

PN-ACR-781

**BEAN/COWPEA COLLABORATIVE
RESEARCH SUPPORT PROGRAM (CRSP)
OPERATIONS AND POLICY MANUAL**

December 2002

This publication was made possible through support provided to the Bean/Cowpea Collaborative Research Support Program (CRSP) by the Bureau for Economic Growth, Agriculture, and Trade, U.S. Agency for International Development, under the terms of Grant No. GDG-G-00-02-00012-00. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.

;

THE BEAN/COWPEA CRSP

An international community of persons, institutions, agencies and governments committed to collectively promoting economic growth and strengthening health and nutrition in developing countries by improving the availability and utilization of beans and cowpeas.

FOR FURTHER INFORMATION, CONTACT:

Bean/Cowpea CRSP
Michigan State University
321 Agriculture Hall
East Lansing, Michigan 48824-1039 U.S.A.
Phone: (517) 355-4693
Fax: (517) 432-1073
E-Mail: dfouw@msu.edu

TABLE OF CONTENTS

LIST OF ACRONYMS	vi
I. OVERVIEW	
The Bean/Cowpea Collaborative Research Support Program (CRSP)	1
II. PROGRAM STRUCTURE AND COMPOSITION	
Definition of Organization Units	5
Regional Projects	5
Components	5
Activities	5
Three Regional Projects	6
Regional Organizational Structure	6
III. TIME FRAMES	
Budget Management Calendar and Time Lines	9
IV. PROGRAM IMPLEMENTATION AND ADMINISTRATION	
Administrative Structure	10
U.S. Lead Institution	10
Host Country Institution	10
MOU	10
Subagreements	10
Sub-subagreements	11
Procedures for Change	11
Change in Principal Investigators	12
Change in Institutions	12
Procedure to Initiate New Components	13
Reductions or Realignment of Component Research Funding	13
Sample Memorandum of Understanding	15
Sample Subagreement	17
V. MANAGEMENT AND ITS ADVISORY GROUPS	
Management	27
Management Entity	27
Management Office	27
Advisory Groups	28
Institutional Representatives (IRs)	28
Board of Directors	28

Technical Committee (TC)	28
External Evaluation Panel	29
Policies Adopted by the Board of Directors	30
Collaboration	30
Distribution of Funds—U.S./HC	30
HC Institutions' Contributions	30
Institutional Involvement	30
Institutions Formerly Associated with the CRSP	31
Multidisciplinary Orientation	31
Non-CRSP Developing Countries' Participation	31
Training	31
Training—Location of Sponsored Graduate	31
Training—Support for Terminated Projects	31
Women in Development	31
VI. FINANCIAL MANAGEMENT	34
Sample Date of Receipt of Bean/Cowpea CRSP Expense Reports	38
Twelve-Column Budget Sheet	39
Guidelines for Completing the Form	39
Changes in the Approved Budget	40
Sample Twelve-Column Budget Sheet	41
Expense Reporting Form	42
U.S. Lead Institutions	42
HC Institutions	42
Sample Expense Reporting Form	44
Encumbrance Process	45
VII. TRAVEL	
International Travel Clearance Requests	46
Use of CRSP Funds for Technical/Professional Interchange	47
International Travel Notification Form	48
VIII. EQUIPMENT PURCHASES	49
Sample Equipment Authorization and Request to Purchase Form	50
IX. GUIDELINES ON CRSP PUBLICATIONS AND INTERNET USAGE	
CRSP Publication Guidelines	52
Guidelines on Internet Usage for CRSP Purposes	53

X. TRAINING	
Degree Training	54
Non-Degree Training	54
Guidelines Concerning Training	54
Participant Training Guidelines	55
Training Activities Reporting	57
XI. WORKPLANS AND ANNUAL REPORTS	58
XII. STYLE GUIDE-WORKPLAN AND ANNUAL REPORT	65
XIII. BEAN/COWPEA CRSP BIBLIOGRAPHIC REFERENCE FORMAT	66
XIV. ASSESSMENT OF SCIENTIFIC PROGRESS, SCIENTIFIC ACHIEVEMENTS, TECHNOLOGICAL OUTPUTS AND IMPACTS	
Definition	69
Mechanisms for Assessing Progress, Outputs and Impacts	70
XV. STATEMENT OF POLICY ON INTELLECTUAL PROPERTY	
Definitions	72
Fundamental Principles Related to Intellectual Property(IP)	
Generation and Transfer under Bean/Cowpea CRSP	73
Guidelines for U.S. and HC Scientists in Bean/Cowpea CRSP Activities	74
APPENDIX 1. OVERVIEW OF BEAN/COWPEA CRSP ORGANIZATION STRUCTURE: PERIOD 2002-2007	79
APPENDIX 2. FIVE-YEAR CALENDAR	80

LIST OF ACRONYMS

ATBU	Abubakar Tafawa Balewa University, Nigeria
B.S.	Bachelor of Science
BIFAD	Board for International Food and Agriculture Development
BOD	Board of Directors
<i>Bt</i>	<i>Bacillus thuringiensis</i>
Bunda	Bunda College of Agriculture, Malawi
C&G	Contracts and Grants Officer
CBD	Convention of Biological Diversity
CC	Cross Cutting
CEDAF	Centro para el Desarrollo Agropecuario y Forestal, Inc., Dominican Republic
CIAT	Centro Internacional de Agricultura Tropical
CRSP	Collaborative Research Support Program
EAP	Escuela Agrícola Panamericana, Honduras
EEP	External Evaluation Panel
EGAD	Center for Economic Growth and Agricultural Development
EGAT	Bureau for Economic Growth, Agriculture, and Trade
EMBRAPA	Empresa Brasileira de Pesquisa Agropecuaria, Brazil
EMU	Eduardo Mondlane University, Mozambique
ESA	East and Southern Africa
FY	Fiscal Year
GMO	Genetically Modified Organism
HAC	Health and Accident Coverage
HC	Host Country
IARC	International Agricultural Research Centers
ICRISAT	International Crops Research Institute for the Semiarid Tropics
ID	Invention Disclosure
IITA	International Institute of Tropical Agriculture
INERA	Institut d'Education et de Recherchés Agricoles, Burkina Faso
INIA	Instituto Nacional de Investigacao Agronomica, Mozambique
INIAP	Instituto Nacional Autonomo de Investigaciones Agropecuarias, Ecuador
INIFAP	Instituto Nacional de Investigaciones Agropecuarias, México
INRAN	National Research Institute of Niger, Niger
INTA	Instituto Nicaraguense de Tecnologia Agropecuaria, Nicaragua
IP	Intellectual Property
IPM	Integrated Pest Management
IR	Institutional Representative
IRAD	Institut de la Recherche Agronomique pour le Development, Cameroon
ISRA	Institut Sénégalais de Recherchés Agricoles, Senegal
JVA	Joint Venture Agreement
LAC	Latin America/Caribbean Basin
M.S.	Master of Science
M.Sc.	Master of Science
ME	Management Entity
MO	Management Office
MOU	Memorandum of Understanding
MSU	Michigan State University

MTA	Material Transfer Agreement
NARS	National Agricultural Research Systems
NGO	Non-Governmental Organization
NIH	National Institute of Health
OMB	Office of Management and Budget
OSU	Oregon State University
PI	Principal Investigator
PROFRIJOL	For Beans—a research network in Latin American and the Caribbean Basin
PRONAF	Cowpea Network for Africa
PSU	Pennsylvania State University
PVO	Private Voluntary Organizations
PVP	Plant Variety Protection
RA	Research Agreement
RF	Regional Facilitator
RPT	Regional Project Team
SARI	Savanna Agricultural Research Institute, Ghana
SPARE	Strategic Partnership for Agriculture Research and Education
SUA	Sokoine University of Agriculture, Tanzania
TARI	Tanzania Agricultural Research Institute-Uyole
TC	Technical Committee
TRIPS	Trade Related Intellectual Property Rights
TX A&M	Texas A&M
UC-D	University of California-Davis
UC-R	University of California-Riverside
UnCR	University of Costa Rica
UFS	University of the Free State, South Africa
UGA	University of Georgia
UG-L	University of Ghana-Legon, Ghana
UMN	University of Minnesota
UN-L	University of Nebraska-Lincoln
UP	University of Pretoria, South Africa
UPR	University of Puerto Rico
U.S.	United States
USAID	United States Agency for International Development
USAID/W	United States Agency for International Development/Washington
USDA	United States Department of Agriculture
UWI	University of West Indies, Jamaica
UZ	University of Zimbabwe, Zimbabwe
WA	West Africa
WID	Women and International Development
WSU	Washington State University
WV-M	World Vision-Mozambique

I. OVERVIEW

THE BEAN/COWPEA COLLABORATIVE RESEARCH SUPPORT PROGRAM (CRSP)

Beans and cowpeas are an important source of protein, carbohydrates and other essential nutrients in the diets of people around the world. As beans and cowpeas are staple foods throughout much of Africa and Latin America, the poor are largely dependent upon these legumes for their nutrition. Limitations in the production and availability of beans and cowpeas make young children, in particular, susceptible to protein deficiency and numerous childhood disorders and diseases.

Under Title XII, the Collaborative Research Support Program (CRSP) concept was created by the U.S. Agency for International Development (USAID) and the Board for International Food and Agriculture Development (BIFAD), as a long-term mechanism to focus the capabilities of U.S. land grant universities to carry out the international food and agricultural research mandate of the U.S. Government. The CRSPs are communities of U.S. land grant universities working with developing country agricultural colleges and universities, National Agricultural Research Systems (NARS), International Agricultural Research Centers (IARCs), U.S. agribusiness, private voluntary organizations (PVOs), USAID/Washington and USAID Missions, and other U.S. federal agencies such as USDA.

The fundamental vision for the CRSPs is to mobilize U.S. scientific talent and to foster its role in high-payoff, problem-oriented research programs on key food, nutritional and rural development problems confronting the developing world. The CRSPs are expected to assume effective interaction and complementarity with national and multi-national agricultural development programs in developing countries in various regions of the world.

The Bean/Cowpea CRSP's roots extend back to the late 1970's, when a group of U.S. scientists received a two-year planning grant to prepare a proposal for a new CRSP. Their goal was to develop a research/training program of worldwide scope which partnered U.S. and developing country scientists to address constraints in the production of beans and cowpeas. This goal was to be achieved through graduate training of men and women from the selected countries and the joint undertaking of both "basic" and applied research. Basic research was thought to be necessary "to attract leading U.S. scientists as well as to build a body of fundamental knowledge about the biology and utilization of beans and cowpeas" (Adams, 2000). The strategy of the first Bean/Cowpea CRSP grant was to focus research upon problems of the small subsistence farmers, in their traditional settings, in selected countries of East and West Africa, the Caribbean and Latin America.

The Bean/Cowpea CRSP started a new grant in 2002 entitled "Regional Partnerships to Enhance Bean/Cowpea Consumption and Production in Africa and Latin America: A Value-Chain Strategy". The Bean/Cowpea CRSP has adopted a *value-chain strategy* to guide the formulation and implementation of research and training activities to overcome *regionally specific constraints* associated with the bean and cowpea sectors during the 2002-2007 grant period. Value-chains recognize the importance of multiple independent, but interlinked, stakeholders/enterprises in commodity food chains which connect consumers to producers. *The objective* of a Value-Chain is *to optimize the flow of product* through the

food chain by seeking to *"add value" to each component (subsector) of the network and to strengthen the linkages among the various components.*

The global objectives of the Bean/Cowpea CRSP are to focus on: (1) stimulating **economic growth** by developing new market opportunities for bean/cowpea grain and products; (2) increasing **utilization and consumption** by adding value to bean and cowpea grain and their by-products; (3) enhancing **human health and nutrition**, especially in children, by increasing knowledge of nutritional constituents in beans/cowpeas and developing nutritious bean/cowpea-based food products; (4) ensuring maximum **access by women and minorities** to technology and information; (5) increasing the **sustainability** of bean and cowpea production systems in divergent agro-ecological zones; and (6) enhancing the **productivity and quality** of beans and cowpeas through genetic improvement, utilizing both tools of molecular biotechnology and traditional breeding.

The Bean/Cowpea CRSP seeks to achieve its vision through three Regional Projects in West Africa, East and Southern Africa, and Latin America and the Caribbean Basin during the 2002-2007 grant period. A Regional Project organizational structure is considered vital to the implementation of a value-chain strategy in order to:

1. Coordinate integrated regional approaches that address constraints in each subsector of bean and cowpea value-chains in a multi-disciplinary manner, such that the interactions with, and issues important to, other subsectors are considered when planning and conducting research and training activities.
2. Promote greater mutual intellectual engagement by U.S.-Host Country (HC) Bean/Cowpea CRSP scientists, mutual ownership and collaboration in regional research and training activities, mutual participation in the evaluation of technical progress, and mutual benefits to both HCs and the U.S.
3. Promote a culture of greater interaction and partnership between national agricultural university and research system scientists with clientele/stakeholder groups (e.g., urban consumer focus groups, food industry advisory groups, micro-enterprise entrepreneurs, farmer associations, etc.), and governmental agencies in order to obtain guidance and feedback on research activities so as to maximize the development of appropriate technologies and shorten the time for their adoption.
4. Establish multi-lateral linkages with International Agriculture Research Centers (e.g., CIAT, IITA, ICRISAT), regional bean and cowpea research networks (e.g., PROFRIJOL, PRONAF), Non-Governmental Organizations/Private Voluntary Organizations (NGOs/PVOs), private industry groups, and other CRSPs to:
 - Coordinate research/training activities at a regional level so as to ensure complementation and avoidance of duplication, as well as regional impact.
 - Share knowledge and provide access to research facilities/resources that may not be resident in particular HCs so as to accelerate progress in the development of technologies (e.g., genetic transformation cowpea with *Bt* gene in collaboration with IITA/Nigeria, Rockefeller Foundation, and Monsanto).
 - Enable joint solicitation and leveraging of research grant funds from international development foundations, governmental assistance programs, and NGOs.

- Coordinate the dissemination of technologies at a regional level (e.g., World Vision International in West Africa).

In addition to research, the Bean/Cowpea CRSP is committed to both degree and short-term training of HC students. Through training, an active cadre of professional men and women engaged in bean and cowpea research will emerge within both the public academic and national agricultural research communities as well as within the private sectors in developing countries. During the 2002-2007 grant period, the Bean/Cowpea CRSP is committed to supporting post-graduate degree training in such critical areas as agricultural economics, agriculture and extension education, agronomy, entomology, food science, human nutrition, soil science and microbiology, plant pathology, plant physiology, plant breeding and genetics, and sociology/WID. Numerous short-term training activities involving workshops, field schools, in-lab training, etc. are also planned in this grant period.

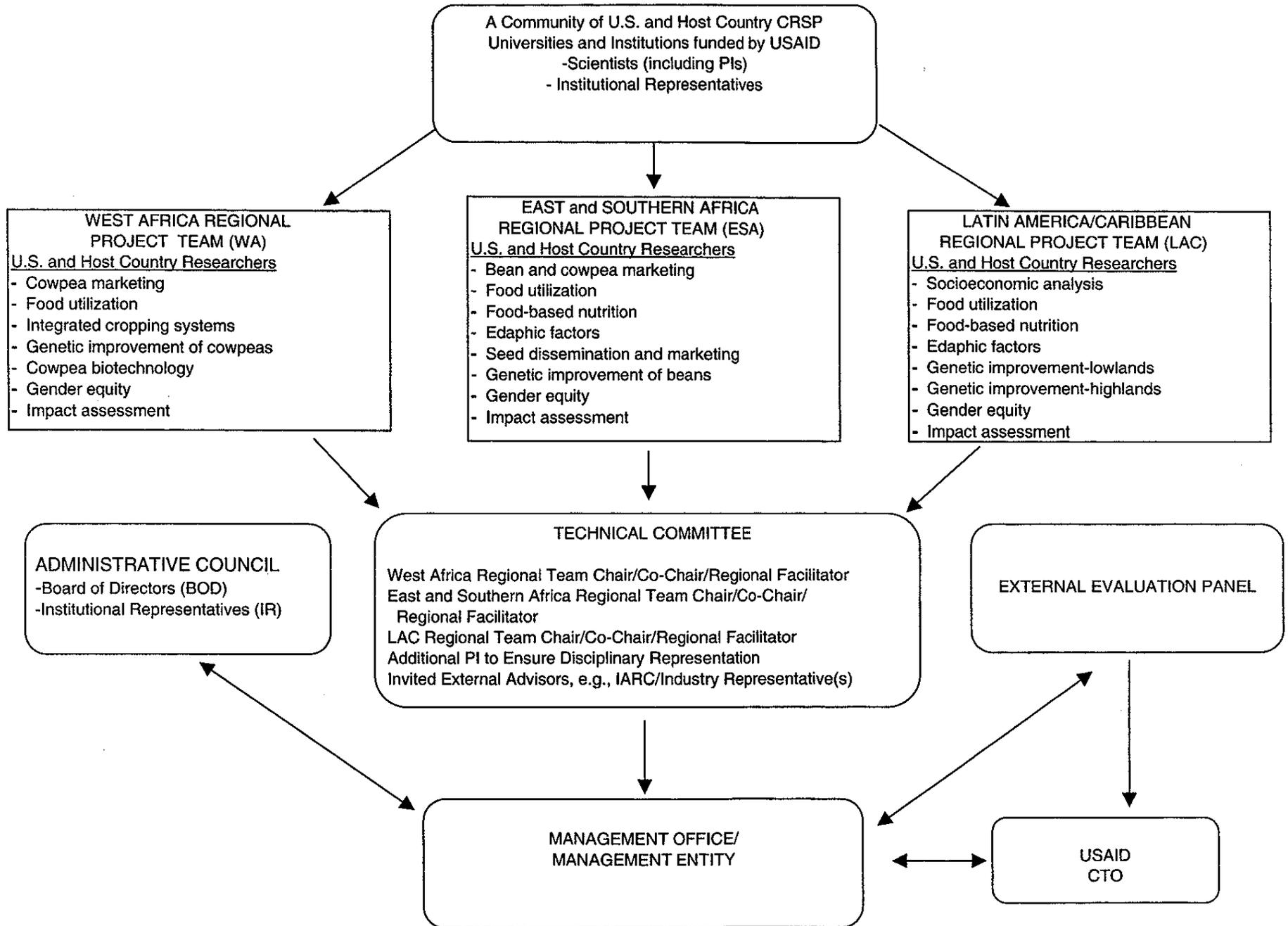
The Overview of the Bean/Cowpea CRSP's Organizational Structure is presented in Figure 1.

The Bean/Cowpea CRSP, which operates with funding from USAID through the Bureau for Economic Growth, Agriculture, and Trade (EGAT), is assigned a Cognizant Technical Officer. Evaluation and long term guidance for the program comes from the Board of International Food and Agricultural Development (BIFAD). The CRSP organizational structure includes the Management Office (MO) which serves as the operational administrative unit of the program's Management Entity (ME), Michigan State University (MSU). Administrative advisory groups which are important to CRSP functions include the Board of Directors (BOD), Administrative Council (includes all U.S. Institutional Representatives), the Technical Committee (TC), and an External Evaluation Panel (EEP).

The U.S. and HC PIs partner in planning, executing, supervising and reporting activities of their component. They provide leadership to the overall management of the research and training activities budgeted in regional workplans for their components.

The unit of operation in the regional project is a Regional Project Team (RPT). The RPT is comprised of all PIs (from U.S. and HCs) within a regional project. The RPT has the following officers who will be part of the Technical Committee: a) Regional Chair, b) Regional Co-Chair and c) Regional Facilitator (RF). The RF is from the U.S., while the Regional Team Chair and Co-Chair has one U.S. and one HC representative.

Figure 1: OVERVIEW OF BEAN/COWPEA CRSP ORGANIZATION STRUCTURE: Period 2002-2007



II. PROGRAM STRUCTURE AND COMPOSITION

Definition of Organization Units:

Regional Projects

Projects are defined as partnerships between multiple components (both U.S. and HC PIs and their respective universities/institutions) to address a common set of constraints associated with subsectors of bean or cowpea value-chains in a regional context. Therefore, **Regional Projects** consist of multiple components, each with an individual Five-Year Workplan, whose collaborating members are committed to working together in a coordinated, collaborative, and multi-disciplinary manner to achieve regional impact. The organization unit for Regional Projects is the **Regional Project Team** which is comprised of the U.S. and HC PIs and their universities/institutions from those components that focus on the region in question.

Components

A **component** is that unit defined by a Five-Year Workplan and Budget for collaborative research and training to address a set of specific constraints within a regional context. The Five-Year Workplans and Budgets for the Bean/Cowpea CRSP are presented in Volume II of the continuation grant proposal for FY 2002-2007. For each component, at least one U.S. and one HC PI and their affiliated universities/institutions are designated to fulfill the research and training commitments outlined in the respective Five-Year Workplan. In several cases, multiple PIs (Co-PIs) have been identified for an individual component. In those components where multiple PIs reside at the same U.S. university, one will be identified as the "Administrative PI". The university of the U.S. PI (or Administrative PI) will be the Lead U.S. University of a component. In the case of Co-PIs from separate U.S. universities, two Lead U.S. Universities will be established.

Activities

Activities are efforts to achieve specific research and training goals as identified within the context of Regional Project Workplans and Budgets. Regional Workplans/Budgets are developed and evaluated on an annual basis by PIs in order to ensure that collaboration, coordination and interdisciplinary approaches are executed at a regional level so that constraints are overcome and regional impact achieved. Activities presented in annual Regional Project Workplans are aligned with the research and training goals outlined within the Five-Year Workplans/Budgets developed for each component. In an effort to maintain focus, the number of activities should not greatly exceed the number of components within a Regional Project. In cases of components with multiple PIs with interrelated but distinct research goals (i.e., breeding and pathology in the context of a genetic improvement component), there may be justification for distinct activities. Only one coherent training plan should be developed for each Regional Project.

The use and operational meaning of these organization units is further discussed in the section entitled "Workplans and Annual Reports" in this manual.

Three Regional Projects

The three regional projects--West Africa (cowpeas), East and Southern Africa (beans and cowpeas) and Latin America and Caribbean (beans)--are comprised of several constraint-driven research and training components (listed in Appendix 1).

In addition to the region-specific components, there are two research components that cut across all three regions. These components focus on gender issues and impact assessment and are led by PIs from Michigan State University and Purdue University.

Regional Organizational Structure

Regional Project Teams (RPT): The unit of operation in the regional project is a Regional Project Team (RPT). The RPT is comprised of all PIs (from U.S. and HCs) within a regional project.

The purpose of RPTs is to:

1. Review research progress annually.
2. Respond to feedback from the TC and EEP.
3. Prepare and submit annual regional project workplans and budgets to the MO.
4. Prepare and submit regional project annual reports to the MO.

The RPT will hold regional planning meetings to integrate the workplans and budgets of individual components into an Annual Regional Workplan and Budget for each fiscal period. Meeting options include physical meetings at a location in the U.S. or HC and/or conference telephone calls or other electronic means of communication.

Each research component in a regional project must be represented at all Regional Project Planning Meetings by either a PI or his/her designee. To the extent possible, based upon the component participation in regional projects, a 50-50 balance should be maintained between U.S. and HC participants at all Regional Project Planning Meetings.

The first year, Regional Project Teams will elect each year a Chair and Co-Chair to provide leadership to the regional project and to represent them on the Technical Committee. One of the Officers (Chair or Co-Chair) must be from a Host Country Institution and the other from a U.S. partner university. In subsequent years, the Co-Chair becomes Chair and a new Co-Chair is elected.

A Regional Facilitator, appointed by the MO for the entire five years of the grant, will assist the Chairs in ensuring continuity of RPT activities.

Regional Project Planning Meetings are to be conducted in such a manner that there is equal voice and vote in decision making (i.e., elections, research and budget decisions, etc.) by participating components.

Role of PIs: Each component of a Regional Project is led by U.S. and HC PIs who are partners in planning, executing, supervising and reporting of activities of their component. In cases where a component has two U.S. PIs from the same institution, one is designated an

"Administrative or Lead" PI and the other a Co-PI. The PIs/Co-PIs will provide leadership to the overall management of the research and training activities budgeted in regional workplans for their components. The U.S. and HC PIs of a component will be jointly responsible to:

1. Prepare an annual workplan and budget for research and training activities using the Bean/Cowpea CRSP On-Line Reporting System.
2. Submit an annual report of research and training activities (for which they are PIs) using the Bean/Cowpea CRSP On-Line Reporting System.
3. Select one PI (from U.S. or HC) of a research component, or his/her designee, who must participate at the annual Regional Project Planning Meetings, where the workplans of individual components are integrated into Regional Project Workplans and Budgets and submitted as a recommendation to the MO.

Role of RFs: The RFs will be PIs of components in RPTs. The specific additional responsibilities of the RF will include:

1. Support overall regional project coordination.
2. Plan and organize regional planning meetings in collaboration with the regional Chair and the MO.
3. Ensure the balance of HC and U.S. representation at each regional planning meeting.
4. Facilitate an interdisciplinary perspective in the regional project.
5. Assist the Regional Chair in coordinating the compilation and submission of annual regional workplans, budgets and progress reports to the MO.
6. Assist PIs to establish new linkages with NARS, NGOs, IARCs, etc. within the region.
7. Promote cross-regional activities and communication.
8. Represent the Regional Project as a permanent member on the Technical Committee.
9. Administer the funds for regional planning meetings.

RFs will receive a modest budget per year to cover expenses of facilitating Regional Planning meetings and coordinating regional activities. The RFs in the 2002-2007 grant period for the three regional projects are:

James Lowenberg-DeBoer (WA Regional Project)

James Myers (ESA Regional Project)

James Beaver (LAC Regional Project)

Role of Regional Chair and Co-Chair: The Chair and Co-Chair of a regional project are the Officers that represent the Region on the TC. They function as a team in providing leadership to the RPT, along with the RF. One of the Officers (Chair and Co-Chair) must be from a Host Country and the other from a U.S. institution. The Officers will be elected, by a simple majority, by the members of the RPT for a two-year term—one year as a Co-Chair and the other as a Chair. In other words, the Co-Chair elected in the first year will become the Chair of the regional project in the following year and the RPT will elect a new Co-Chair each year thereafter. The election of Co-Chair will be conducted at Regional Planning Meetings or via e-mail during years when these meetings are not held. The retiring Chair will be responsible for conducting the elections. The term of the Chair and Co-Chair starts soon after the election. Both Chair and Co-Chair will represent the regional project on the Technical Committee during their term of service. The responsibilities of a Chair will include:

1. Chairing the Regional Planning Meeting.

2. Ensuring that regional project PIs submit complete and accurate annual workplans, budgets and progress reports in a timely manner.
3. Attending the Technical Committee meeting (both the Chair and the Co-Chair) following the Regional Planning Meetings to review and finalize Annual Regional Project Workplans and Budgets.
4. Reviewing the Annual Regional Project Research and Training Progress Reports and preparing an Executive Summary, usually in November of each year.
5. Attending the Technical Committee meeting (both the Chair and the Co-Chair) usually in December of each year, to review and evaluate Annual Progress Reports.
6. Seeking nominations and conducting elections for the Regional Co-Chair for the coming year.
7. Providing the results of this election to the MO and the Chair of the TC.

Mid-Term Bean/Cowpea CRSP All Researchers Meeting: U.S. and HC PIs from all three regional projects will meet jointly once, in year 2005, during the five-year grant period. As the budget permits, the meeting may include collaborators and representatives from: the relevant IARCs, NGOs, other CRSPs, and Missions with active programs in bean and cowpea research. The objectives of this meeting will be:

1. To foster a sense of community among U.S. and HC scientists across the three regional projects.
2. To provide opportunity for scientists to report on CRSP achievements, outputs and impacts.
3. To establish a vision for the next grant period of the Bean/Cowpea CRSP.

III. TIME FRAMES

Budget Management Calendar and Time Lines

The Bean/Cowpea CRSP grant period of performance is September 30, 2002 to September 29, 2007. The Bean/Cowpea CRSP funding year runs from April 28 of one year through April 27 of the next. For ease of research and training management and reporting, the MO maintains the CRSP on an October 1–September 30 fiscal and operational year. The Bean/Cowpea CRSP Five-Year Calendar corresponding to the Federal and CRSP Fiscal Years (October 1 to September 30) is given in Appendix 2.

The grant year and allocation periods are only of concern to MSU, which uses them for program flexibility, financial management and fiscal control. A comparison of these financial management time lines is given in Table 1. Although complicated, the budget process is fully computerized and thus, after a number of years, has become routine.

Table 1: Annual Workplans, Five-Year Grant Period, Federal Fiscal Year and Allocations.

Workplan for:	Period covered:	Funded from allocations received from the Federal Fiscal years:**
FY02B-03*	Aug 1, 2002 to Sep 30, 2003	FY2002 (8/1/02 to 9/30/02)* FY2002 (9/30/02 to 4/27/03) and FY2003 (4/28/03 to 9/30/03)
FY04	Oct 1, 2003 to Sep 30, 2004	FY2003 (10/1/03 to 4/27/04) and FY2004 (4/28/04 to 9/30/04)
FY05	Oct 1, 2004 to Sep 30, 2005	FY2004 (10/1/04 to 4/27/05) and FY2005 (4/28/05 to 9/30/05)
FY06	Oct 1, 2005 to Sep 30, 2006	FY2005 (10/1/05 to 4/27/06) and FY2006 (4/28/06 to 9/30/06)
FY07	Oct 1, 2006 to Sep 29, 2007	FY2006 (10/1/06 to 4/27/07) and FY2007 (4/28/07 to 9/29/07)

* FY02B-03 workplan is partially funded under the previous grant for the period August 1 to September 30, 2002, with an end date of December 31, 2002.

** Since the workplans for a given fiscal year are funded from two federal fiscal year allocations, mid-course adjustments will be made to workplans and budgets to reflect fluctuations (increase or decrease) in the allocations received from the USAID from one fiscal year to another.

IV. PROGRAM IMPLEMENTATION AND ADMINISTRATION

Administrative Structure

A Grant from USAID/W to Michigan State University, Grant No. GDG-G-00-02-00012-00, effective September 30, 2002 through September 29, 2007, funds the Bean/Cowpea CRSP, identifies the participants, and cites the "Standard Provisions for U.S., Nongovernmental Recipients" and other documents as guiding authorities for the Bean/Cowpea CRSP's operation.

For each component, a Memorandum of Understanding (MOU), a Project Proposal/Workplan, a Subagreement, and a sub-Subagreement are the instruments for defining relationships among participant universities/institutions.

U.S. Lead Institution

Participating U.S. Lead Institutions are identified on the basis of their expertise and capacity in specific areas of science and their ability to conduct collaborative research in support of approved objectives. A CRSP U.S. Lead Institution may be responsible for implementing one or more components and activities within an individual or multiple regional projects. U.S. Lead Institutions have a sub-agreement with the Management Entity (ME), Michigan State University (MSU).

Host Country Institution

Participating Host Country (HC) Institutions are identified on the basis of their expertise and capacity in specific areas of science and their ability to conduct collaborative research in support of approved objectives. A HC Institution may be responsible for implementing one or more components and activities within a regional project. HC Institutions have a sub-subagreement with U.S. Lead Institutions. A HC Institution may have sub-subagreements with multiple U.S. Lead Institutions.

MOU

The MOU is a formal commitment between the CRSP and a HC Institution to engage in collaborative research and training (see sample at end of this section). It designates the related administrative procedures under the CRSP Grant, recognizing the collaborative research program and its goals; procedures for establishing a research/training relationship; specifications of responsibilities of the U.S. Lead and the HC Institution, and communication requirements. The MOU commits no funds directly, only the authorization to do so subsequently under a sub-subagreement. The MOU is signed by an administrator of the HC research institution and the CRSP Management Office (MO). The U.S. Lead Institution does not sign the MOU but commits to it through the sub-subagreement. Any number of CRSP activities can be established under each MOU.

Subagreements

The MSU subagreement obligates funds and passes certain authority and responsibility from the ME to the U.S. Lead Institution (see sample at the end of this section). Subagreement appendices include the applicable USAID Standard Provisions, cost sharing regulations, the MOU authorizing collaboration with the designated HC Institution(s), the Five-Year Workplan, and the annual Regional Project Workplans and Budgets as developed. These appendices are

binding in-as-much as they are appended to and made part of the subagreement signed by the appropriate contract officials at the U.S. Lead Institution and Michigan State University.

Sub-Subagreements

A sub-subagreement between the U.S. Lead Institution and collaborating U.S. and/or HC Institutions defines their relationship in the Bean/Cowpea CRSP. Each HC and/or U.S. collaborating institution must have a sub-subagreement with a U.S. Lead Institution. These sub-subagreements describe procedures for both the transfer and accounting of CRSP/USAID funds to be spent for purposes described in the component's Five-Year Workplans (see Volume II, Bean/Cowpea CRSP grant proposal, 2002-07) and in subsequent annual regional project workplans and budgets. Collaborating U.S. and HC Institutions, when they receive support from U.S. Lead Institutions, are obliged to conform to the rules and regulations referred to in the CRSP Grant and Subagreement, including applicable Standard Provisions, and other documents referenced. An important function of the sub-subagreements is to identify commitments of CRSP resources to HC Institutions whether as an advance of funds for deposit in HC accounts, equipment purchased in the U.S. for use in the HC, training in the U.S. for HC participants, or any other resources committed by the U.S. Lead Institution to support participation in a component and Regional Project. Only commitments included in sub-subagreements can be exempted from the base for calculating U.S. institutional cost-sharing as required in the prime grant.

Sub-subagreements must be in accordance with the commitments and procedures adopted in the MOU to which HC officials will have already subscribed. No standard format for the sub-subagreements has been established as each U.S. Lead Institution will have their own sub-subagreement that they utilize. The MO will provide a copy of the MSU Host Country sub-subagreement template upon request.

As collaborating HC Institutions are bound by the terms of the CRSP Grant and the ME's subagreement to the U.S. Lead Institution, including its appendices, copies of applicable documents must be provided to HC administrators, along with the sub-subagreement(s), for reference purposes.

Procedures for Change

1. Approval is needed whenever there is a major change to the approved component's target constraints, research goals, and/or budget, as presented in the Five-Year Workplan (Volume II, Bean/Cowpea CRSP Grant Proposal, 2002-2007). These include:
 - a. The addition of new research goals not included in the approved Five-Year Workplan.
 - b. Any substantive changes in research goals and regional project activities, such as changes which might compromise the approved component objectives or the Global Bean/Cowpea CRSP Plan (e.g., elimination of activities previously conducted).
 - c. Elimination, addition or substitution of U.S. or Host Country collaborating institutions.

2. The process for approval of a change is:
 - a. A brief proposal, covering the following points, is to be submitted to the MO by the U.S. Principal Investigator (PI):
 - (1) Description of the proposed change;
 - (2) Reasons for the proposed change;
 - (3) Implications of proposed change to
 - Component objectives and anticipated outputs
 - Component leadership
 - Budget.
 - b. When there are substantive changes which may limit achievement of research goals, the MO will forward the proposal and relevant comments to the TC.
 - c. The TC will review the proposal and make a recommendation to the BOD.
 - d. The BOD will review the proposal and all previous comments and make a recommendation to the MO.
 - e. The MO will notify the PI in writing whether or not the proposed change is approved.
3. Minor changes may be made at the discretion of the PI(s) but such changes should be fully described and justified in the annual regional project workplans and annual reports for the fiscal year in which the change took place (e.g., changes in research approach, addition of personnel, or new students who will receive CRSP support, etc.).
4. U.S. Lead Institutions may have their own internal policies and procedures regarding changes in projects. Please contact the MO if there are conflicts between the CRSP and the U.S. Lead Institutions' policies and procedures.

Change in Principal Investigators

When a PI, either U.S. or HC, terminates his/her role with the CRSP, the MO must be notified immediately after such a decision has been made. If necessary, the MO will work with the U.S. or HC IR to identify an acting PI to continue the project on an interim basis. By the next TC and BOD meetings, the IR from the Lead Institution is expected to notify the MO of (1) its interest in continuation of the component and (2) its proposal for designating a new PI.

The BOD reviews this information and works with the MO to determine if the component should continue. If not, the MO may initiate procedures to assure new leadership of the respective component in the regional project.

Change in Institutions

From time to time, it will be necessary to change the institutional leadership in order to more effectively address priority regional constraints to enhancing bean and cowpea utilization and production.

A participating U.S. or HC Institution may be phased out or placed on inactive status because: (1) the component has achieved the research and training goals of the approved Five-Year Workplan for which it was responsible; (2) the institution no longer has the staff and resources, or interest to maintain its participation; (3) the performance of the institution has fallen below

an acceptable standard; or (4) decreased USAID/W support for the CRSP requires elimination of program components (regional projects, activities, and/or institutions).

The process of being phased out involves the MO, EEP, TC, and BOD acting in accordance with the established review procedures. The BOD and MO work with the Institutional Representative (IR) of the affected institution to bring about the appropriate action and the MO works with the USAID/W Cognizant Technical Officer throughout the process.

Procedure to Initiate New Components

Because of new directions or the need for new leadership in continuing efforts, the Bean/Cowpea CRSP may wish to initiate a new component. To do so, the MO will work with the TC to write a Request for Pre-proposals based on the CRSP Global Plan and the scope of work the program and regional projects are to address. The Request for Pre-proposals is presented to the BOD for its input and concurrence. When the groups are in agreement, the MO distributes the document to relevant institutions, (e.g., College of Agriculture Deans and Directors at Land Grant Universities, etc.) to ensure an open and competitive process.

When pre-proposals are received, they are reviewed by the TC and outside consultants, if deemed necessary. The most highly evaluated pre-proposals will be selected and their writers asked to submit full proposals.

The full proposals follow the same review process as the pre-proposals with TC recommendations for funding sent to the BOD. Adding new institutions to the CRSP involves the MO, TC and BOD. Throughout the process, the MO works closely with the USAID/W Cognizant Technical Officer. When agreement is reached as to which proposal(s) should be funded, the MO notifies the proposal writer and the paperwork is initiated to create the administrative structure for the new component activities.

Reductions or Realignment of Component Research Funding

Five-year workplans and budgets are the basis from which annual research activity workplans and budgets or individual components are developed with input from the Regional Project Team. Annual workplans are used to evaluate progress toward research and training goals by the respective RPT, the TC, the EEP and the MO. In situations when evaluations by these groups indicate that unacceptable progress is being made, that research activities have shifted significantly from target objectives and outputs defined in the Five-Year Workplans, where unanticipated impediments will prohibit the achievement of research goals, or where advances in research technology render the proposed research objectives unnecessary, it may be necessary to realign research funding within a Regional Project, thus reducing support for the research activity(s) of concern.

In the context of a "long-term" collaborative research support program, such as a CRSP, budgetary realignments should not occur on the basis of one year's performance by a component. Progress and productivity should be evaluated over an appropriate period of time which allows components to respond to EEP and TC evaluations, to make adjustments in research activities and approaches, and to take measures to ensure that outputs are generated in a timely manner.

In cases where problems persist and the prospects for corrective measures being taken are dim, the MO has the authority to adjust the level of financial support for research activities. The MO, however, should not take such action without consideration of input from the EEP, TC and BOD.

SAMPLE
MEMORANDUM OF UNDERSTANDING
between
[name of government/agency/institution]
and

The Bean/Cowpea Collaborative Research Support Program (Bean/Cowpea CRSP)

Introduction

Rapid population growth and poor economic conditions in developing countries have led to food shortages which reduce the quality of life, hinder economic growth, and threaten stability. Meanwhile, the total amount of global resources being channeled into rectifying this imbalance is being reduced. Consequently, agencies involved in the search for solutions for the population/food/environment nexus need to combine resources and differing capabilities in ways which heighten their impact, and make significant gains in achieving food security and improving the quality of life.

Background

In a growing number of cases, collaborations between Collaborative Research Support Programs and governmental and non-governmental organizations have proven to be influential in rapidly reducing hunger and dependence on foreign food aid by increasing the productivity and production levels of local farmers. This MOU aims at facilitating increased collaboration between [*MOU recipient*] and the Bean/Cowpea CRSP and will provide a framework for the Parties to share their strengths in order to more efficiently accomplish their respective objectives.

The Parties

[institution]

[Need a paragraph from the institution similar to this one from FAO. It says who they are and what their goal/mission is: The Food and Agriculture Organization of the United Nations is a specialized agency in the United Nations System, and is the lead agency for agriculture, forestry, fisheries and rural development. FAO gives practical help to developing countries through a wide range of technical assistance projects, encouraging an integrated approach that is sensitive to environmental, social and economic considerations. The Organization collects, analyzes, interprets and disseminates information relating to nutrition, food, agriculture, forestry and fisheries, and serves as a clearing-house, providing farmers, scientists, traders and government planners with the information they need to make rational decisions on planning, investment, marketing, research or training. FAO's work in Southern and Eastern Africa is coordinated by its Sub-Regional Office for Southern and Eastern Africa (FAO-SAFR) located in Harare, Zimbabwe.]

The Bean/Cowpea CRSP

The Bean/Cowpea CRSP supports close collaboration between Host Countries and U.S. scientists through partnerships between researchers from developing countries and U.S. Land Grant Institutions focused on problems of production and utilization of dry beans and cowpeas. The Bean/Cowpea CRSP works with Host Country nationals to identify production and utilization constraints and address them through research in settings where they are important, focusing special attention on low-resource farmers and women. The program is supported by USAID, with contributions from the U.S. Land Grant Institutions, and Host Country Institutions.

Fields of cooperation

1. [institution] and the Bean/Cowpea CRSP will cooperate with each other and, as appropriate, with relevant national or regional institutions within the region in the design, implementation, and impact assessment of research and extension programs to achieve the maximum impact on matters of common interest.
2. [institution] is prepared to provide leadership in matters regarding procurement, testing, multiplication, and dissemination of technologies such as improved seed, crop management practices and food technologies. [institution] is also prepared to coordinate and provide logistical and administrative support for in-country operations.
3. The Bean/Cowpea CRSP is prepared to provide research leadership in genetic improvement, production of breeder seed, crop management practices, food science/technology research and the socioeconomics of bean/cowpea production. Where there is overlap of expertise, the Parties will jointly work out the division of tasks.
4. For each collaborative initiative to be activated under this MOU, an agreed-upon scope of work indicating specific responsibilities will be developed with input from the associated Host Country and signed by all participating organizations. All such agreements shall be subject to the availability of funds.
5. Because strengthening the capacity of local and national institutions is essential for long-term development, the Bean/Cowpea CRSP and [institution] will work collaboratively in providing training for national scientists and technicians as appropriate. Each organization will furnish agreed-upon services and/or logistical support as required by each training exercise, subject to the availability of funds.
6. The Parties will work together to generate funds from third parties/donors to support their common objectives. This may include submitting joint proposals and/or making joint presentations.
7. Reports and data files required for and generated by the collaborative initiatives will be freely shared among the Parties.
8. This MOU may be modified by mutual written agreement of both Parties.
9. This MOU will enter into force upon signature by both Parties and may be terminated by either Party giving to the other two-months written notice.
10. Representatives of [institution] and the Bean/Cowpea CRSP will review joint activities each year and decide on a program for the following year. In this regard, [institution] and the Bean/Cowpea CRSP will appoint a focal person for this MOU.

Once signed by both parties, this MOU supersedes any previous MOU with the Bean/Cowpea CRSP. Agreed to and accepted by the undersigned.

_____	_____	_____	_____
[name]	Date	Irvin E. Widders	Date
[title]		Director	
[organization]		Bean/Cowpea CRSP	

**SAMPLE
SUBAGREEMENT #61-XXXX
BETWEEN
MICHIGAN STATE UNIVERSITY
AND
[insert]**

This subagreement is made and entered into by and between Michigan State University, with its principal office located at Contract and Grant Administration, 301 Administration Building, East Lansing, Michigan, hereinafter referred to as MSU and [insert] located at [insert] hereinafter referred to as the LEAD INSTITUTION, for the [insert] project.

I. INTRODUCTION

This subagreement is in consideration of the following circumstances:

A. MSU, designated the Management Entity (ME), is the recipient of the grant from the United States Agency for International Development (USAID/W), Grant No. GDG-G-00-02-00012-00, hereinafter referred to as the prime grant, for the implementation of the Title XII Bean/Cowpea Collaborative Research Support Program (CRSP). This program involves the support of projects for research, training and technical services in the areas of bean and cowpea production, storage, distribution, marketing, preparation and human consumption, as relates to the US government commitment to Famine Prevention and Freedom from Hunger under the Foreign Assistance Act of 1961.

B. The Bean/Cowpea CRSP is managed by the MSU Bean/Cowpea CRSP Management Office (MO) with the policy-making support of the Board of Directors (BOD), the technical guidance of the Technical Committee (TC) and evaluation by the External Evaluation Panel (EEP), which jointly contribute to decision-making as required in the performance of the prime grant.

C. THEREFORE, the LEAD INSTITUTION agrees that it will perform the services called for herein, and MSU agrees that it will compensate the LEAD INSTITUTION in the amount and under the terms and conditions enumerated in this Subagreement. MSU and the LEAD INSTITUTION further understand that this Subagreement consists of this document and the following Appendices:

- | | |
|-------------|--|
| Appendix A, | Standard Provisions for U.S. Nongovernmental Recipients; Required as Applicable Standard Provisions for U.S. Nongovernmental Recipients |
| Appendix B, | Five Year Workplan(s) |
| Appendix C, | Subagreement Annual Budgets |
| Appendix D, | Memorandum of Understanding between the Bean/Cowpea Collaborative Research Support Program Management and [insert MOU for each country under this subagreement and host country agreements] |
| Appendix E, | Revised Guidance on USAID-Funded Communications Products; Standards for USAID-Funded Publications/Information Required for Approval; Standards for USAID-Funded Video Productions/Information Required for Approval; Standards for USAID-Funded Internet World Wide Web Pages and Other Electronic Dissemination Methods/Information Required for Approval |
| Appendix F, | Bean/Cowpea CRSP Expense Reporting Form |
| Appendix G, | Bean/Cowpea CRSP International Travel Notification Form |
| Appendix H | Bean/Cowpea CRSP Request to Purchase Equipment |

II. STATEMENT OF WORK

The LEAD INSTITUTION shall perform the work described in the detailed project plan submitted to the CRSP MO annually, incorporated and appended hereto as Appendix B. The actual performance of that work shall conform in all aspects and be limited to the project proposal approved by the BOD including:

- A. Specific objectives of the project;
- B. Expected inputs, outputs and impact indicators of the project;
- C. Program and budget relationships with Host Country Institution(s);
- D. Fiscal and managerial responsibilities of the project consistent with the requirements of the prime grant; and
- E. Fiscal and administrative arrangements for project activities at Host Country sites.

Changes in any of the above work must be approved in writing in advance by the MO to assure the comprehensive nature of the total program, the appropriate relationships among the projects and compliance as required under the terms of the prime grant.

III. PERIOD OF PERFORMANCE

The period of performance of this Subagreement shall be from *[insert]* through *[insert]*, unless terminated earlier or extended by mutual written agreement of all parties.

A recommendation regarding project continuation will be made by the BOD based on a substantive review and evaluation. MSU shall have the right to terminate the Subagreement after due deliberations with the TC and the BOD. In the event of early termination, the LEAD INSTITUTION shall be reimbursed for all allowable costs incurred to the date of termination and for all allowable noncancellable obligations, subject to availability of funds.

IV. ALLOWABLE COSTS

A. For performance of this subcontract, MSU shall reimburse the LEAD INSTITUTION for allowable costs which are reasonable, allocable and allowable in accordance with the terms of (1) this Subagreement, (2) any negotiated advance understanding on particular cost items, (3) OMB Circular A-21, "Cost Principles for Educational Institutions" in effect on the date of this Subagreement and all subsequent revisions, <http://www.whitehouse.gov/omb/circulars/a021/a021.html>, (4) OMB Circular A-110, "Uniform Administrative Requirements for Grants and Agreements With Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations" in effect the date of this Subagreement and all subsequent revisions <http://www.whitehouse.gov/omb/circulars/a110/a110.html>, (5) 22 CFR 226 in effect on the date of this Subagreement and all subsequent revisions, <http://www.usaid.gov/pubs/ads/22cfr226.doc>, and (6) 22 CFR 228 in effect on the date of this Subagreement and all subsequent revisions, <http://www.usaid.gov/pubs/ads/22cfr228.doc>.

B. Funds budgeted for Equipment may not be exceeded without the prior written approval of the MO. Note that to be classified as equipment, individual items must have a useful life of more than one year and cost \$5,000 or more per item.

C. Funds budgeted for expenditures in or on behalf of the Host Country may not be re-budgeted to the LEAD INSTITUTION or to another Host Country without the prior written approval of the MO.

D. Funds budgeted for training may not be re-budgeted without the prior written approval of the MO.

E. Except for B, C and D above, line items within the total approved budget may be adjusted, as reasonable and necessary, without the prior approval of MSU or the MO.

F. When approved by the MO, amounts unexpended at the end of a budget year may be carried forward to the subsequent budget year within the period of performance of this Subagreement.

G. The LEAD INSTITUTION shall be obligated to refund to MSU an amount or amounts equal to the sum of costs reimbursed by MSU and ultimately determined by MSU or USAID/W to be unallowable.

V. COMPENSATION

The total estimated amount of this Subagreement shall not exceed XXX Thousand XXX Hundred Dollars (\$XX,XXX) per the approved budget listed in Appendix C.

MSU obligates the amount of XXX Thousand XXX Hundred (\$XX,XXX), as partial funding of the total estimated amount as set forth above. The LEAD INSTITUTION shall not exceed the total estimated amount or the obligated amount of this Subagreement, whichever is less.

Because this Subagreement is incrementally funded, funds obligated hereunder are only anticipated to be sufficient for project expenditures through approximately XXXXX 30, 200X. Revisions to the budget shall be made in accordance with 22 CFR 226.25 <http://www.usaid.gov/pubs/ads/22cfr226.doc> and Article IV of this Subagreement.

Annual Subagreement budgets as approved by the Bean/Cowpea CRSP BOD are made a part hereof as Appendix C.

VI. REIMBURSEMENT PROCEDURE

A. **Initial Advance of Funds:** Advances shall only be sufficient to cover three months of expenditures for the LEAD INSTITUTION and six months of expenses for each of the Host Countries under this Subagreement.

To request an advance of funds, the LEAD INSTITUTION will submit an invoice to the CRSP MO. The invoice shall indicate "Advance of Funds."

The invoice shall show the period for which the advance is being requested. All invoices will reference Subagreement No. XXXXXX and must contain a listing of how the requested advance will be distributed (i.e., LEAD INSTITUTION, Host Country(ies)).

If the LEAD INSTITUTION has an outstanding Advance of Funds as of [insert], a portion of each subsequent quarterly invoice will be applied to reduce the advance of funds over the final year of the project. The amount to be applied to the advance from each invoice will be decided prior to the final year of the project. When the amount invoiced exceeds the advance payment, the MO will reimburse the LEAD INSTITUTION for the remaining expenditures up to the total obligated amount of the subagreement.

B. Subsequent Reimbursements: The LEAD INSTITUTION will submit an invoice indicating the period covered. Invoices for reimbursement may be submitted monthly, but must be submitted no less than on a calendar-quarterly basis to the MO and must be submitted within 30 days following the end of each quarter. The invoice submitted at the end of each calendar quarter shall be supported by an original and two copies of a certified expense report in accordance with Appendix F. Upon receipt of the invoice, MSU will replenish the advance funds for actual expenditures until such time as the total reimbursement, when added to the initial advance, equals the total obligated amount of this Subagreement. Thereafter vouchers for expenditures submitted by the LEAD INSTITUTION will not be reimbursed but will be applied to liquidate the amount of outstanding advance of funds.

The LEAD INSTITUTION will submit an original and two copies of a certified expense report as follows:

The expense reports will be submitted to:
The Administrative Officer
Bean/Cowpea CRSP
321 Agriculture Hall
Michigan State University
East Lansing, MI 48824-1039

C. The Final Report: A properly executed expense report marked FINAL REPORT will be submitted to the MO within 60 days following the end of the period of performance of this Subagreement.

VII. INTEREST ON CASH ADVANCES

The LEAD INSTITUTION shall maintain advances of Federal funds in an interest bearing insured account, unless (1), (2), or (3) apply: (1) The LEAD INSTITUTION receives less than \$120,000 in federal awards per year; (2) The best reasonably available interest bearing account will not be expected to earn interest in excess of \$250 per year on Federal cash balances; or (3) The depository would require an average or minimum balance so high that it would not be feasible within the expected Federal and non-Federal cash resources. The LEAD INSTITUTION shall follow the regulations under OMB Circular A-110 in effect on the date of this Subagreement and all subsequent revisions, <http://www.whitehouse.gov/omb/circulars/a110/a110.html>.

Interest earned on Federal advances through MSU MO shall be remitted by LEAD INSTITUTION annually to the Department of Health and Human Services(HHS), Payment Management System, Rockville, MD 20852.

LEAD INSTITUTION must notify MO annually the amount of interest remitted to HHS and on what date.

Interest earned on advances of Federal funds is not considered program income.

VIII. COST-SHARING

The LEAD INSTITUTION, for each year of performance, shall assure that expenditures from non-Federal funds equal or exceed 25 percent of the Federal funds provided by MSU/USAID/W. These expenditures will exclude obligations made to or on behalf of HC Institutions under Subagreements in furtherance of grant objectives. Prior and subsequent year's non-Federal contributions in excess of the aforesaid 25 percent, if any, may be applied to compensate for any year's shortfall.

Cost sharing will be in accordance with OMB Circular A-110 (as periodically updated), Subpart C, Section .23, <http://www.whitehouse.gov/omb/circulars/a110/a110.html>.

IX. AUDIT

A. MSU and its authorized representative(s) may audit the invoices or vouchers. Each payment theretofore made shall be subject to reduction and refund to MSU for amounts included in the related invoices or vouchers, which are found, on the basis of such audit, to constitute unallowable costs.

B. If any audit of the LEAD INSTITUTION's records reveals that the LEAD INSTITUTION has not met its cost-sharing obligations with non-Federal funds under this Subagreement, MSU is authorized to request refund of a proportionate amount of expenditures.

C. The LEAD INSTITUTION agrees to comply with the requirements of OMB Circular A-133, Audits of Institutions of Higher Education and Other Nonprofit Institutions in effect on the date of this Subagreement and all subsequent revisions, <http://www.whitehouse.gov/omb/circulars/a133/a133.html>. The LEAD INSTITUTION further agrees to provide MSU with copies of any of the independent auditors' reports, which present instances of non-compliance with federal laws and regulations which bear directly on the performance or administration of this Agreement. In cases of such non-compliance, LEAD INSTITUTION will provide copies of responses to auditors' reports and a plan for corrective action. All records and reports prepared in accord with the requirements of OMB Circular A-133 as appropriate shall be available for inspection by representatives of MSU, USAID or the U.S. Federal Government during normal business hours.

X. RECORDS

The LEAD INSTITUTION will maintain adequate financial records, in accordance with generally accepted accounting practices to clearly and easily identify expenses of the Subagreement, to describe the nature of each expense and to establish relatedness to this Subagreement. All records, books, documents and papers related to the project conducted under this Subagreement shall be available upon request at all reasonable times to inspection and audit by MSU, U.S. Agency for International Development, and by the U.S. Department of Health and Human Services (MSU's cognizant Federal audit agency inspection or their authorized representatives). These records will be retained for a period of three (3) years, with the following qualifications.

A. If any litigation, claim, negotiation, audit or other action involving the records has been started before the end of the 3-year period, the records shall be kept until all issues are resolved, or until the end of the regular 3-year period, whichever is later.

B. The retention period starts from the date of the submission of the LEAD INSTITUTIONS' final invoice.

XI. TITLE TO PROPERTY

Title to property acquired hereunder shall vest in the LEAD INSTITUTION, subject to the requirements of 22 CFR Part 226, <http://www.usaid.gov/pubs/ads/22cfr226.doc>, regarding the use, accountability, and disposition of such property.

Note that to be classified as equipment, individual items must have a useful life of more than one year and cost \$5,000 or more per unit.

Purchase of equipment and vehicles (vehicle is defined as an item having a motor, seat(s) and wheels) requires prior approval of the MO. See Appendix H for a Request to Purchase Equipment form.

XII. COMPLIANCE WITH USAID ELIGIBILITY RULES

This Section applies to the procurement of goods and services by the LEAD INSTITUTION. The LEAD INSTITUTION shall comply with the Mandatory Standard Provisions (Appendix A), and 22 CFR228, <http://www.usaid.gov/pubs/ads/22cfr228.d0c>, when the costs for goods or services will be paid for with USAID funds.

XIII. AUTHORIZED GEOGRAPHIC CODE

The authorized geographic code for procurement of goods and services under this award is 000 (United States) and as specified in the Mandatory Standard Provisions for U.S. Nongovernmental Recipients When Activities are Undertaken Outside the U.S. (Appendix A), and 22 CFR 228, <http://www.usaid.gov/pubs/ads/22cfr228.doc>.

XIV. ASSURANCES

Delinquent Federal Debt. The LEAD INSTITUTION certifies that it is not delinquent on the repayment of any U.S. Federal debt.

Debarment and Suspension. The LEAD INSTITUTION certifies that, neither it nor its principles are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any U.S. Federal department or agency. By signing this Subagreement, The LEAD INSTITUTION makes the above certification.

Drug-Free Workplace. The LEAD INSTITUTION certifies that it will provide a drug-free workplace.

Certification Regarding Lobbying. The LEAD INSTITUTION agrees to comply with the requirements of OMB Circular A-21, Principles For Determining Cost Applicable To Grants, Contracts And Other Agreements With Educational Institutions, regarding lobbying. By signing this Subagreement, The LEAD INSTITUTION makes the above certification.

Clean Air Act and the Federal Water Pollution Control Act. The LEAD INSTITUTION agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), as amended. Violations shall be reported to MSU, USAID and the Regional Office of the Environmental Protection Agency (EPA).

XV. PATENTS AND INVENTIONS

The Department of Commerce regulations entitled "Rights in Inventions Made by Nonprofit Organizations and Small Business Firms" set forth in 37 CFR Part 401 and CIB 99-19 shall govern rights, title, disclosure, filings, etc., of any invention resulting from the work performed by the LEAD INSTITUTION hereunder. The LEAD INSTITUTION agrees to comply with and to be bound by the terms and conditions of these patent regulations.

If necessary, a separate Research Agreement may be negotiated between MSU and the LEAD INSTITUTION.

XVI. RESEARCH INVOLVING RECOMBINANT DNA

The LEAD INSTITUTION shall implement any research activities under this Subagreement which involve recombinant DNA in accordance with:

(a) the United States and XXXXX established rules for the conduct of recombinant DNA research. If XXXXX does not have such rules, the proposed research must be reviewed and approved by an NIH-approved Institutional Biosafety Committee or equivalent review body and accepted in writing by an appropriate national governmental authority of the XXXXX. The safety practices that are employed abroad must be reasonably consistent with the NIH Guidelines.

(b) The National Institutes of Health Guidelines for Research Involving Recombinant DNA Molecules;

(c) Guidelines Recommended to USDA by the Agricultural Biotechnology Research Advisory Committee;

(d) USAID's environmental procedures; and

(e) Such other U.S. or Government of XXXXX guidelines and procedures as may apply during the course of research.

Recombinant DNA materials will not be transferred to a HOST COUNTRY INSTITUTION until guidelines for research are approved by the appropriate United States and Government of XXXXX authorities.

XVII. CARE OF LABORATORY ANIMALS

If the Standard Provision entitled "Care of Laboratory Animals" (see Section 8, Required as Applicable Standard Provision for U.S., Nongovernmental Recipients, included as Appendix A), the LEAD INSTITUTION shall include the certificate required by paragraph (c) of said Standard Provision in all of its reports which pertain to the use of laboratory animals.

XVIII. USE OF HUMAN SUBJECTS

If the Standard Provision entitled "Protection of the Individual as a Research Subject" applies to this Subagreement (see Section 7, Required as Applicable Standard Provisions for U.S. Nongovernmental Recipients, included as Appendix A), the LEAD INSTITUTION shall provide written assurance that it will abide by this policy for all research involving human subjects supported by MSU and USAID. The LEAD INSTITUTION will submit this written assurance with the Bean/Cowpea Expense Reporting Form for the period ending September 30 for each year of this project.

XIX. TERMINATION AND SUSPENSION

A. Termination for Cause - This Subagreement may be terminated in whole or in part at any time before the date of completion, whenever it is determined that the recipient has failed to comply with the conditions of the Subagreement. MSU shall promptly notify the LEAD INSTITUTION in writing of the determination and reasons for the termination, together with the effective date. Payments made to the LEAD INSTITUTION or recoveries by the Federal sponsoring agency under grants or other Subagreements terminated for cause shall be in accordance with the legal rights and liabilities of the parties.

B. Termination for Convenience - This Subagreement may be terminated in whole or in part when the continuation of the project would not produce beneficial results commensurate with the further expenditure of funds. The two parties shall agree upon the termination conditions, including the effective date and, in the case of partial terminations, the portion to be terminated. The LEAD INSTITUTION shall not incur new obligations for the terminated portion after the effective date, and shall cancel as many outstanding obligations as possible.

C. Termination or Suspension for Changed Circumstances. If at any time USAID or MSU determines that continuation of all or part of the funding for a project should be suspended or terminated because such assistance would not be in the national interest of the United States or would be in violation of an applicable law, then MSU, may, following notice to the LEAD INSTITUTION, suspend or terminate this Subagreement in whole or part and prohibit the LEAD INSTITUTION from incurring additional obligations chargeable to this Subagreement other than those costs specified in the notice of suspension during the period of suspension. If the situation causing the suspension continues for sixty (60) days or more, then MSU may terminate this grant on written notice to the LEAD INSTITUTION and cancel the portion of this Subagreement that has not been disbursed or irrevocably committed to the LEAD INSTITUTION.

D. Termination Procedures. Upon receipt of and in accordance with a termination notice as specified in A. or B. above the LEAD INSTITUTION shall take immediate action to minimize all expenditures and obligations financed by this Subagreement and shall cancel such unliquidated obligations whenever possible. Except as provided below, no further reimbursement shall be made after the effective date of termination. The LEAD INSTITUTION shall within thirty (30) calendar days after the effective date of such termination repay to MSU all unexpended funds that are not otherwise obligated by a legally binding transaction applicable to this Subagreement. Should the funds paid by MSU to the LEAD INSTITUTION prior to the effective date of the termination of this Subagreement be insufficient to cover the LEAD INSTITUTIONS' obligations in the legally binding transaction, the LEAD INSTITUTION may submit to MSU within ninety (90) calendar days after the effective date of such termination a written claim covering such obligations. The USAID grant officer shall determine the amount(s) to be paid by MSU to the LEAD INSTITUTION under such claim in accordance with the applicable cost principles.

XX. DISPUTES

Except as otherwise provided in this Subagreement, all claims, counter-claims, disputes and other matters in question between MSU and the LEAD INSTITUTION arising out of or relating to this Subagreement or the breach thereof will be decided by arbitration if the parties hereto mutually agree, or in a court of competent jurisdiction.

XXI. AMENDMENTS

All mutually agreed upon changes to this Subagreement must be processed through the MO at the following address:

The Administrative Officer
Bean/Cowpea CRSP
321 Agriculture Hall
Michigan State University
East Lansing, MI 48824-1039

XXII. SUBORDINATE AGREEMENTS

The LEAD INSTITUTION's intention to enter into a subordinate agreement for any of the work to be performed under this Subagreement must be identified in the LEAD INSTITUTION's detailed project

plan or annual scope of work and the detailed project budget which require TC and BOD approval. Any deviation from this condition requires the prior written approval of the MO.

The LEAD INSTITUTION will make certain that any subordinate agreement which it may enter into for the performance of any part of this Subagreement will include the same terms and conditions regarding financial, property and operational reporting requirements as those to which the LEAD INSTITUTION is subject under the terms and conditions of this Subagreement. No subordinate agreement entered into by the LEAD INSTITUTION can release it from any obligation, responsibility or liability to MSU under this subagreement.

XXIII. TRAVEL

The USAID/Washington Cognizant Technical Officer (EGAT) must be notified of all international travel funded under the Subagreement in advance of the commencement of the travel. Travel must make use of US carriers as indicated in the Standard Provisions attached hereto.

International Travel Notification Forms must be submitted through the MO 21 days prior to the departure date.

XXIV. TRAINING

Participant training under this Subagreement is to be conducted according to Article 5 of the Standard Provisions attached hereto.

The PI must provide the MO with a yearly summary of training activities including total number of new trainees during the period and the following information for all persons trained under this Subagreement: name, citizenship, sex, training site, beginning and ending dates of training, type and purpose of training, type of training activity and source of funding.

XXV. REPORTS

The LEAD INSTITUTION shall prepare and submit financial and technical reports to the CRSP MO in such form and reasonable detail as prescribed by the CRSP MO and the prime grant.

A. **INTERIM REPORTS** under this Subagreement shall be in accord with instructions from the CRSP MO.

B. **FINAL REPORTS** under this Subagreement shall be in accord with instructions from the CRSP MO.

XXVI. PUBLICATIONS

The LEAD INSTITUTION will supply MSU with five (5) copies of each publication, funded in part or whole, from this project. IF SPECIFICALLY REQUESTED BY USAID/W, THE LEAD INSTITUTION will supply up to an additional 50 copies of any technical publication resulting from this project within the availability of project funds.

XXVII. INDIRECT COSTS

The current Negotiated Agreement between the LEAD INSTITUTION and the US Government shall be the basis for establishing the method and rate or rates to be applied in determining the allowable Indirect Costs under this Subagreement.

XXVIII. ALTERATIONS TO STANDARD PROVISIONS, APPENDIX A

A. Except as noted in B below, it is understood and agreed that as used in these standard provisions numbers 1 through 27:

1. References to "grant" shall mean this "Subagreement."
2. References to "grantee" shall mean "LEAD INSTITUTION."
3. References to "USAID," "Government" or "US Treasury" shall mean "MSU."

B. Exceptions to A above: In Articles 1(a), 9(c), 10, 12, 14, 15, 23, 26 and 27, "USAID" shall mean "USAID."

IN WITNESS THEREOF, MSU AND LEAD INSTITUTION have executed this Subagreement.

MICHIGAN STATE UNIVERSITY

(INSERT NAME OF LEAD INSTITUTION)

Brian T. Day
Sr. Contract and Grant Administrator

Signature

Typed Name and Title

Date

Date

V. MANAGEMENT AND ITS ADVISORY GROUPS

A roster of management and advisory groups of the Bean/Cowpea CRSP, effective August 1, 2002, is given in Table 2.

Management

Management Entity

The Bean/Cowpea CRSP was initiated in September 1980 with a five-year grant from USAID/W to the Management Entity (ME), Michigan State University (MSU), who is ultimately responsible for the conduct of the grant. The Director of the MSU Contract and Grant Administration accepts and signs on behalf of MSU for USAID/W funds, with that acceptance subsequently ratified by the MSU Board of Trustees. Programmatic responsibility rests with the College of Agriculture and Natural Resources through the Director of the Institute of International Agriculture.

Management Office

MSU has organized and designated the Management Office (MO) as its functional arm. The MO, which handles all the day-to-day management of the CRSP, is staffed by a Program Director, Deputy Director, Administrative Officer and an Information Coordinator. This team, representing social and biological research management expertise as well as strong financial-administrative competence, works closely with the MSU Contract and Grant Administration to ensure the grant is administered within the rules and regulations of MSU as well as those of USAID/W.

The responsibilities of the MO include, but are not limited to:

1. Receiving and administering USAID/W grants funds and monitoring the use of those funds;
2. Developing subagreements with participating U.S. universities for approved projects and developing Memorandum of Understanding with participating HC Institutions;
3. Implementing research programs in coordination with U.S. and HC Institutions;
4. Accounting to USAID/W for program accomplishments and expenditures, including the required U.S. match, through quarterly and annual reports;
5. Obtaining the necessary USAID/W clearances for international travel by CRSP personnel and the required approvals for equipment purchases;
6. Developing and implementing review and evaluation procedures to assure the CRSP's overall performance meets stated objectives;
7. Coordinating and facilitating meetings of the BOD, TC and EEP;
8. Providing leadership in the enhancement of financial resources other than the core grant, such as buy-ins from USAID Missions; and
9. Representing the CRSP on the CRSP Council.

While the MO has the authority to make final decisions relative to program assignments, budget allocations and authorization, the MO carefully considers the advice and guidance of the various CRSP advisory and evaluation groups, i.e., the BOD, TC and EEP. The roles of these advisory groups are included in the CRSP Guidelines under "Organization of Participating Institutions."

Advisory Groups

Institutional Representatives (IRs)

The U.S. and HC universities/institutions participating in this CRSP will each designate an IR to represent them in the conduct of the CRSP. The IRs are selected by their participating institutions on the basis of their responsibilities and their relevant expertise. Each IR is the administrative resource for the team on his/her campus and the institution's focal point for the MO. IRs are valuable to the successful governance of the CRSP. The U.S. IRs and one HC IR (rotated on a two-year term from among the HC IRs) constitute the "Administrative Council" of the Bean/Cowpea CRSP (per CRSP Guidelines).

Board of Directors

Effective August 1, 2002, the BOD will consist of six IRs, five from the U.S. Lead Institutions and one from a HC Institution (see Table 3). MSU, as the ME, has permanent membership on the BOD. The other four U.S. seats rotate among the IRs of the remaining U.S. Lead Institutions for two-year terms. The HC IR seat will be rotated on a two-year term from among the HC Institutions. The USAID CTO and the CRSP Program Director will serve as ex-officio members of the Board. A Chair and Co-Chair will call, establish the agenda for, and lead meetings of the BOD in consultation with the MO. At the beginning of the grant, members will be elected to both offices from the newly constituted BOD. The term of service is one year. Each subsequent year, the Chair will step down, the Co-Chair will assume the position of Chair, and the BOD will elect a new Co-Chair. The Co-Chair has the responsibility of recording the minutes of meetings.

The responsibilities of the BOD include, but are not limited to:

1. Providing advice on program policy issues to the MO;
2. Evaluating the Global Plan, content and balance of the program, and the adequacy of funding and resources through review and approval of annual budgets and workplans;
3. Reviewing the progress/accomplishments of the CRSP through reports from the annual EEP review or other major reviews;
4. Approving additions/deletions/modifications to components of the CRSP;
5. Approving nominations for the EEP to be submitted to USAID/W.

The BOD meets at least twice annually. Other meetings may be called by the BOD Chair or the MO when deemed necessary. Meeting options include conference telephone calls or other electronic communication. Participation by at least 50 percent of the BOD members is considered a quorum for transaction of business and a simple majority of members present is required for decisions by the BOD. BOD members receive no compensation for their services on the BOD, but expenses for participating in the meetings are reimbursed.

Technical Committee (TC)

The TC for the CRSP will be comprised of at least nine members: a) two representatives from each of the three Regional Project Teams (Chair and Co-Chair); and b) the Regional Facilitator (permanent member) from each of the three regional projects. In addition to these nine members, other members will be appointed by the MO as appropriate, including: a) an additional PI (as needed) to assure disciplinary representation; and b) up to two invited external advisors (e.g., representatives from industry and/or other international programs such as CIAT and IITA).

The TC Chair and Secretary will be elected by a simple majority by TC members for a one-year term beginning with the first meeting of the calendar year (April-June). The retiring TC Chair

will be responsible for seeking nominations for Chair and Secretary from among the newly elected Regional Officers (Chairs and Co-Chairs) and RFs for a one-year period. The elections will be conducted either by e-mail or a brief conference call (two-four weeks) prior to the first TC meeting of the year.

The responsibilities of the TC include, but are not limited to:

1. Monitoring the technical aspects of CRSP research and proposing modifications therein.
2. Reviewing the regional project annual workplans and budgets and recommending technical and/or budget adjustments.
3. Reviewing the recommendations of the EEP and recommending adjustments, if appropriate.
4. Reviewing the annual reports relative to the technical progress being made.
5. Providing advice to the MO on operational issues relative to the regional projects.

The TC will meet physically only once a year (first meeting) and hold a conference call later in the year to discuss the review of the annual progress reports. Other meetings may be called by the TC Chair or the MO when deemed necessary. Participation by at least 50 percent of the TC members is considered a quorum for transaction of business and a simple majority of members present is required for decisions by the TC. TC members receive no compensation for their services on the TC, but expenses for participating in the meetings are reimbursed.

External Evaluation Panel

The EEP is appointed by the ME with approval of USAID/W to review the progress, funding, plans and status/prospects of the CRSP. Nominations for EEP members are solicited from CRSP personnel, TC and BOD members as well as current EEP members. When a list of candidates is prepared, the MO contacts each of them to determine their willingness to be nominated. A list of the people who accept is submitted to the BOD for ranking and approval. The approved names are submitted to the USAID/W Cognizant Technical Officer for processing through the appropriate offices. The EEP consists of up to five members appointed for five-year terms which are staggered so that only one or two members rotate off each year.

The EEP Chair is elected, by a simple majority, from and by the EEP members and confirmed by USAID/W. The term of office normally consists of the time remaining in the member's appointment to the EEP.

The responsibilities of the EEP include, but are not limited to:

1. Reviewing the progress of the CRSP's research program on an annual basis, either through a review of the workplans and annual reports or a combination of a paper review and selected site visits;
2. Making recommendations to the MO relative to technical direction and management of the program; and
3. Completing an intensive review every five years prior to the request for the extension of the CRSP.

The EEP meets annually to discuss the draft reviews which have been prepared by individual EEP members. Meeting options include conference telephone calls or other electronic communication. Information from the meeting is incorporated, as needed, into the official report of the EEP along with their recommendations. A simple majority of the members present is required for all EEP decisions. In addition to reimbursement for expenses incurred as a result of participating in a review or the annual meeting, EEP members are paid an honorarium.

Policies Adopted by the Board of Directors

1. Collaboration

Bean/Cowpea CRSP projects should be collaborative with U.S. and Host Country partners rather than free standing in any one country. The Regional Project Teams are to collaborate in the planning and implementation of the research and in preparing budget recommendations to the MO.

2. Distribution of Funds—U.S./HC

- a. Based on each grant period, not less than 50 percent of USAID/W funds for support of components are to be spent in or directly on behalf of HCs in order to (1) nourish a climate of collaboration and partnership between the U.S. and HC PIs and (2) insure CRSP focus on the solution of HC problems rather than on the maintenance of existing research programs of U.S. institutions.
- b. However, experience has demonstrated that the U.S. PI is uniquely restricted when institutional indirect costs for component support are taken solely from the U.S. 50 percent of the total funds. Therefore, the 50/50 split is to be applied to the total project budget exclusive of all indirect costs.
- c. If a component has not settled into a 50/50 direct expense spending pattern, more funds must be allotted to the HC in subsequent years so that at the end of the grant direct expenses will be at the 50/50 level. Where HC spending patterns are seriously below the expected level, the HC and U.S. PIs will be request to submit to the MO for Technical Committee discussion the reasons for the spending patterns and their suggestions for addressing the issue, including possible recognition of an unrealistic HC budget level.
- d. To insure accurate and responsible financial reporting by the CRSP to USAID/W and a timely utilization of obligated funds, HC Institutions are requested to submit their receipts to the U.S. Lead Institutions no less than quarterly (within 30 days after the end of each quarter) and no more than monthly. If the HC Institution consistently does not report quarterly and thus the U.S. Institution is unable to document that HC funds are expended, the MO may budget a smaller percentage of funds to be assigned to the offending HC Institution for the next fiscal year.

3. HC Institutions' Contributions

While not specifically mandated as in the case of U.S. institutions, contributions from participating HC Institutions are encouraged and are seen as strengthening the collaborative nature of the CRSP. Personnel, in-kind contributions and indirect costs or overhead are among the contributions considered appropriate.

4. Institutional Involvement

The Bean/Cowpea CRSP Board of Directors is concerned about the degree to which institutional participation occurs in CRSP projects beyond activities associated with the individual Principal Investigators (PIs). Of special concern is the extent to which PIs interact with their Institutional Representatives (IRs) and the extent to which the administration of each Lead Institution is aware of research and training progress. Every institution is strongly encouraged to take significant steps to strengthen institutional ownership through (a) internal reviews of activities with attention to greater institutional integration, (b) identification of strengths and weaknesses with appropriate institutional response and, when relevant, (c) institutional participation in on-site activity evaluations.

5. Institutions Formerly Associated with the CRSP

Host Country Institutional capacity building, through professional training and financial investment in research infrastructure, is a priority objective of the CRSP. This combination of human and infrastructural capacities in the agricultural sciences is considered vital for enabling Host Country Institutions to effectively and sustainably find solutions to food, health, nutrition, rural income and environmental problems in their respective countries. Host Country PIs and institutions are encouraged to capitalize on the enhanced capacity to leverage additional resources from other national and international sources and to seek to achieve broad regional impact through their collaborative research and training activities in the Bean/Cowpea CRSP.

6. Multidisciplinary Orientation

Because of the complex nature of the food and agriculture issues addressed, the CRSP is encouraged to continue a multi-disciplinary orientation in its projects and program-wide activities. Broadly, within the CRSP an integration of production sciences (e.g., breeding, physiology, pathology) and non-production sciences (e.g., food science, nutrition, social science including economics) should be maintained through research and program management.

7. Non-CRSP Developing Countries' Participation

Whereas the Bean/Cowpea CRSP has institution building and strengthening as a major goal, the BOD endorses the concept of CRSP Host Countries inviting scientists, representing limited-resource nations in CRSP regions of the world, to participate in HC collaborative research and training efforts which may provide mutual benefits.

8. Training

The Bean/Cowpea CRSP has as a major goal the strengthening of HC Institutions through the training of HC nationals, a critical resource necessary for successful long-term research. To achieve this goal, CRSP projects are to give emphasis to the training of HC persons over the training of U.S. persons. This policy adopts a HC priority rather than U.S. exclusion and refers to both short-term training and graduate education.

9. Training—Location of Sponsored Graduate

It is in the best long-term interest of each HC Institution that its personnel achieve training from a diversity of institutions in an effort to avoid institutional "in-breeding." CRSP U.S. Lead Institutions and their Host Country collaborators are encouraged to consider using an assortment of CRSP training sites for nationals from the same HC.

10. Training—Support for Terminated Projects

The Bean/Cowpea CRSP Board of Directors endorses honoring the training commitments made to CRSP-sponsored students associated with projects which are terminated prior to the completion of the students' programs. This policy is in effect only for the academic degree for which the students are studying at the time of their projects' termination. (A total maximum commitment is not to exceed five years for a Ph.D., three years for a Masters, and five years for a Baccalaureate degree.) This policy is contingent upon the continuation of the CRSP, availability of funds and satisfactory academic progress by the trainee.

11. Women in Development

In many parts of the world, the primary responsibility for bean and cowpea production rests with women. A major commitment is made by the Bean/Cowpea CRSP to the participation of women in its research projects and training activities. Attention to the effects of the program on family life is a major concern. A Women in Development Specialist is essential to implementing this policy.

**Table 2: Roster of Management and Advisory Groups
Effective October 1, 2002**

<p align="center">MANAGEMENT ENTITY Michigan State University Contract & Grant Administration</p> <p>USAID/W COGNIZANT TECHNICAL OFFICER</p> <p align="center">MANAGEMENT OFFICE Director Deputy Director Administrative Officer Information Coordinator</p> <p align="center">ADMINISTRATIVE COUNCIL Institutional Representatives from U.S. Lead Institutions: Michigan State University Oregon State University Pennsylvania State University Purdue Texas A&M University of California-Riverside University of Georgia University of Minnesota University of Nebraska-Lincoln University of Puerto Rico Washington State University Institutional Representative from one HC Institution (on a rotating basis)</p>	<p align="center">BOARD OF DIRECTORS One Institutional Representative from four U.S. Lead Institutions One Institutional Representative from a HC Institution One Institutional Representative from Michigan State University</p> <p align="center">REGIONAL FACILITATORS West Africa Region (WA) East & Southern Africa Region(ESA) Latin American & Caribbean Region (LAC)</p> <p align="center">TECHNICAL COMMITTEE Chair, WA Project Co-Chair, WA Project Regional Facilitator, WA Project Chair, ESA Project Co-Chair, ESA Project Regional Facilitator, ESA Project Chair, LAC Project Co-Chair, LAC Project Regional Facilitator, LAC Project Up to two invited external advisors (to be identified)</p> <p align="center">EXTERNAL EVALUATION PANEL Chair and Three to Four Members</p>
--	--

Table 3: Institutional Participation on the Bean/Cowpea CRSP Board of Directors

FY	03	04	05	06	07	08	09	10	11	12
Michigan State University	X	X	X	X	X	X	X	X	X	X
Oregon State University		X	X				X	X		
Pennsylvania State University	X	X				X	X			
Purdue University		X	X				X	X		
Texas A&M				X	X				X	X
Univ. of California-Riverside			X	X				X	X	
University of Georgia	X				X	X				X
University of Minnesota				X	X				X	X
University of Nebraska	X	X			X	X				
University of Puerto Rico			X	X				X	X	
Washington State University	X					X	X			X
HC IR (appointed on a two-year rotation)	Bunda	Bunda	X	X	X	X	X	X	X	X

VI. FINANCIAL MANAGEMENT

Assignment	Implications	Time Frame
<p>1. The Technical Committee evaluates each year all research and training activities in each regional project using:</p> <ul style="list-style-type: none"> a. The most recently prepared Annual Regional Project Reports (submitted in November); b. The latest available External Evaluation Panel report; and c. Background information from the MO. <p>Their evaluation report is submitted to the MO, BOD and the EEP.</p>	<p>Technical progress of each regional project is monitored on a regular basis. When needed, the TC identifies outside expertise for consultation in disciplines not represented on the TC.</p>	Dec/Jan
<p>2. The EEP reviews the Bean/Cowpea CRSP, using:</p> <ul style="list-style-type: none"> a. Background information from the MO; b. Site visit reports, Annual Regional Project Reports, publications; and c. Minutes of the TC Meetings. <p>The EEP submits its report to USAID/W and the BOD through the MO.</p>	<p>The EEP brings a much broader development perspective and set of experiences to assess progress related to goals and objectives, research management, appropriate linkages, output in relation to expenditures and general contributions to development.</p>	Jan/Feb
<p>3. The BOD reviews all the above reports and addresses any problems raised.</p>	<p>Institutional administrators keep informed and involved.</p>	Jan/Feb
<p>4. The MO establishes a draft of the next fiscal year's budget based on:</p> <ul style="list-style-type: none"> a. Projections of future allocations from USAID/W; and b. Performance of regional projects based on TC and EEP evaluation of research activities. 	<p>From the total CRSP perspective and knowledge of USAID/W's prospects for continuing support, the anticipated budget is split by Region, Project Support and MO.</p>	Jan/Feb
<p>5. Regional Project Teams meet to draft a detailed regional research activity and training workplans and budgets for the next fiscal year. Budgets for activities are itemized by University/Institution.</p>	<p>PIs are informed of the rationale for budget decisions early in the process and given an opportunity to provide input as appropriate. In the development of regional project budgets, PIs must justify anticipated expenses to regional teams.</p>	Jan-April

Assignment	Implications	Time Frame
6. The draft regional project workplans and budgets are submitted to the TC for evaluation. A recommendation is made to the MO relative to changes in the regional workplans and budgets.	From a technical perspective, the TC considers what is the most effective and efficient expenditure of regional project funds. Changes can be recommended in projects' workplans and budgets so long as the total CRSP bottom line does not change.	Apr/May
7. The MO presents workplans and budgets for the upcoming fiscal year to the BOD for feedback and approval.	As Representatives of CRSP Universities/Institutions, the BOD is concerned with the program's performance, progress toward the Global Plan and approval of workplans and budgets.	May/June
8. The MO informs the U.S. and HC PIs of the BOD approved workplans and budgets for the coming fiscal year and requests a 12-column budget sheet signed by the Contracts and Grants Officers (C&G) at the Lead U.S. Institutions.	PIs must show in detail how they anticipate spending the funds, including the amount to be spent in the U.S. and in subagreements with HCs. Other than reducing training or increasing equipment, line items can be adjusted later. Funds can be transferred from the U.S. to a HC, but not from a HC to the U.S. or to another HC. C&Gs acknowledge by their signature on the twelve-column budget sheet that indirect costs are calculated correctly.	August
9. Amendments to the Subagreements with Lead Institutions are prepared and processed, obligating MSU, as the ME, to reimburse subcontracted institutions for an amount equal to that portion of the component's approved budget for which the ME has received funds from USAID/W.	Funds are usually obligated to cover approximately seven months of the fiscal year (October 1 to April 27).	August/Sept
10. Figures from the 12-column budgets are entered into the MO's spread sheets to verify the calculations and to make the information available for a composite line item budget for the full CRSP. Copies of the fully signed 12-column budget are sent to the PI and the Lead Institution's Financial Officer.	A financial baseline is established for the year against which the quarterly financial reports can be assessed.	August/Sept

Assignment	Implications	Time Frame
<p>11. Expense Reports from the U.S. Lead Institutions are due 30 days after the close of each quarter, though monthly billings are accepted. These reports are also entered into the MO's computer databases to verify the calculations and to utilize the information to generate the CRSP-wide reports of expenditures. The balance which is available for reimbursement (total obligation minus advance of funds minus prior reimbursements) is reviewed.</p> <p>a. If the balance is sufficient to cover the amount requested for reimbursement, a payment voucher is processed immediately.</p> <p>b. If the balance is not sufficient to cover the amount requested for reimbursement, a partial reimbursement (using the remaining balance in the obligation to date) is made with a notation on the voucher that the remaining amount cannot be paid until after the next obligation is processed.</p>	<p>These are official university documents which, to the extent that they are submitted on time, allow the MO to maintain timely and accurate financial management reports. This step assures that, from the perspective of the MO, the projects cannot overspend.</p> <p>The advance of funds is the amount issued to each component by the ME at the beginning of the grant for up to six months of anticipated host country expenses and three months of anticipated Lead Institution expenses. As expenditures from the advance of funds are reported in the financial reports and are reimbursed by the MO, this replenishes the initial advance. This process means that universities should not have to use their own funds for host country expenses.</p>	<p>Quarterly</p>
<p>12. Approximately 45 days after the close of each quarter, a "Date of Receipt of Bean/Cowpea CRSP Expense Reports" is sent to all PIs, Institutional Representatives and Financial Officers to show by quarter which financial reports have been submitted and the date the report was received by the MO.</p>	<p>Originally suggested by the BOD, this procedure is used to encourage universities to submit their expense reports on time.</p>	<p>Quarterly</p>
<p>13. CRSP-wide Expenditure Reports, utilizing information from quarterly expense reports, are prepared and made available to the program advisory groups and the MO as financial management tools.</p>	<p>This process acts as an early warning system which highlights unusual financial activity. Overall management is facilitated by up-to-date information.</p>	<p>Quarterly</p>

Assignment	Implications	Time Frame
<p>14. If a component has a balance of more than 10% of that year's base budget after the expense report ending September 30, an end-of-year encumbrance report is required by November 15. The Encumbrance Report should include expenditures which were initiated before the end of the year but were not included on the ledgers for that year, up to the amount remaining unspent in the component's obligation through September 30.</p>	<p>The MO is able to monitor the flow of all funds while at the same time the PIs are not penalized for late billings.</p>	<p>Nov 15</p>
<p>15. Any unspent/unencumbered funds (carry-forward) are returned to the general CRSP pool for redistribution. This is done by reducing the obligation to the component by the amount of the unspent/unencumbered carry-forward.</p>	<p>Unspent funds are available for use by other components in the program needing them. This helps to keep balances in components from building up. It also keeps the "pipeline" low.</p>	<p>March/April</p>
<p>16. When the allocation is received from USAID/W, amendments are prepared as in #9 above for the remaining approved fiscal year budget for that component minus any unencumbered carry-forward funds from the previous year. This prevents the total obligation for a component from exceeding the amount approved to be spent through the current year.</p>	<p>The PIs operate off the approved fiscal year budgets. Because of this process of funding components in two increments, USAID/W funding cuts are all passed on at the initiation of the next fiscal year (October 1). Thus, PIs can usually count on being able to meet all approved personnel commitments within a fiscal year. Funds are obligated to cover approximately five months of the fiscal year (April 28 to September 30).</p>	<p>May</p>

SAMPLE

DATE OF RECEIPT OF BEAN/COWPEA CRSP EXPENSE REPORTS (BY QUARTER)						
PROJECT # & INSTITUTION	QTR 1	QTR 2	QTR3	QTR 4	QTR 1	QTR 2
	10/01/02-12/31/02	1/01/03-3/31/03	4/01/03-6/30/03	7/01/03-9/30/03	10/01/03-12/31/03	1/01/04-3/31/04
61-XXXX PURDUE-WA1						
61-XXXX UGA-WA2						
61-XXXX TXA&M-WA3						
61-XXXX UC-R-WA4						
61-XXXX PURDUE-WA5						
61-XXXX PURDUE-WARF						
61-XXXX PURDUE-ESA1						
61-XXXX TX A&M-ESA2						
61-XXXX MSU-ESA3						
61-XXXX UMN-ESA4						
61-XXXX WSU-ESA5						
61-XXXX OSU-ESA6-A						
61-XXXX WSU-ESA6-B						
61-XXXX MSU-ESA CC1						
61-XXXX OSU-ESARF						
61-XXXX MSU-LAC1						
61-XXXX PURDUE-LAC2						
61-XXXX MSU-LAC3						
61-XXXX PSU-LAC4						
61-XXXX UPR-LAC5-1						
61-XXXX UN-L-LAC5-2						
61-XXXX MSU-LAC6						
61-XXXX MSU-LAC CC1						
61-XXXX UPR-LACRF						
61-XXXX MSU-CC1						
61-XXXX MSU-CC2						
61-XXXX PURDUE-CC2						

Twelve-Column Budget Sheet

Guidelines for Completing the Form

When the budgets and workplans have been approved by the Board of Directors, the components are notified of their budget amount for the next fiscal year and requested to complete a twelve-column budget sheet. Budget sheets are usually due September 15 each year. After being signed by all parties, this becomes the official budget for each CRSP component. Although the U.S. PI is ultimately responsible for submitting this budget, all workplans and budgets are to be developed in collaboration with the HC PI(s). A copy of the budget sheet should be provided to the HC PI(s) after it is fully signed.

The 12-column budget sheet is available from the MO in Excel format and can be down-loaded from the Bean/Cowpea CRSP webpage at <http://www.isp.msu.edu/CRSP>.

At the top of the form in the heading area after "Project," input the names of the U.S. Lead Institution/the Sub-U.S. Institution/the Host Country Institution(s). Under the "USAID Contribution" replace LEAD US, Sub-US and HC1, HC2, etc. with acronyms of the institutions, e.g., OSU, UC-D, Bunda.

Budgeting of training funds causes the most confusion. For budget purposes, a CRSP degree trainee is defined to include:

1. Participant trainee: a student from a HC or other developing country who will be enrolled with the USAID's participant trainee program (requires HAC insurance, a pre-determined stipend/assistantship and if coming to the U.S. for degree training a USAID-sponsored J-1 visa). Expenses for this training are budgeted in line H. Other/Participant Trainee.
2. Other trainee:
 - a. A student from a HC, U.S. or a third country who will be provided an assistantship through the CRSP project for the entire period of degree completion at a U.S. or HC Institution.
 - b. A student from U.S. or a third country who will be provided an assistantship for one or more semesters to complete his/her CRSP-related thesis research.

These trainees would be budgeted in line H. Other/Other Trainee.

Wages for students who are employed temporarily by the project but to whom no commitment has been made to continue support until their degree is awarded should be budgeted in line A. Personnel.

Subagreements to U.S. and Host Country Institutions should be budgeted in line F. Contractual (Subagreements) split by Training and All Other. If no expenses will be incurred by the U.S. Lead Institution on behalf of the Sub-U.S. Institution or Host Country Institution, then only line F will have a budget figure.

Column 1 is the funds which will be spent at the U.S. Lead Institution for expenses incurred in the U.S.

Column 2 is the funds that will be subcontracted by the U.S. Lead Institution to other U.S. collaborating institutions. If no expenses will be incurred by the U.S. Lead Institution on behalf of the Sub-U.S. Institution, then only line F will have a budget figure.

Columns 3 through 6 are the funds that will be utilized in the Host Country by subagreement and retained by a U.S. Institution to spend on behalf of the Host Country (e.g., funds for HC students studying in the U.S., equipment purchased in the U.S. and shipped to the HC, etc.).

One column is to be used for each Host Country with which the U.S. Lead Institution collaborates. The funds that will be utilized in the Host Country by subagreement are to be budgeted in Line F, split by Training and All Other. The remaining lines are the expenses to be incurred by the U.S. Lead Institution on behalf of the Host Country. If no expenses will be incurred by the U.S. Lead Institution on behalf of the Host Country Institution, then only line F will have a budget figure. NOTE: In order for a HC Institution to charge indirect costs, they must have a negotiated indirect cost rate agreement with the U.S. Government. HC Institutions can charge an administrative fee if it is included in their written institutional policies and it is uniformly charged to all grants.

Column 7 is the sum of columns 1 and 2 to show total funds to be spent for U.S. research.

Column 8 is the sum of columns 3 to 6 to show total funds to be spent in or for the HC. Since the Bean/Cowpea CRSP has a policy which requires 50 percent of USAID/W funds spent on direct costs to be spent in or on behalf of the HC, line I (Total Direct Costs) in column 8 must be equal to or greater than line I in column 7.

Column 9 is the sum of columns 7 and 8 to give line item totals for the USAID/W funds.

Column 10 reports the amount and form of the U.S. match. The Bean/Cowpea CRSP has a mandated match of 25 percent of U.S. costs. This is equal to 25% of line K in column 7.

Column 11 is an estimate of what the HC Institution(s) contributes to the project. While this match is not required, it is strongly encouraged, to demonstrate the HC Institution's commitment to the project. The HC PI should be able to provide this information.

Column 12 gives the grand total of funds provided to the project from all sources.

When the budget is complete, the U.S. PI signs where indicated. It is then necessary to have the appropriate person in the Lead Institution's Contracts and Grants Office verify with their signature that the budget has been reviewed and approved.

When the budget has all the necessary signatures from the U.S. Lead Institution, it is forwarded to the Management Office. The Administrative Officer will double-check the calculations; the Director or Deputy Director will sign for the CRSP; and photocopies with all required signatures will be mailed to the U.S. PI and the U.S. Lead Institution's Financial Officer.

Changes in the Approved Budget

During the fiscal year, the U.S. and/or HC PI may, without obtaining approval, move amounts between line items in their own portion of the approved budget except that funds may not be moved into equipment or out of training without written permission from the MO. Permission should be requested by a brief letter addressed to the CRSP Director stating the reason for the transfer. The U.S. PI may transfer funds from their budget to the Host Country or other collaborating U.S. institutions at their discretion without MO approval.

Funds may not be transferred from one subcontractor (HC or U.S.) to another or out of the U.S.-for-HC budget unless the U.S. PI obtains, from the leader of the component relinquishing the funds, a letter which says that he/she is aware of the transfer of funds out of their budget and approves of the transfer. This letter is sent to the MO with a request for approval of the transfer.

BEAN/COWPEA CRSP BUDGET GRANT #: GDG-G-00-02-00012-00 CODE #:	PROJECT: US Institution/US-Sub Institution/Host Country 1/HC 2/HC 3/HC 4						Budget for: MonthDayYear through MonthDayYear					
	USAID Contribution						Totals for Match/Split		Contributions			TOTAL (12)
	LEAD US (1)	Sub-US (2)	HC1 (3)	HC2 (4)	HC3 (5)	HC4 (8)	US (7)	HC (8)	USAID (9)	US Inst. (10)	HC Inst. (11)	
			(HC Columns Include U.S. for Host Country Expenses)									
A. PERSONNEL							\$0	\$0	\$0			\$0
B. FRINGE BENEFITS							\$0	\$0	\$0			\$0
C. TRAVEL AND PER DIEM							\$0	\$0	\$0			\$0
D. EQUIPMENT							\$0	\$0	\$0			\$0
E. MATERIALS AND SUPPLIES							\$0	\$0	\$0			\$0
F. CONTRACTUAL (Subagreements)												
Training							\$0	\$0	\$0			\$0
All Other							\$0	\$0	\$0			\$0
TOTAL CONTRACTUAL-Subagreements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G. CONSTRUCTION							\$0	\$0	\$0			\$0
H. OTHER												
Participant Trainee							\$0	\$0	\$0			\$0
Other Trainee							\$0	\$0	\$0			\$0
All Other Direct Costs							\$0	\$0	\$0			\$0
TOTAL OTHER	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
I. TOTAL DIRECT CHARGES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
J. INDIRECT CHARGES							\$0	\$0	\$0			\$0
K. TOTAL DIRECT & INDIRECT COSTS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

-41-

U.S. Principal Investigator:

Contracts and Grants Officer:

Bean/Cowpea CRSP MO:

Expense Reporting Form

U.S. Lead Institutions

The Expense Reporting Form is a request from the U.S. Lead Institution to the CRSP MO for reimbursement of funds expended by the U.S. Lead Institution during the past month or fiscal quarter (October-December, January-March, April-June, July-September). It is not intended to be a report of all expenditures for the month/quarter. Reimbursements by the U.S. Lead Institution to a sub-U.S. Institution or the HC Institution should be reported in the month/quarter in which they were reimbursed, not the month/quarter in which the original institution incurred the expenditure. Expenditures should be reported on the same line and in the same column as they were budgeted. The following are the most common problem areas:

1. Student stipends/assistantships for trainees are reported under section H. Other in the line for Participant Trainee or Other Trainee as appropriate; not under Personnel. Travel and related expenses for trainees are also reported in Section H. Other in the line for Participant Trainee or Other Trainee as appropriate. This must be done in order to provide accurate information to USAID/W on total training support costs. If a trainee is enrolled in HAC insurance, their expenses are reported in section H. Other, the line for Participant Trainee. If the trainee is not enrolled in HAC insurance, their expenses are reported in section H. Other, the line for Other Trainee.
2. Wages for students who are employed temporarily by a component but to whom no commitment has been made to continue support until their degree is received are reported under section A. Personnel.
3. Indirect costs on the first \$25,000 of subagreements from the U.S. Lead Institution to the HC Institution are reported in the U.S. column. Indirect costs on U.S.-for-HC expenditures should be reported in the HC column under line J. Indirect Costs.
4. Expenses in support of HC Subagreements are billed under Section F. Contractual (SubAgreements). As expenses from Host Countries are reviewed, please keep in mind that in order for a HC Institution to charge indirect costs, they must have a negotiated rate agreement with the U.S. Government. HC Institutions can charge an administrative fee if it is included in their written institutional policies and it is uniformly charged to all grants.
5. Expenses incurred in the U.S. on behalf of the HC are reported in the appropriate HC column by line.

The reports are due in the MO quarterly within 30 days after the close of each quarter. Monthly billings are accepted.

HC Institutions

HC financial reporting to their component's U.S. Lead Institution is handled similarly to that outlined above for U.S. Lead Institutions. HC Institutions are required to report no more than monthly and no less than quarterly. U.S. Lead Institutions must provide information to the HC Institutions regarding billing procedures and the U.S. Lead Institutions regarding billing procedures and required receipts, i.e., originals, photocopies, other. Based on the Lead Institution's policies originals or photocopies of HC expenditures should be submitted. Monthly submission of billings is encouraged for several reasons: (1) HC Institutions find it less formidable to photocopy 30 days of receipts rather than 90; (2) if the photocopies are lost in the mail, it is easier to replace only 30 days; (3) reimbursement of monthly billings to HC

Institutions assist with cash flow for the HC Institutions; (4) if USAID/W requires an up-to-date accounting of expenditures, with one phone call to each U.S. Lead Institution it is possible to obtain figures to within a day for the U.S. Institution and a month for the HC Institution. For the final month of the year (September), the amount is estimated and included in the project's encumbrances.

BEAN/COWPEA CRSP EXPENSE REPORT GRANT #: GDG-G-00-02-00012-00 CODE #:	PROJECT: US Institution/US-Sub Institution/Host Country 1/HC 2/HC 3/HC 4						Expenses for: MonthDayYear through MonthDayYear					
	CURRENT QUARTER EXPENSE						CUMULATIVE EXPENSES					
	LEAD US	Sub-US	HC1 (HC Columns Include U.S. for Host Country Expenses)	HC2	HC3	HC4	US	Sub-US	HC1	HC 2	HC 3	HC4
A. PERSONNEL							\$0	\$0	\$0	\$0	\$0	\$0
B. FRINGE BENEFITS							\$0	\$0	\$0	\$0	\$0	\$0
C. TRAVEL AND PER DIEM							\$0	\$0	\$0	\$0	\$0	\$0
D. EQUIPMENT							\$0	\$0	\$0	\$0	\$0	\$0
E. MATERIALS AND SUPPLIES							\$0	\$0	\$0	\$0	\$0	\$0
F. CONTRACTUAL (SubAgreements)							\$0	\$0	\$0	\$0	\$0	\$0
G. CONSTRUCTION							\$0	\$0	\$0	\$0	\$0	\$0
H. OTHER												
Participant Trainee												
Other Trainee							\$0	\$0	\$0	\$0	\$0	\$0
All Other Direct Costs							\$0	\$0	\$0	\$0	\$0	\$0
TOTAL OTHER	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
I. TOTAL DIRECT CHARGES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
J. INDIRECT COSTS*												
K. TOTAL DIRECT & INDIRECT COSTS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
GRAND TOTAL			\$0						\$0			

*Indirect costs computation details required. Please provide here or on separate sheet.

SUMMARY OF THE U.S. COST SHARING FOR THIS PERIOD IS AS FOLLOWS:

TOTAL DIRECT COSTS		
TOTAL INDIRECT COSTS		
GRAND TOTAL	\$0	\$0

The undersigned hereby certify that information on this fiscal report is correct and that in connection with amounts reimbursed to Host Country Institutions under subordinate contracts, receipts and other supporting documentation are available at the Lead Institution and are adequate in the opinion of the undersigned to justify payment.

U.S. Principal Investigator:

Contracts and Grants Officer:

Encumbrance Process

Any component with a balance of 10% or less of the current year's base allocation as of the September 30 billing automatically carries forward the balance. No paperwork needs to be submitted to the MO. The MO considers this an automatic encumbrance.

Any component with a balance of more than 10% of the current year's base allocation as of the September 30 billing needs to submit an end-of-year encumbrance report by November 15 of that year. The encumbrance report includes expenditures which were initiated before September 30, but were not included on the billings through September 30. Encumbrances are broken down by U.S. and Host Country Institution(s) and includes salaries earned prior to September 30 but not paid by that date with any associated fringe benefits, outstanding travel reimbursement with a return date prior to September 30, outstanding purchases, and indirect costs on all encumbered amounts. If there is a large encumbrance amount, an itemization may be requested by the MO.

Host Country PIs should be contacted and asked to submit an accounting of any ledgered expenditures not yet reported to the U.S. university as well as provide encumbrance information. This report should be sent by fax or e-mail so there is written documentation of their encumbrance amount. If there is a large encumbrance amount, an itemization may be requested.

Requested amounts are reviewed by the MO and may be approved up to the amount remaining unspent in the project's obligation through the same date.

Unspent/unencumbered funds (excess carry-forward) are returned to the general CRSP pool for redistribution. This is done by reducing a future (usually the next) obligation to the project by the amount of excess carry-forward. This prevents a project's total obligation from exceeding the amount for which they have authorization to spend.

VII. TRAVEL

International Travel Clearance Requests

The Standard Provision on Air Travel and Transportation states that international travel, as provided for in the grant, is authorized unless disapproved by the USAID/W Cognizant Technical Officer in writing prior to the commencement of travel. Travel notifications must be submitted by the U.S. Lead Institution PI to the MO on the "CRSP International Travel Clearance Notification" form for **ALL** CRSP-paid travel which crosses **ANY** international border. This includes all HC persons traveling internationally on CRSP funds, including to the U.S. Only one copy of the form is needed and up to five travelers with a **common** travel itinerary may be included on a single form.

If a trip requires Mission logistical support or assistance, USAID/W must cable the Mission and receive their approval of the proposed travel. In this case, the form should be submitted to the MO 45 days in advance to give USAID/W time to contact the Mission.

Travel Notification forms are available to down-load from the Bean/Cowpea CRSP web page, <http://www.isp.msu.edu/CRSP>. Completed Travel Notification forms should be faxed to the MO. USAID/Washington should receive the form as far in advance as possible but absolutely **no later than 14 days prior to the date the travel is to begin**. In order to insure this policy is met, travel requests must be sent to the MO at **least 21 days in advance**. The MO recognizes that it is not always possible to schedule travel more than 21 days in advance; however, be aware that anything less may result in a travel delay or cancellation.

To document that USAID/W was properly notified, the USAID/W Cognizant Technical Officer signs the notification form and faxes it to the MO. An e-mail advising approval of the travel will be sent to the U.S. Lead Institution PI. In addition, a hard copy of the acknowledgment will be mailed to both the U.S. PI and the Financial Officer. **IT IS THE TRAVELER'S RESPONSIBILITY TO BE SURE THAT USAID/W HAS BEEN PROPERLY NOTIFIED AND HAS ACKNOWLEDGED SUCH BEFORE PROCEEDING WITH TRAVEL.** Travel without notification can be disallowed by Federal Auditors.

Travelers are encouraged to contact the Agriculture/General Development Officer as soon as possible upon arrival in-country to maintain a congenial relationship with the USAID Mission and inform them of CRSP activities. If the trip is not taken or dates of travel change, the MO must be informed so that USAID/W and the Mission can be notified.

When completing the Travel Notification form

1. Be sure to indicate whether or not each traveler has security clearance from the U.S. Government. If the traveler has never been directly employed by the U.S. Government, the answer will nearly always be "No."
2. In indicating inclusive travel dates, be as specific as possible but consider them to be thresholds of time rather than precise departure dates.
3. List all countries to be visited and **indicate dates visiting each**, if travel encompasses more than one international destination.
4. Be specific and informative about purpose of travel and, if certain stops on the itinerary vary in purpose, indicate the multiple purposes for each site visit. **Travel must be related to CRSP activities.**

5. Name each CRSP-related person, their title, and office/association that you will contact on this visit. This will allow the Mission to contact you if an emergency arises.
6. The U.S. Lead Institution PI must sign all forms.

Use of CRSP Funds for Technical/Professional Interchange

The policy regarding the use of CRSP funds to attend technical/professional meetings is established in the Mandatory Standard Provisions for U.S., Nongovernmental Recipients, 22 CFR Part 226, and OMB Circular No. A-21. The policy is summarized here for your guidance:

1. Professional interchanges, including the exchange of visits and staff, workshops and seminars, and seeking occasions to consult with and involve others professionally and technically, are encouraged.
2. Costs of meetings and conferences, when the primary purpose is the dissemination of technical information, are allowable. This includes the cost of meals, transportation, rental of facilities and other items incidental to such meetings or conferences.
3. Funds for these purposes should be specifically included, programmed for, and explicit in annual budgets.
4. Use of Bean/Cowpea CRSP funds for such travel will be subject to policies of the participating institutions in addition to those guidelines established by USAID/W.

VIII. EQUIPMENT PURCHASES

All equipment purchases require specific approval. 22 CFR Part 226 defines equipment as "an article of non-expendable tangible personal property having a useful life of more than one year and an acquisition cost of \$5,000 or more per unit."

The specific language of 22 CFR Part 226 and discussions with the USAID/W Grant Officer have been used to prepare the "Bean/Cowpea CRSP Equipment Authorization and Request to Purchase" form (Equipment form). This form must be prepared and submitted to the MO for all equipment purchases. Equipment items should be specifically identified in the original proposal budget and in subsequent annual regional project budgets. If equipment had not been budgeted, an explanation of where the funding is coming from for the equipment is required, i.e., reducing international travel to purchase equipment.

In completing the Equipment form, the probable country source (country where item is to be purchased) is not usually a concern. Probable country origin (country where majority of item was manufactured or components were manufactured) often is. The componentry of the product must be taken into account. To qualify as U.S. made, non-U.S.-components may not cost more than 49 percent of the lowest price at which the product is sold. **It is the component PI's responsibility to contact the vendor, if necessary, to obtain this information.** For the component's protection, it would be a good idea to get assurance in writing from the vendor that "it is U.S. made."

If either the probable country source or the probable country origin are not U.S., a Source/Origin Waiver is required. This fact must be noted on the front of the Equipment form and the Justification Section on the back must be completed to justify the waiver.

It is important to always complete the Discussion Section on the back of the Equipment form, whether or not a Source/Origin Waiver is required.

One copy of the completed Equipment form should be sent to the MO where it will be reviewed by the MO Director/Deputy Director to confirm that the item requested supports research on identified project objectives. It will then be sent to the USAID/W Cognizant Technical Officer for their approval and forwarded to the USAID Office of Procurement for final approval. This approval will be transmitted in writing to the MO, which will forward copies to the U.S. PI and the designated Contracts and Grants Officer at their respective university.

THE MO WILL NOT PROCESS EQUIPMENT PURCHASE AUTHORIZATION REQUESTS FOR ITEMS ALREADY PURCHASED. Without prior USAID/W approval for purchase, equipment costs will be disallowed by Federal auditors. These costs will then be borne by the U.S. Lead Institution or that entity or individual responsible for authorizing the purchase.

SAMPLE

GRANT NO. GDG-G-00-02-00012-00 MSU Bean/Cowpea CRSP MO Fax#: (517) 432-1073

**BEAN/COWPEA CRSP
EQUIPMENT AUTHORIZATION AND REQUEST TO PURCHASE***

This form must be submitted to the management office for all purchases of equipment. Equipment is defined in 22CFR part 226 as tangible property "having a useful life of more than one year and an acquisition cost of \$5,000 or more per unit." Written approval by the USAID/W Contract Office is required prior to purchase.

Lead Institution/Project: _____

Principal Investigator: _____

Item to be Purchased: _____

For exclusive use in what geographic location: _____

Quantity: _____ Unit Price (U.S.\$): _____ Total Price: _____

Probable Country Source: _____

Probable Country Origin: _____

___ Item requires source and/or origin waiver, i.e., source (vendor) and/or origin (manufacturer) are other than U.S. **SOURCE AND/OR ORIGIN WAIVER IS REQUIRED WHEN UNIT COST EXCEEDS \$5,000.** Justification for waiver on the back of this form must be completed.

___ Engineering drawings attached for construction requests.

DISCUSSION ON REVERSE SIDE MUST BE COMPLETED.

Director/Deputy Director, Bean/Cowpea CRSP

Date

Cognizant Technical Officer, USAID/W/EGAT

Date

Discussion: (Is cost included in current FY project budget? If not, how will funds be provided? Who will use the purchase? If shared with non-project personnel, how will their use contribute to project objectives: How will use of this item contribute to accomplishment of project objectives and significantly improve chances for project success? Would you accept a substitute? If not, why not?)

SOURCE/ORIGIN WAIVER:

Justification: (Why must non-U.S. vendor/manufacture be used? If purchase is made in HC, is it an "off-the-shelf" item? If purchased or used in HC, are spare parts and qualified dealers/technicians available for maintenance?)

IX. GUIDELINES ON CRSP PUBLICATIONS AND INTERNET USAGE

CRSP Publication Guidelines

In accordance with Section 4 of the *Standard Provisions on Publications and Media Releases* (Appendix A on CD) and the *Revised Guidance on USAID-Funded Communications Products* (Appendix F on CD), USAID must be acknowledged in all publications, videos, web pages or other information/media products funded in whole or in part through the Bean/Cowpea CRSP. The acknowledgment should read:

This [publication, video, web pages or other information/media product (specify)] was made possible through support provided to the Bean/Cowpea Collaborative Research Support Program (CRSP) by the Bureau for Economic Growth, Agriculture, and Trade, U.S. Agency for International Development, under the terms of Grant No. GDG-G-00-02-00012-00. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.

The acknowledgment is placed on the top or bottom of the front cover or first inside title page of publications, and in a similar location in videos or other information/media products. The acknowledgment should be similarly located and of similar size and appearance as co-sponsors or authorizing institutions. To ensure that this requirement for acknowledgment language is correctly followed, all publications and media releases (including brochures, workshop proceedings, monographs, books, videos, Internet web pages) funded in whole or in part through the Bean/Cowpea CRSP should be sent to the MO for review and approval prior to publishing.

Five copies of all publications, videos or other information/media products funded in whole or in part under the Bean/Cowpea CRSP must be sent to the MO upon their printing and/or release. The MO will forward a copy to the Cognizant Technical Officer and to the USAID Development Experience Clearinghouse.

Please contact the MO for assistance in obtaining Legislative and Public Affairs approval if your communications is listed in both section A. *Type of Media* and B. *Cost or Distribution*:

- A. Type of Media
- Any printed material other than photocopy;
 - photographic services;
 - electronic information dissemination products, i.e., Internet pages audio;
 - television, video or film productions

and

- B. Cost or Distribution
- the costs exceeds \$25,000;
 - it will be sent directly to or likely seen by a Member of Congress or Congressional staffer;
 - it will have more than 50% of its audience in the United States

Guidelines on Internet Usage for CRSP Purposes

To assure compliance with USAID guidelines on publications and communication products, and to maintain a standard of excellence, all Bean/Cowpea CRSP funded websites and other electronic applications that involve the Internet must comply with the following guidelines.

1. Compliance with USAID guidelines relative to publications and media releases as outlined in the previous section.
2. Approval from the MO prior to releasing the web page or publishing an electronic application to ensure:
 - a. The correct use of the Bean/Cowpea CRSP logo, USAID logo, and their copyright symbols.
 - b. The accuracy of titles of web pages or electronic publications (e.g., newsletters, brochures) and the identity of Bean/Cowpea CRSP, its regional projects, and partnering institutions.
 - c. The consistency of formatting and quality among CRSP websites, and other electronic publications.
 - d. The website/web-based publication is linked with other appropriate Bean/Cowpea CRSP websites and databases on the Internet.
3. Permission from individuals appearing in photographs that might be posted, including Host Country scientists and other individuals from Host Countries.
4. Permission from the owners of databases and other materials that might be used or posted on the website.
5. Compliance with requirements and guidelines set by the "Source" for citing/using their data and other published materials on the website.
6. Compliance with regulations pertaining to publishing copyrighted materials in an electronic media.

X. TRAINING

Degree Training

For the training report and budget purposes, a Bean/Cowpea CRSP degree trainee is defined to include:

1. **Participant trainee:** A student from a HC or other developing country who will be enrolled with USAID's participant trainee program outside his/her home country. The student is enrolled in USAID's HAC insurance and, if coming to the U.S. for training, a USAID-sponsored J-1 visa. The student may be paid allowances or a graduate assistantship. ADS253 "Training for Development Impact," <http://www.info.usaid.gov>, must be followed.

OR

2. **Other trainee:**
 - a. A student from a HC, U.S. or another country who will be provided an assistantship through the CRSP project for the entire period of degree completion at a U.S. or HC Institution (*Full support*); or
 - b. A student from the U.S. or another country who will be provided an assistantship or other support for research activities through the CRSP for one or more semesters to complete his/her CRSP-related thesis research (*Partial support*); or
 - c. A student from the U.S. or another country who will be supported from other leveraged funding sources to work on CRSP research projects (*Indirect support*).

Non-Degree Training

The Bean/Cowpea CRSP classifies personnel involved in short-term, non-degree training as anyone who is financially supported as:

1. A participant in a workshop
2. A participant in short-term training courses, seminars, symposia
3. A participant in an internship program
4. A Post-doc
5. A Visiting Scholar/Researcher
6. A participant in laboratory or field training activities

Guidelines Concerning Training

Guidelines on training include:

1. Each component and regional project must update their training plan every year and show that the degree training of non-U.S. students is consistent with the needs identified in the Regional Training Plans.
2. Alternative funding sources should be sought to provide financial support for the students so as to achieve economies and supplement CRSP support.

3. Training HC students takes priority over students from the U.S., other developing countries and "USAID-graduate" countries.
4. Students should be sent to the institutions that can best meet their training needs. Supporting and strengthening HC educational institutions is very important. Whenever possible, HC and other developing country training institutions should be used for training. However, it is understood that in many cases CRSP institutions have special advantages for training due to the integrated nature of CRSP research and graduate training.
5. Degree training should be made available to women in numbers similar to that of men. In identifying potential U.S. students, each project should make an effort to train African-American, Hispanic and other U.S. minorities.
6. Students conducting thesis research in the U.S. must focus their investigations on areas that contribute to the achievement of research objectives outlined in workplans.
7. Principal Investigators are encouraged to develop a regional training plan identifying HC Institutional needs and regional deficiencies for agricultural science expertise. This training plan should serve as the basis for approaching the USAID Missions in the region for "buy-ins." PIs are encouraged to advise USAID Missions of the excellent training opportunities that are available through the CRSP in meeting the institutional needs and regional deficiencies. This will help the CRSP to achieve the goals of its Global Plan, and will enhance relationships between the CRSP and the USAID Missions.
8. If a CRSP component is totally funding the graduate training of a Host Country student, it is desirable to obtain a commitment from the Host Country Institution stating that they will make every effort to provide a position to the student upon their successful completion of the degree program.
9. The training of U.S. graduate students is important. Their research should have direct relevance to the objectives of the CRSP project, and the students should have a sincere interest in international development. It is recognized that CRSP research activities provide opportunities for U.S. students to gain international development experience.

The Bean/Cowpea CRSP Board of Directors has also passed several policies related to training. See the section on "Policies Adopted by the Board of Directors" in this manual.

Participant Training Guidelines

For several decades, USAID/W has emphasized the training of developing country scientists, technicians and administrators/managers for three purposes: (1) staff development for USAID/W-assisted projects; (2) strengthening of key development institutions; and (3) establishment of local training capacities, as well as the improvement of specialized training capacities in developing countries. Such training is an essential component of USAID/W's development strategy. "Participant training," as used here, refers to a foreign national whose training is funded and/or sponsored by USAID/W and takes place outside his/her home country. Participant training is a major means of assisting the development of high-level skills and institutional leadership.

USAID/W affirms that all training programs are to give attention to ensuring substantial participation by women. Where relatively few women participate, there must be indications of

initiatives being taken to increase the number of women in participant training programs. All feasible steps should be taken to ensure that USAID/W-sponsored trainees return to work (1) in their home countries and (2) in positions where their training is utilized effectively. Training in the U.S. should be limited to fields in which training is not available in the HC, for which U.S. training is cost-effective, or which supports other strategic considerations such as the exposure of key leaders to U.S. institutions and practices. USAID/W has no implicit preference for one form of training over another, but it does expect that cost-effective training options, including training in HC or third-country institutions, will be explored before relatively expensive training in U.S. institutions is recommended.

It is USAID/W policy that all USAID/W participant training, no matter how funded, managed or implemented, is subject to the policies, procedures, and reporting requirements established by Automated Directives System Chapter 253 (ADS 253), *Training for Development Impact*, <http://www.info.usaid.gov>, except where specifically excluded by ADS 253 or waived in accordance with ADS 253. All foreign nationals whose education/training takes place outside their country as a Participant Trainee are subject to the policies and procedures established in ADS 253.

A summary of the major procedures in ADS 253 are listed below:

1. The Training Implementation Plan (ADS E253.5.2) is the detailed training program prepared in response to the training request. It is a detailed description of each segment of the training program and includes a budget estimate.
2. A DS2019 must be completed in order to apply for a J-1 visa. USAID-sponsored Participant Trainees are admitted to the U.S. only under the USAID J-1 visa. USIA regulations and restrictions for the J-1 visa apply to all USAID Participant Trainees (ADS 253.5.6a). The Mission will arrange this visa. If the Mission is unable or unwilling to arrange the visa, contact the Management Office, for their help with the form. This process will take several weeks. Be sure to contact your University's International Student and Scholars Office regarding SEVIS procedures. A Travel Notification form must also be submitted to the MO.
3. The trainee information must be input into the TraiNet system (ADS E253.5.2e), located at website: www.devis.com/client_support/usaid. If there are subsequent changes in the Participant's program, these changes must be input in the TraiNet system.
4. Each participant must have a pre-departure medical examination (ADS E253.5.2b). The USAID Mission should notify the contractor that this form is on file and that there are no pre-existing health problems.
5. The Participant must be enrolled in the Health and Accident Coverage (HAC) program (ADS E253.5.6b). The enrollment can be completed at website www.devis.com/client_support/usaid. You will receive a billing from the HAC provider. If you do not receive a billing, please contact the MO for assistance.
6. All foreign nationals whose training is outside their country and is to be conducted in English are screened to demonstrate a level of English proficiency at or above minimum acceptable scores prior to departure.
7. Allowances for short-term Participant Trainees can be found at www.policyworks.gov per diem rates. Allowances for long-term Participant Trainees can be found at

www.iie.org/fulbright/posts/restrict/mmr. Allowances for long- and short-term Participant Trainees are outlined in ADS253.5.5b and the Detailed Guide for Training Results Section VII. In August 1986, the Bean/Cowpea CRSP received from the USAID Office of International Training a waiver from following ADS 253 requirements for graduate students except for (1) HAC insurance and (2) CRSP participants will not receive, on average, less funding than others involved in the same type of program.

8. All Participant Trainees whose programs are funded by USAID/W must file a tax return if they receive more money than the current tax year's personal exemption.
9. An "Academic Term Report" must be completed for each Participant Trainee each Term/Semester.

Training Activities Reporting

The Training Activities Workplan and the Annual Region Project Progress Reports will be used to plan and document the number and types of training activities supported by the Bean/Cowpea CRSP. The training workplan (see the format in section "Workplans and Annual Reports") is to be completed by each component's PIs annually. U.S. and HC PIs can update their component's training activities using the Online Reporting System available on the Bean/Cowpea CRSP web page. PIs can add the names and other requested information for new and continuing trainees, add completion dates for trainees who recently finished CRSP-supported training, and update the current professional status and contact information of current and past CRSP trainees on the CRSP website.

XI. WORKPLANS AND ANNUAL REPORTS

A web-based workplan and reporting system (CORS) will be utilized by the Bean/Cowpea CRSP during the FY2002-2007 grant period. This goal is to simplify the reporting process, and make the Annual Regional Progress Report more readable to a broad audience.

Several fundamental changes are being implemented relative to the organizational structure of the regional project workplans and annual technical reports with the start of the new Bean/Cowpea CRSP grant (FY 2002 - 2007). These changes can be best understood by examining the organization units (defined in Appendix 1) in the context of responsibilities for workplans and annual reports.

Components: A Component consists of a team of U.S. and HC PIs and Co-PIs, and their respective universities and/or institutions which are participating in a specific regional project of the Bean/Cowpea CRSP. The proposed research and training activities for a Component are described in a Five-Year Workplan that was prepared and submitted with the grant proposal. Each Component is assigned an alpha-numeric code (e.g., LAC4) which identifies the regional project to which it is affiliated. **The PIs of a component are responsible to develop annual activity workplans and complete annual progress reports of all research and degree and short-term training activities supported by their component (see *Research Workplan Format and Training Workplan Format*).**

Activities: Each Component is subdivided into one to three distinct collaborative research "Activities" depending on what is appropriate. An effort should be made to limit the number of research Activities within a Component in order to maintain focus within both the Components and the regional projects. Regional projects will consist of a maximum of 11 to 14 research Activities.

Activities will serve as the unit for preparation of research workplans and budgets as well as for reporting at the end of each fiscal year. Accordingly, collaborating **U.S. and HC PIs** are identified for each research Activity and **will be responsible for the preparation of research workplans and reports (see *Research Workplan Format*)**. Each Activity within a regional project will be identified by a number (e.g., A1, A2, etc.).

Objectives: Each Activity will contain one or more research Objectives. Within the workplans and reports, these Objectives will be supported with the following information: Collaborating scientists, Approaches and Methods, Indicators of Research Progress, and Research Results, Achievements and Outputs.

Objectives, however, will not be the primary unit for budgeting and reporting within regional projects.

Thematic Areas: Regional projects will consist of a set of Activities organized by Thematic Areas (see below). These Thematic Areas are established to define the important areas of foci for the implementation of a "Value-Chain" approach within the regional projects.

- T1: Identifying new market opportunities to stimulate economic growth.
- T2: Adding value to promote increased utilization and consumption.
- T3: Enhancing health and nutrition of target populations.
- T4: Assuring access of technology to women and ethnic minorities.
- T5: Increasing the sustainability of production systems.
- T6: Enhancing grain productivity and quality through research and extension.
- T7: Assessing *ex ante* and *ex post* impact of technology.

A Component may consist of multiple Activities that are assigned to distinct Thematic Areas. Conversely, a Thematic Area within a Regional Project may contain from zero to six different Activities.

Each component is required to submit training and research workplans for a designated fiscal period. These workplans should be developed with input from both U.S. and HC PIs and collaborators as well as from the respective regional project team.

At the end of the fiscal year, PIs are required to provide progress reports on research activities and training under their responsibility using the web-based reporting system:

1. Annual technical progress report by Research Activity (See *Progress Report Format*). This should include:

- Progress report on all the objectives planned for the year
- Progress report on additional objectives funded by supplementary funds (if any)
- List of any leveraged funds/projects
- List of publications, presentations and awards in that year associated with a research activity

2. Degree and short-term training activity Report (See *Training Report Information*)

3. Complete an evaluation of the funding/fiscal management

The Annual Progress Reports submitted by each component of a regional project using the web-based reporting system will be organized by the Management Office in a standardized format to generate Annual Technical Reports of each Regional Project.

It is Bean/Cowpea CRSP policy that if workplans and/or annual progress reports are not submitted by the requested dates, international travel notifications, equipment requests, allocations and invoice payments will be held until these documents are received by the MO.

In general, the training and research workplans and Annual Progress Reports will contain information specified in the following formats:

Training Workplan Format
FY 200? - 200?
 (October 1, 200? - September 30, 200?)

Regional Project:

Component Title:

I. Degree Training Plan

Justification:

(Present a justification for the proposed degree training activities including a statement of regional training needs, how the proposed training activities will address the specific research objectives, and help achieve the overall CRSP goal of institutional capacity building)

Proposed degree training activities:

*(Please provide the following information for each degree trainee to be supported by your component).**

1. First and Other Given Names:
2. Last Name:
3. Citizenship:
4. Gender:
5. Degree to be trained:
6. Discipline or Department:
7. Thesis title/research area:
8. Training Institution:
9. CRSP supervising PI:
10. Start date:
11. Completion date:
12. Type of CRSP support: *(The options are: Full, Partial or Indirect)*
13. If providing partial support, please describe the nature of support:
14. If providing Indirect support, please describe the sources of leveraged funds:
15. Research Activity Code this degree training will contribute to:
16. Amount budgeted (direct and indirect costs):
17. CRSP Institution this budget should go to:

* Repeat the above format for additional trainees.

II. Short-term Training Plan

Justification:

(Present a justification for the proposed short-term training activities including a statement of regional training needs, how the proposed training activities will address the specific objectives of your component's research activities, and help achieve the overall CRSP goal of institutional capacity building)

Proposed short-term training activities:*

(Please complete the following information for each short-term training activity planned in the coming fiscal year. Examples of short-term training include support for workshops, conferences, visiting scientists, internships, post-doctoral fellowships, group training, individualized instruction, training in laboratory or field techniques, etc.)

1. Type of training:
2. Description:
3. Location:
4. Duration:
5. When will it occur?
6. Who will benefit?
7. Anticipated numbers of beneficiaries
8. List other funding sources to be sought for this activity (if any):

9. Research activity code this training relates to:
10. Amount budgeted (direct and indirect costs):
11. CRSP institution this budget should go to:

* Repeat the above format for additional short-term training activities.

Research Workplan Format
FY 200? - 200?
(October 1, 200? - September 30, 200?)

Activity Title:

Thematic Area of Activity: *(Select one of the following thematic areas for the planned activity)*

1. Identifying new market opportunities to stimulate economic growth.
2. Adding value to promote increased utilization and consumption.
3. Enhancing health and nutrition of target populations.
4. Assuring access of technology to women and ethnic minorities.
5. Increasing the sustainability of production systems.
6. Enhancing grain productivity and quality through research and extension.
7. Assessing *ex ante* and *ex post* impact of technology.

PIs: *(Identify the U.S. and HC PIs and their respective universities responsible for this activity.)*

Justification: *(Present a justification for the proposed collaborative research activity including a statement of the problem/constraint, literature citations and/or data supporting the need for technology or knowledge in both the HC and U.S., plus a brief overview of the state of the science or research progress to-date.)*

Objectives: *(Provide information below for a limited number of distinct objectives in order to maintain focus and simplify the reporting process. Three objectives is the recommended maximum for an individual activity.)*

***Objective 1:** *(Present a concise one-sentence statement of the research objective.)*

Collaborators: *(List the CRSP scientists, including PIs and their respective institutions who will contribute to the achievement of this specific research objective.)*

Approaches and Methods: *(Describe the experimental approaches and methodologies to be employed to achieve this objective during the fiscal period of this workplan.)*

Indicators of Research Progress: *(Specifically describe verifiable indicators for assessment of research progress during the fiscal period corresponding to this objective.)*

* Repeat the above format for additional objectives.

Networking and Linkages with Stakeholders:

(Describe specific initiatives to be undertaken to network and link with entities outside the Bean/Cowpea CRSP during the fiscal period corresponding to this workplan. Include joint activities (e.g., research coordination, workshops, joint planning meetings, short-term training activities, joint field days, etc.), visits to specific laboratories/institutions, organizations, etc., exchange of information and technology, licensing of Intellectual Property, and efforts to partner with private or public sector groups to extend CRSP knowledge and technologies.)

Anticipated Outputs:

(Identify specific scientific achievements and technological outputs that will directly result from this research activity during the course of this five-year grant.)

Innovative Tools to be Used: *(Select all that apply)*

- Biotechnology (tools of modern molecular biology)
- GIS
- Participatory research approaches
- Cutting-edge research technologies and/or analytical tools
- Internet-based networking, databases, information exchange
- Human subject surveys
- Use of recombinant DNA

Budget: *(Provide direct cost and indirect cost budget requests for each U.S. and HC PI and collaborators, their respective university/institution, and subcontracting institution under this activity.)*

PIs/Collaborators	U.S./HC Institution (where money goes to)	U.S. University (where money comes from)	Amount budgeted	
			Direct cost	Indirect cost

Annual Progress Report Format
FY 200? - 200?
(October 1, 200? - September 30, 200?)

Regional Project:

Component:

Activity Title:

Thematic Area:

Principal Investigator(s) of this Activity: *(Identify U.S. and HC PIs and their respective Universities/Institutions responsible for the activity).*

Collaborator(s): *(List all CRSP collaborators and their respective Universities/Institutions involved in the completion of this research activity.)*

Abstract:

(Provide a summary narrative of technical progress and achievements under this activity—400 word limit.)

Justification:

(Provide information on the constraint addressed and the importance of this research activity.)

Methods/Approaches:

(Describe the research methods/approaches used to achieve each of the objectives planned under this activity for the fiscal year. Please present sufficient detail so that readers understand what experiments/activities were completed and will have confidence in the technical quality of the research. If there were major changes from the workplan, please provide an explanation and justification for these changes.)

Objective 1:

Objective 2:

Objective 3:

Results, Achievements and Outputs of Research:

(Describe the results and outputs achieved under this activity for each objective or sub-activity planned for the fiscal year. Please present specific information so that readers can relate the results and outputs to the anticipated indicators from the workplan.)

Objective 1:

Objective 2:

Objective 3:

Networking and Linkages with Stakeholders:

(Include travel, site visits, joint activities, exchange of information, germplasm, etc. completed in the fiscal year.)

Leveraged funds:

(Please provide the following information for each leveraged project under this research activity.)

Name of PI receiving leveraged funds:

Description of leveraged project:

Dollar amount:

Additional comments:

List of Publications:

(Please list all publications and presentations made in the reporting year related to this activity.)

Annual Training Report Information
FY 200? - 200?
(October 1, 200? - September 30, 200?)

Regional Project:

Component:

Please edit/update the status report of each degree and short-term training activity as of the end of the reporting fiscal year.

Degree Training:

(Please update the following information for current trainees: training status, date if training completed, current professional status, involvement in CRSP, current country of residence, address, and other contact information.)

Short-term Training:

(Please complete the following information for each short-term training activity budgeted in the fiscal year.)

Type of training:

Description of short-term training activity:

PI/Collaborator responsible for this training activity:

Status of this activity (completed, postponed, cancelled):

Reasons if training activity not completed as planned:

Who benefitted from this activity?

Number of beneficiaries (Males/Females/Total):

XII. STYLE GUIDE–WORKPLAN AND ANNUAL REPORT

Punctuation

- Commas in a list–DO NOT use a comma before the word “and” in lists, e.g., beans, cowpeas and corn.
- A comma should never come between a subject and its verb.
- “Quotation” marks should always be double, except “in case of a ‘quote’ within a quote.”
- Punctuation goes within the quotes (except colons, semicolons, hyphens and dashes).

Scientific Names

- Genus and species should be italicized and in parentheses when used with a common name. The parentheses should not be italicized, e.g., (*Phaseolus vulgaris*). (P. vulgaris genus names start with a capital letter).
- If scientific name is being used without the common name, it should be italicized but not in parentheses, e.g., *P. vulgaris*.
- Authorities are not italicized, e.g., *Phaseolus vulgaris* (L.).
- sp. and spp. are not italicized.

Capitals for Proper Nouns

- Geographic descriptions are capitalized if part of a proper noun, e.g., North America.
- But are not if simply describing a geographic region, e.g., in northern Thailand.

Numbers

- One to ten are typed as words
- 11 onwards are typed as numerals, except at the start of a sentence.
- Large numbers are punctuated with commas, e.g., 6,000

Units of Measure

- Use scientific notation, e.g., kg ha⁻¹ d⁻¹
- Space between number and unit, e.g., 2 kg
- Note space between units, e.g., kg ha⁻¹
- Body weight per day = BWD
- Hour = h
- Day = d
- Year = yr
- Liter = l
- Second = s

Temperature

- 24°C/24°F–no space between numbers, symbols and letters in temperature.

Dates

- Preferred format August 2, 2001

Figures and Tables

- “Figure” should be spelled out in the text and in the figure headings (i.e., Figure 3 rather than Fig. 3).

XIII. BEAN/COWPEA CRSP BIBLIOGRAPHIC REFERENCE FORMAT

The following formats should be used when reporting the types of scholarly outputs listed below.

BOOK:

Alverson, Hoyt. 1978. Mind in the Heart of Darkness. New Haven, CT: Yale University Press.

EDITED BOOK:

Dauber, Roslyn and Melinda L. Cain (eds.). 1981. Women and Technological Change in Developing Countries. Boulder, CO: Westview Press, Inc.

BOOK IN PRESS:

Charlton, Sue Ellen. Forthcoming. Women in Third World Development. Boulder, CO: Westview Press, Inc.

CHAPTER, ARTICLE IN BOOK:

Schudder, Thayer and Elizabeth F. Colson. 1972. The Kariba Dam Project: Resettlement and Local Initiative. In H. R. Bernard and P. J. Pelto (eds.) Technology and Social Change. New York, NY: Macmillan Co., pp. 39-69.

JOURNAL ARTICLE:

Beneria, Lourdes and Dita Sen. 1981. Accumulation, Reproduction and Women's Roles in Economic Development: Boserup Revisted. Signs: Journal of Women in Culture and Society VII(2):279-98.

JOURNAL ARTICLE IN PRESS:

Gaikwad, D. G. and G. Thottappilly. In press. Occurrence of Southern Bean Mosaic Virus on Cowpea in Sénégal. Journal of Phytopathology.

JOURNAL ARTICLE SUBMITTED FOR REVIEW BUT NOT YET ACCEPTED FOR PUBLICATION:

Beaver, J. S., C. V. Paniagua, D. P. Coyne and G. F. Freytag. 1984. Yield Stability of Dry Bean Genotypes in the Dominican Republic. Submitted to Crop Science.

ABSTRACTS, PROCEEDINGS, COLLECTED PAPERS:

McWatters, K. H., R. D. Phillips and A. L. Branch. 1987. Influence of Storage on Quality of Cowpea Meal for Use in *Akara*, Fried Cowpea Paste. Cereal Foods World 32(9):664 (Abstract 106). The 72nd Annual Meeting, American Association of Cereal Chemists, Nashville, TN, November 1-5.

Nnayelugo, D. O. and E. C. Okeke. 1990. Recent Data in the Nutritional Status of Children in Eastern Nigeria. Annual Conference of Nutrition Society of Nigeria, Sokoto, October 31-November 3 (Abstract, p. 4).

Beaumarchais, J. M., M. A. Uebersax and G. L. Hosfield. 1989. Feasibility and Quality Evaluation of Fully Cooked Individually Quick Frozen (IQF) Dry Beans. Proceedings of the 1989 Biennial Meeting of the Bean Improvement Cooperative, Toronto, Ontario, Canada, November 7-9 (Abstract).

PAPERS, PRESENTATIONS:

Chaney, E. 1981. Third World Women and International Migration. Paper presented at the Annual Meeting of the American Political Science Association, New York, NY, September 3.

Gwathmey, C. O. and A. E. Hall. 1990. Responses to Mid-Season Drought of Cowpea Genotypes Differing in Senescence Traits. Poster session, Annual Meeting of the American Society of Agronomy, San Antonio, TX, October 21-26.

Hall, A. E. 1990. Breeding for Adaptation to Drought and the Climatic Conditions of the Next Century. Invited seminar at Cornell University, Ithaca, NY, October 30.

NEWSPAPERS:

Farnsworth, Clyde H. 1984. Regan Indifferent If Certain States Pay More U.S. Tax. New York Times, Sunday, December 2, p. 1.

State Journal (Lansing, MI). 1984. Tragedy Strikes India. December 8, p. 1.

New York Times. 1984. Mediation in Chile Termed Essential by U.S. Officials. Sunday, December 2, p. 1.

GOVERNMENT, AGENCY OR INSTITUTION:

Botswana Ministry of Agriculture. 1979. 1979 Livestock and Crop Survey. Gaborone, Botswana: Central Statistics Office, Ministry of Finance and Development Planning.

Dixon, Ruth B. 1979. Jobs for Women in Rural Industry and Services. Washington, DC: Office of Women in Development, USAID.

World Bank. 1975. The Assault on World Poverty. Baltimore, MD: John Hopkins Press.

THESES/DISSERTATIONS:

Mutters, R. G. 1988. Reproductive Physiology of Cowpea (*Vigna unguiculata* {L.} Walp.) at High Temperatures with Different Photoperiods. Ph.D. Dissertation, University of California-Riverside.

Aw, Tak-Ling. 1983. Influence of Tannin on *Phaseolus vulgaris* Protein Digestibility and Quality. M.S. Thesis, Washington State University.

UNPUBLISHED MATERIAL:

Bressani, R. 1987. Effect of Bean Broth Addition on the Nutritive Value of Cereal Grains. Manuscript. Guatemala City, Guatemala: Instituto de Nutricion de Centro America y Panama (INCAP), Division of Agriculture and Food Science.

WORKING AND OCCASIONAL PAPERS:

Golden, David. 1983. Program to Calculate Gini Coefficients: Microsoft Basic Compatible, Designed for Apple II CP/m. Bean/Cowpea CRSP Ecuador Project Working Paper 83.3E. Ithaca, NY: Cornell University, International Agriculture Program.

Schuster, Isla. 1982. Female White Collar Workers: A Case Study of Successful Development in Lusala, Zambia. Working Papers on Women in International Development Number 29. East Lansing, MI: Michigan State University, Office of Women in International Development.

BEAN/COWPEA CRSP PUBLICATIONS:

Bean/Cowpea Collaborative Research Support Program. 1984. 1984 Annual Report: Executive Summary. East Lansing, MI: Michigan State University, Bean/Cowpea CRSP Management Office.

Bean/Cowpea Collaborative Research Support Program. 1984. 1984 Annual Report: Part I, Technical Summary. East Lansing, MI: Michigan State University, Bean/Cowpea CRSP Management Office.

Bean/Cowpea Collaborative Research Support Program. 1984. 1984 Annual Report: Part II, External Evaluation Panel Report. East Lansing, MI: Michigan State University, Bean/Cowpea CRSP Management Office.

Bean/Cowpea Collaborative Research Support Program, Sénégal/University of California-Riverside Project. 1983. 1983 Annual Report: Technical Summary. East Lansing, MI: Michigan State University, Bean/Cowpea CRSP Management Office, pp. 120-129.

McWatters, K. 1984. Improving Food Accessibility Through Village-Level Production of Cowpea Meal. Research Highlights (4). East Lansing, MI: Michigan State University, Bean/Cowpea CRSP Management Office.

Bean/Cowpea Collaborative Research Support Program. 1984. Pulse Beat. East Lansing, MI: Michigan State University, Bean/Cowpea CRSP Management Office, Spring.

Wallace, Donald H., Porfirio N. Masaya and Paul A. Gniffke. 1984. Temperature x Photoperiod, Adaptation and Yield in *Phaseolus vulgaris*. Vanguard (1). East Lansing, MI: Michigan State University, Bean/Cowpea CRSP Management Office.

XIV. ASSESSMENT OF RESEARCH PROGRESS, SCIENTIFIC ACHIEVEMENTS, TECHNOLOGICAL OUTPUTS AND IMPACTS

Definition

Ongoing assessment will be an integral part of the implementation of a Value-Chain strategy. Assessment provides a mechanism for evaluation of research/training effectiveness and direction and is therefore valuable for making mid-course adjustment decisions. The most common form of programmatic assessment involves evaluation of indicators of research progress, outputs, and the long-term impacts of technologies emerging from individual collaborative research activities. These are defined as:

1. Indicators of research progress: These are concrete results/outcomes of a research objective that are expected and achieved in the time frame of a fiscal year workplan (e.g, FY04). These are used to track progress for research management purposes. The expected results/outcomes are determined by PIs for each research objective in an Activity Workplan as “indicators of research progress.” Some examples of acceptable indicators include:

Research Objective	Indicators of Research Progress
Develop cowpea grain marketing opportunities in Senegal.	<ul style="list-style-type: none"> • Research report detailing the economic opportunities associated with coastal shipping and budgets for a trading enterprise that might make such shipments.
Evaluate bean breeding lines for Mn tolerance.	<ul style="list-style-type: none"> • Completion of a study evaluating 50 breeding lines in three screens—floating leaf disks in controlled conditions, solution culture, and foliar application to otherwise healthy plants in the field. • Information on the extent to which regional breeding programs already represent sources of useful genes for this trait.
Characterize genetic populations and develop molecular tools necessary for implementation of MAS. Develop molecular markers and mapping populations segregating for photosensitivity, high sucrose, plant habit, etc.	<p>By the end of a fiscal year, the U.S. and HC PIs will have:</p> <ul style="list-style-type: none"> • advanced inbreeding in the RIL Populations by three generations; • identified molecular polymorphisms among the parent lines, and; • identified important phenotypic traits that can be mapped with these RIL sets.

At the end of a fiscal year, as part of the Technical Progress Report, PIs provide a description of the results and outcomes of specific objectives as an indicator of progress achieved during the year.

2. Outputs: These are the long-term technological outputs and scientific achievements resulting directly from a research Activity during the course of a five-year grant period. These are not tied to a specific objective, but to the overall research Activity. They are the culmination of results, outcomes and progress achieved under specific objectives of a research Activity over a five-year period (or life of an Activity) and are concrete steps toward impact. The outputs are identified by PIs for each research Activity in the Workplan as “Anticipated Outputs.” Some examples include:

Research Activity	Anticipated Outputs
Determination of the demand and market opportunities for cowpea grain and processed products in West Africa.	<ul style="list-style-type: none"> • Analysis and information that will help focus breeders on those characteristics of highest value in the market. • Analysis and information that will help food scientists identify technologies which fit consumer preferences. • Analysis and information that will help open up new markets for Senegalese producers.
Genetic improvement of bean adaptation to low fertility soils.	<ul style="list-style-type: none"> • Release of two or more bean lines to the PROFRIJOL network with at least 30% better yield in low P soils than existing cultivars. • New information about the impacts of P efficient genotypes on nutrient cycling and soil fertility in bean production systems. • Web-based plant nutrition resources for bean researchers in Spanish and English.
Molecular genetic improvement of cowpea for growers and consumers.	<ul style="list-style-type: none"> • Identified cowpea germplasm with improved transformability. • A genetic transformation system for cowpea with increased efficiency of transformation. • One or more cowpea lines transformed with a Bt gene and expressing resistance to <i>Maruca vitrata</i>.

3. Impacts: Impacts are generated when a large number of people benefit from a technology resulting from a research Activity (or activities). Widespread adoption of research outputs and technology is essential for impact. The widespread adoption of a technology may have economic, social or environmental and natural resource impacts. Typically, these impacts occur several years after a technology is generated and made available for use. Maximizing impacts through widespread adoption should be considered in the design of technologies, the planning of research, and the networking activities with entities that play a role in the dissemination of CRSP technologies after they are generated.

Mechanisms for Assessing Progress, Outputs and Impacts

The Bean/Cowpea CRSP is committed to ongoing assessment of progress, outputs/achievements, and impacts of CRSP research and training activities. These assessments will be achieved via three distinct mechanisms.

1. Assessment of research progress, scientific achievements and outputs on an annual basis: In the annual workplans, PIs for each Activity should identify specific quantifiable/verifiable "indicators of research progress" by research objectives and "anticipated outputs" for each research Activity (see *Research Workplan Format* in the previous section).

Progress toward achievement of these indicators and outputs will be reported in the annual technical progress reports by each Activity plus an explanation as to factors that may have impeded progress during the fiscal year.

The Technical Committee (TC) will review and evaluate the annual progress reports of each Activity based on a set criteria. These include: technical quality of research, scientific achievements, potential for impact by outputs, extent of integration with other regional activities,

collaboration/networking with non-CRSP entities, adequacy of training, etc. Each year, the TC will provide both quantitative and qualitative assessments of research progress for each Activity in all three regional projects. The EEP will independently review and evaluate each component on the basis of annual progress reports and selected site visits.

The emphasis of the annual reviews and evaluations will be on assessment of the success of the collaborative projects in attaining intermediate goals ("Indicators of Research Progress") as established in the Regional Project Workplans. The Regional Project Teams will then use this evaluative feedback to prepare the coming fiscal year's Regional Research and Training Workplans.

2. Economic impact assessment of CRSP technologies as a cross-cutting activity: Economic impact assessment of CRSP technologies will be a separately funded cross-cutting activity within the Bean/Cowpea CRSP-CC2. The primary focus will be on impact assessment of those CRSP technologies and countries which have not been subjected to assessment during the last grant.

The primary goal of the cross-cutting impact assessment component over the next five years (2002 - 2007) will be to determine the impact of Bean/Cowpea CRSP activities in the U.S., Latin America and Africa. The specific objectives for the five-year period are to:

- measure the spread of CRSP bean and cowpea varieties and storage technologies in Africa,
- measure the spread of CRSP bean varieties and other innovations in Ecuador,
- measure the spread of CRSP bean varieties in Michigan,
- provide adoption estimates for emerging CRSP innovations, and
- estimate the economic benefits from CRSP technologies.

3. Social and environmental impact assessment as independent research activities: Assessment of social impacts of CRSP technologies on women farmers, processors and entrepreneurs will be the focus of the cross-cutting research component-CC1. The CC1 component will play an important role in assessing the role that women play in the bean and cowpea value-chain, and design approaches that are reoriented toward greater gender sensitivity.

Assessment of Sustainability challenges will be assessed as part of the socio-economic research activities of the LAC1 component. The objective of assessment of bean production sustainability challenges is to identify researchable issues/problems where outputs have a high probability of benefit and impact. The primary sustainability challenges chosen for assessment in this activity include soil/fertility and pest (insect and disease) management practices in bean production systems, with an emphasis on natural resource conservation and human health.

XV. Statement of Policy on Intellectual Property

Definitions

Intellectual Property (IP): Any new and useful process, composition of matter, life form, article of manufacture, software, copyrightable work, or tangible property including genetically engineered biological organisms, chemical compounds, data sets, or unique and innovative uses of existing inventions that may or may not be patentable or copyrightable. It is created when something new and useful has been conceived or developed, or when unusual, unexpected, or non-obvious results obtained with an existing Invention can be practiced for some useful purpose. It can be created by one or more individuals each of whom to be a creator must have conceived of an essential element or have contributed substantially to its conceptual development.

Invention: A new, original and useful form or item of Intellectual Property.

Invention Disclosure (ID): The act and mechanism for the disclosure of a potential new invention to an administrative body (i.e., the intellectual property office of a university, the Bean/Cowpea CRSP MO, etc.). ID is the first formal step in the documentation of the discovery of a potential new invention. An ID document outlines the objectives of an invention, describes its uniqueness and advantages over previous technologies or processes, provides a detailed description of the invention, gives the current stage of development of the invention, identifies the funding source(s) for the development of the invention and identifies the inventors or creators.

License Agreement (LA): A revocable privilege that gives the Licensee (a recipient of a technology or creation) the right to commercialize the technology or creation and not to be sued by the Licensor for said commercialization. A LA specifies the terms and conditions for both parties for the long-term use and commercialization of a technology, including the period of time, extent of monetary compensation and royalties, and the need for record keeping.

Material Transfer Agreement (MTA): A mutually acceptable agreement of terms by both parties for the handling, use, commercialization and liabilities related to said use of a proprietary technology. A common use of MTAs is to establish the short-term use of molecular technologies in genetic engineering research when very little or no revenue is required for such use. Alternatively, commercialization usually requires the execution of a License Agreement. The MTA or an attachment to the MTA (i.e., letter) will define the conditions for the transfer of a technology.

Plant Variety Protection (PVP) (or Plant Breeders Rights): A mechanism for legal governmental protection through the certification of novel sexually propagated varieties of plants. Applications for PVP must be filed through a country's Plant Variety Protection Office.

Research and Joint Venture Agreements (JVA): A formal agreement among multiple institutions, frequently in different countries, to embark on a joint venture and collaborative research including the research activities being conducted and supported so as to meet the requirements and interests of both the parties (i.e., HC and U.S. CRSP institutions). A JVA will clarify the terms for conducting the collaborative research including (1) reporting, (2) handling of new inventions or products with commercial value that may result from the joint venture, (3) use, exchange, ownership and protections of new inventions, (4) notification of the MO and USAID, (5) sharing of royalties, (6) publication of research results, (7) handling of other parties' confidential information, and (8) financing.

Fundamental Principles Related to Intellectual Property (IP) Generation and Transfer under Bean/Cowpea CRSP

The Bean/Cowpea CRSP is involved in both the collaborative development and transfer of diverse technologies including products of biotechnology (i.e., gene constructs for viral resistance, transgenic lines, etc.), plant germplasm (i.e., improved cultivars), natural products for control of crop pests (i.e., extracts from neem), grain storage technology, bean/cowpea processing protocols and technology, food products (i.e., iron-fortified weaning food, etc.), and research protocols and instrumentation.

Thus, the Bean/Cowpea CRSP adopts the following principles relative to intellectual property generation and transfer, the protection of genetic resources, assessment of impact, and to its collaborative research and training activities between U.S. and HC institutions and universities.

1. The Bean/Cowpea CRSP is **committed to research and training activities** that benefit bean and cowpea producers, grain handlers/traders, processors and consumers, regardless of scale, in the United States, in Africa, in the Caribbean and in Latin America. Activities within these regions are concentrated in countries identified as CRSP Host Countries (HC) which act as regional centers of research.
2. The Bean/Cowpea CRSP is **committed to providing access to technologies** that arise from CRSP-funded research in the U.S., HCs, as well as non-CRSP countries within a region for the benefit of both the public (i.e., NARS, universities, etc.) and private sectors. Applications of CRSP technologies might include use in research, agricultural development, small business enterprise enhancement and the improvement of the economic state of farmers, grain handlers/traders and processors. It is recognized that the private sector plays an important role in development and may be in the best position in certain situations to make effective use of the technology for the benefit of society at large.
3. The Bean/Cowpea CRSP **supports the legal protection of IP** generated by CRSP-funded research through such means as patents, plant variety protection (PVP), trademarks and copyrights. Legal protection is viewed as a means to assure community access to IPs and to control private company use, thus maximizing their potential benefit to society in both the U.S. and in HCs.
4. The Bean/Cowpea CRSP **recognizes that the use of protected materials and technologies in research may be restricting the transfer and distribution** of the creations and spin-off technologies of said research, including their commercialization and transfer to CRSP Host Countries.
5. The Bean/Cowpea CRSP **recognizes the importance of Genetic Resource conservation and supports the free international exchange of those resources and breeding materials** to maximize the efficiency of agronomic research and the breeding of improved varieties of beans and cowpeas.
6. The Bean/Cowpea CRSP **recognizes the rights of farmers in conserving, improving and making available plant genetic resources**, particularly those in centers of origin diversity.
7. The Bean/Cowpea CRSP is **committed to assisting HC PIs gain safe and legal access to IPs** for use in their research and technology transfer activities. IPs are frequently vital to the achievement of economically, socially and environmentally acceptable solutions to major

production and utilization constraints identified within the CRSP projects. They may also be mutually beneficial to the U.S. and the collaborating countries and associated regions.

8. The Bean/Cowpea CRSP **recognizes the strategic importance and value of indigenously generated IPs within host countries** for their sustainable development. Countries in possession of IPs of commercial value are empowered to take control of their economic futures.
9. The Bean/Cowpea CRSP is **committed to building alliances with private sector industries** in both the U.S. and in HCs in order to take forward many of the creations of the research and to assure effective and sustainable dissemination of CRSP technologies to intended end users such as small-scale farmers and women.
10. The Bean/Cowpea CRSP is **committed to the training and the preparation of HC scientists and professionals** in the use of IPs to facilitate research, accelerate technological development, and to generate IPs that can be commercialized. The Bean/Cowpea CRSP contributes to this process through training, both degree and non-degree, the equipping of laboratories, and by providing access to scientific expertise worldwide through the network of Bean/Cowpea CRSP scientists.
11. The Bean/Cowpea CRSP is **committed to the ongoing evaluation of the socio-economic and environmental impacts** of CRSP technologies. This commitment is based in part on the recognition that some IPs have the potential for negative social and environmental impacts when the technologies are improperly introduced or mismanaged.
12. The Bean/Cowpea CRSP is **committed to assisting collaborating HC researchers in the development of guidelines for safe and legal handling and use of IPs** within their respective institutions, before research and technology transfer activities are initiated. This is in recognition that certain HCs and institutions in Africa, the Caribbean and Latin America may not have established IP policies and biosafety guidelines similar to those set forth by the National Institutes of Health (NIH).

Guidelines for U.S. and HC Scientists in Bean/Cowpea CRSP Activities

The Bean/Cowpea CRSP adopts the following guidelines governing the generation, legal protection, use, handling, and transfer/licensing of IPs in CRSP-financed collaborative research and training activities within both the United States and HCs. These guidelines are formed by international, national, institutional and project legislation and/or policies.

◆ International

GATT/TRIPS

Bean/Cowpea CRSP scientists must abide by provisions within the Uruguay Round's Agreement on Trade Related Intellectual Property Rights (the TRIPS Agreement) when transferring, using and managing IPs in an international context. TRIPS imposes global minimum standards for intellectual property rights.

Key requirements of TRIPS that may affect the activities of CRSP scientists who are involved in collaborative research projects with HC scientists include the following (not a complete listing):

- a. Requires that countries provide patent protection for genes, microorganisms, microorganism processes and pharmaceuticals.

- b. Permits exclusion from patentability for living plants and animals as well as biological processes for producing plants and animals.
- c. Requires countries not providing patent protection for plant varieties to provide protection through an effective *sui generis* system (i.e., PVP).

Convention on Biological Diversity

All novel germplasm from foreign countries (non-U.S.) to be utilized in Bean/Cowpea CRSP-funded projects must be acquired in accord with the guidelines established under the UN Convention of Biological Diversity (1993) (CBD) and laws of the relevant donor country.

◆ National

Standard Provisions of USAID Grant

The Bean/Cowpea CRSP, being a federally funded program through the United States Agency for International Development (USAID), complies with the Patent Rights (Aug. 92) provision (p. 10-13) of the Standard Provisions of the USAID grant.

NIH

The Bean/Cowpea CRSP requires that all research activities involving products of genetic engineering, whether in the U.S. or in HCs, abide by relevant laws and guidelines for biosafety and food safety such as established by the National Institutes of Health (NIH) and the Food and Drug Administration (FDA) or similar laws/policies in the country where the research is being conducted.

Bayh-Dole Act (1980)

Any institution, including both U.S. and HC, receiving Bean/Cowpea CRSP subcontracts must comply with the Bayh-Doyle Act (1980) when establishing ownership of IPs generated through CRSP-funded research activities and licensing legally protected technologies to other parties. See below (Institution) for specific institutional provisions established by the Bayh-Doyle Act (1980).

◆ Institutional

In accord with the Bayh-Dole Act (1980) and the Standard Provisions for USAID grants, the following provisions relative to inventions apply to universities and HC Institutions receiving Bean/Cowpea CRSP subcontracts. These provisions are applicable regardless of whether the project, in which the invention was conceived or first reduced to practice, was fully or partially funded by the CRSP.

- a. CRSP researchers are obligated to report any invention to the University (Office of Intellectual Property) or HC Institution having a subcontract. The University or HC Institution must report within sixty days the invention to the Management Entity for the Bean/Cowpea CRSP, Michigan State University, which will assume the responsibility of reporting to USAID.
- b. The University or HC Institution may elect to retain title to inventions developed under Bean/Cowpea CRSP projects.
- c. The University or HC Institution must file patents on inventions they elect to own.
- d. The U.S. Government is granted a non-exclusive license to practice the patent throughout the world. In the case of USAID, this would most likely be in LDCs.
- e. The U.S. Government retains march-in rights if the University or Institution is not moving forward with the invention, i.e., USAID has the right to grant a license in any field of use to a responsible applicant.

- f. The University or HC Institution may license the invention for commercialization.
- g. Any company that holds an exclusive license for sales in the United States must substantially manufacture the invention in the U.S.
- h. The University or HC Institution may not re-assign rights back to the inventor without permission from the funding agency.
- i. The University or HC Institution may not assign its rights to inventions to third parties except for a patent management organization.

◆ **Bean/Cowpea CRSP Project**

Universities and institutions receiving Bean/Cowpea CRSP subcontracts are required to adhere to the above guidelines that are in accord with national and international laws and agreements and institutional policies. It will be the responsibility of the individual institutions with subagreements with the ME (Michigan State University) to ensure compliance.

Based upon the Fundamental Principles, the **Bean/Cowpea CRSP encourages CRSP scientists and their respective Institutions:**

- To apply for intellectual property protection for advanced biological technologies and/or intermediate (i.e., DNA probes, vector strains, gene constructs, primers, etc.) or final products (i.e., transgenic organisms, genetic maps, etc.) in order to assure the availability of such technologies to developing countries.
- To seek plant variety protection for elite germplasm/cultivars that have been developed as a result of CRSP-supported breeding programs in order to assure availability to growers in both the U.S. and in HCs.
- To apply for patents or other legal mechanisms to protect intellectual contributions in order to assure the availability and maximum potential benefit of said IPs and associated technologies to CRSP target groups (i.e., small farmers, women, etc.) in the U.S. and HCs.

The Bean/Cowpea CRSP recommends the use of the following mechanisms to assure an orderly but flexible, safe and legal process for disclosure, transfer, and utilization of IPs/technologies.

1. Research Agreements and Joint Venture Agreements

Research Agreements which include Intellectual Property management guidelines must be signed by the Bean/Cowpea CRSP Management Entity, Michigan State University, and the U.S. Universities to whom contracts are awarded, and by the U.S. Bean/Cowpea CRSP institutions and HC Institutions with whom subcontracts are established.

Research agreements will be required as a mechanism to define the obligations of all parties to ensure compliance by HC Institutions and NARS with CRSP policies.

2. Disclosure Agreements

Bean/Cowpea CRSP researchers/institutions must notify the MO within 30 days after filing an invention/discovery disclosure form or application for plant variety protection (PVP).

3. *Material Transfer Agreements*

Principal Investigators should obtain Material Transfer Agreements (MTA) when transferring biologically active material (i.e., genetic material, including transgenics, elite germplasm and parental lines of hybrids) between CRSP universities and institutions and with non-CRSP entities. MTA should establish the terms regarding use, handling, liability, commercialization and publication of data of said biologically active material. MTAs are a mechanism to assure long-term availability of genetic products from CRSP funded breeding programs to public and private organizations in the U.S., Africa, Latin America and the Caribbean.

MTAs should be on file at the respective universities/institutions where the research is being conducted and be available to the MO upon request (but not more frequently than once annually). Failure to acquire such agreements or to present them to the MO when requested may result in a discontinuation of financial support for the specific research activity.

4. *Licensing Agreements*

Licensing Agreements serve two distinct purposes as related to Bean/Cowpea CRSP activities.

- a) **Licensing of third-party IPs for use in Bean/Cowpea CRSP-supported research and development activities.** The Bean/Cowpea CRSP recognizes that IPs may be necessary for the achievement of certain CRSP research objectives, especially in the area of plant genetics. Licensing Agreements establish the terms and conditions for both parties (supplier and scientist) for the use of the IP in research and assures that CRSP universities and institutions will have the option to license at some future time end products of said research.

As a matter of general policy, the Bean/Cowpea CRSP will not support financially those research programs in which Licensing Agreements for proprietary IPs to be used in a research activity will prohibit the commercialization of end products of the research involving IPs (i.e., a transgenic line, etc.) and/or restrict their transfer and utilization by both CRSP institutions and non-CRSP entities (i.e., NGOs, research institutions, etc.).

- b) **Licensing of innovations and technologies developed by the CRSP.** Licensing Agreements should be used to establish the terms and conditions for both parties (a CRSP university or institution and a non-CRSP entity) for the commercialization or transfer/dissemination of protected creations and technologies developed in full or part with CRSP financial support. License Agreements are usually long-term arrangements which assure access by private, public and non-profit interests to CRSP technologies.

Licensing Agreements do not require MO approval, but must be on file at the respective universities/institutions where the research is being conducted. A copy of Licensing Agreements involving CRSP-developed technologies (type b) must be sent to the MO for information and record keeping purposes. Failure to acquire such agreements or to present them to the MO when requested may result in a discontinuation of financial support for the specific research activity.

5. Approval Form for Genetically Modified Organisms (GMO)

Bean/Cowpea CRSP scientists are required to complete an Approval Form for the movement of GMOs to a HC, whether or not the GMO was developed in part with CRSP funding, and whether or not it was developed through CRSP-funded research activities outside the country of origin. Approval forms will be forwarded to USAID for review and approval in accordance with USAID's Biosafety Review Procedures.

Appendix 1: Composition of Regional Projects (FY2002-FY2007)

Code	Component Title	U.S. PIs/Co-PIs and Institutions	H. C. PIs/Co-PIs and Collaborators at Sub-Contracting Institutions
WEST AFRICA REGIONAL PROJECT			
WA1	Developing Cowpea Market Opportunities in West Africa	James Lowenberg-DeBoer/ Joan Fulton, Purdue	Mbene Faye, ISRA (Senegal); Germaine Ibro, INRAN (Niger); Saket Kushwaha, ATBU (Nigeria); Augustine Langyintuo, SARI (Ghana)
WA2	Value-added Cowpea-based Food Products and Food Security in West Africa	R. Dixon Phillips, UGA	Esther Sakyi-Dawson, UG-L (Ghana)
WA3	Integrated and Sustainable Cowpea-based Cropping Systems in West Africa	William Payne, Texas A&M	Mohamadou Gandah, INRAN (Niger)
WA4	Genetic Improvement of Cowpea Productivity and Grain Quality	Phillip Roberts, UC-R	Ndiaga Cisse, ISRA (Senegal); Issa Drabo, INERA (Burkina Faso); Ousmane Boukar, IRAD (Cameroon)
WA5	Molecular Genetic Improvement of Cowpea for Resistance to Biotic Stress	Larry Murdock/Ray Bressan, Purdue	Idah Sithole-Niang, UZ (Zimbabwe); A.B. Salifu, SARI (Ghana)
EAST AND SOUTHERN AFRICA REGIONAL PROJECT			
ESA1	Developing Bean and Cowpea Market Opportunities in Eastern and Southern Africa	James Lowenberg-DeBoer/ Joan Fulton, Purdue	Hardwick Tchale, Bunda College (Malawi); Hans Balyamujura, UFS (South Africa); Manuel Fillippe Duarte, INIA (Mozambique); SUA (Tanzania); WVM (Mozambique)
ESA2	Increased Food Utilization of Beans and Cowpeas in East and Southern Africa	Ralph Waniska, Texas A&M	Louis A.M. Pelembe, EMU (Mozambique); Amanda Minaar,-UP (South Africa)
ESA3	Nutritional and Health Benefits of Bean and Cowpea in Improving Child Survival	Maurice Bennink, MSU	Henry S. Laswai, SUA (Tanzania)
ESA4	Edaphic Factors Limiting Production of Beans in Eastern Africa	Peter Graham, UMN Jonathan Lynch, PSU	Robert Mabagala, SUA (Tanzania)
ESA5	Seed Multiplication, Dissemination, Marketing and Promotion in East Africa	Carol Miles, WSU	Charles Masangano, Bunda College (Malawi); Flavianus Magayane, SUA (Tanzania)
ESA6-A	Genetic Improvement of Beans for East and Southern Africa	Jim Myers, OSU	James Bokosi, Bunda College (Malawi)
ESA6-B		Phil Miklas, WSU	Susan Nchimbi-Msolla, SUA (Tanzania)
LATIN AMERICA AND CARIBBEAN BASIN REGIONAL PROJECT			
LAC1	Productivity, Sustainability and Marketing Assessment in Central America	Richard Bernsten/Scott Swinton, MSU	Mayra Falck, EAP (Honduras); Lesbia Rizzo, INTA (Nicaragua); INIAP (Ecuador)
LAC2	Enhanced Bean Utilization in the U.S. and Central America	Suzanne Nielson, Purdue	Anna Bonilla, UnCR (Costa Rica)
LAC3	Nutritional and Health Benefits of Bean and Cowpea in Reducing Cancer and Improving Child Survival	Maurice Bennink, MSU	Jose Jackson, UWI (Jamaica); UnCR (Costa Rica)
LAC4	Improving the Nutrient Efficiency and Acid Soil Tolerance of Bean and Cowpea	Jonathan Lynch, PSU Peter Graham, UMN	Juan Carlos Rosas, EAP (Honduras); Rodolfo Araya Villalobos, UnCR (Costa Rica)
LAC5-1	Genetic Improvement of Beans for the Lowlands of LAC	James Beaver, UPR	Juan Carlos Rosas, EAP (Honduras)
LAC5-2		James Steadman, UN-L	Graciela Godoy-Lutz, CEDAF (Dominican Republic)
LAC6	Genetic Improvement of Beans for the Highlands in LAC	James Kelly, MSU	Jorge Acosta Gallegos, INIFAP (Mexico); Eduardo Peralta, INIAP (Ecuador)
CROSS-CUTTING COMPONENTS			
CC1	Broadening Access and Promoting Gender Equity in Bean and Cowpea Production, Marketing and Processing	Anne Ferguson, MSU	Henry Mloza Banda, Bunda College (Malawi) Work collaboratively with U.S. and HC PIs across Regions
CC2	Impact Assessment of CRSP Technologies	Richard Bernsten, MSU James Lowenberg-DeBoer, Purdue	Work collaboratively with U.S. and HC PIs across regions

Appendix 2: BEAN/COWPEA CRSP FIVE-YEAR CALENDAR (FY03 to FY07)

	FY 03	FY 04	FY 05	FY 06	FY 07
OCT	09/30/02-start date of new grant BOD/IR Mtg (with EEP Rep) New EEP/BOD members begin terms EEP visits new sites as needed Old grant Final Report published	New EEP/BOD members begin terms EEP Review Program Implementation	New EEP/BOD members begin terms EEP Quinquennial site visits begin	New EEP/BOD members begin terms EEP Quinquennial site visits continue	New EEP/BOD members begin terms PIO/T signed by USAID/W
NOV	DUE 11/1: Reports: Expense, Training; MO to USAID/W-IAP66 Usage DUE 11/15: Encumbrances, 11/15: Date of receipt of expense reports	DUE 11/1: Reports: Annual, Expense, Training; MO to USAID/W-IAP66 Usage DUE 11/15: Encumbrances 11/15: Date of receipt of expense reports	DUE 11/1: Reports: Annual, Expense, Training; MO to USAID/W-IAP66 Usage DUE 11/15: Encumbrances 11/15: Date of receipt of expense reports	DUE 11/1: Reports: Annual, Expense, Training; MO to USAID/W-IAP66 Usage DUE 11/15: Encumbrances 11/15: Date of receipt of expense reports	DUE 11/1: Reports: Annual, Expense, Training; MO to USAID/W-IAP66 Usage DUE 11/15: Encumbrances 11/15: Date of receipt of expense reports
DEC	Report of carry-forward funds TC Meeting* (conference call) 12/31: End date of old grant	Report of carry-forward funds Fiscal year end report TC Meeting* (conference call)	Report of carry-forward funds Fiscal year end report TC Meeting* (conference call)	Report of carry-forward funds Fiscal year end report TC Meeting* (conference call)	Report of carry-forward funds Fiscal year end report TC Meeting* (conference call)
JAN	Draft FY04 and FY05 budget prepared by MO Based on regional project budgets, Pls are requested to submit draft workplans & activity budgets via on-line reporting system. Regional Planning Meetings*, Chair & Co-Chair elected (serve on TC)	TC Annual Report Evaluation to EEP EEP Annual Meeting Annual BOD Mtg with EEP (Conference call) Based on regional project budgets, Pls are requested to revise workplans & activity budgets via on-line reporting system. Chair & Co-Chair elected (serve on TC)	Draft FY06 and FY07 budget prepared by MO Based on regional project budgets, Pls are requested to submit draft workplans & activity budgets via on-line reporting system. TC Annual Report Evaluation to EEP EEP Annual Meeting Annual BOD Mtg overlapping EEP Mtg (Conf. call)	DUE 1/1: Final Ext. Proposals to MO TC Annual Report Evaluation to EEP EEP Annual Meeting Annual BOD/IR Mtg overlapping EEP Mtg Based on regional project budgets, Pls are requested to revise workplans & activity budgets via on-line reporting system. Regional Planning Meetings*, Chair & Co-Chair elected (serve on TC)	TC Annual Report Evaluation to EEP EEP Annual Meeting Annual BOD Mtg overlapping EEP Mtg (Conf. call) Draft FY08 budget prepared by MO Based on regional project budgets, Pls are requested to submit draft workplans & activity budgets via on-line reporting system. Regional Planning Meetings*, Chair & Co-Chair elected (serve on TC)
FEB	DUE 2/1: Expense reports new grant. Final expense reports/billings old grant 2/15: Date of receipt of expense reports	DUE 2/1: Expense reports 2/15: Date of receipt of expense reports	DUE 2/1: Expense reports 2/15: Date of receipt of expense reports	DUE 2/1: Expense reports 2/15: Date of receipt of expense reports	DUE 2/1: Expense reports 2/15: Date of receipt of expense reports
MAR		EEP Report published	EEP Report published Draft extension design	EEP Quinquennial Report published CRSP Extension cables to Missions	EEP Report published Grant extending CRSP received

APR	Subcontracts amended to obligate FY03B funds Regional Workplan/Budget due to MO Elect TC Chair & Secretary by e-mail	Subcontracts amended to obligate FY04B funds & release FY03 carry-forward Revised activity Workplans/ Budget due to MO Elect TC Chair & Secretary by e-mail	Subcontracts amended to obligate FY05B funds & release FY04 carry-forward All Researcher's Meeting, including: Finalize Regional Workplan/Budget, TC & BOD Meeting to set & approve reg workplan & budget Regional Workplan/Budget due to MO Elect TC Chair & Secretary by e-mail	Subcontracts amended to obligate FY06B funds & release FY05 carry-forward Revised activity Workplan/ Budget due to MO Elect TC Chair & Secretary by e-mail	Subcontracts amended to obligate FY07B funds & release FY 06 carry-forward Regional Workplan/Budget due to MO Elect TC Chair & Secretary by e-mail
MAY	DUE 5/1: Expense reports 05/15: Date of receipt of expense reports TC Meeting to review workplans & budgets to submit to BOD	DUE 5/1: Expense reports 5/15: Date of receipt of expense reports TC Meeting to review workplans & budgets to submit to BOD	DUE 5/1: Expense reports 5/15: Date of receipt of expense reports	DUE 5/1: Expense reports 5/15: Date of receipt of expense reports TC Meeting to review workplans & budgets to submit to BOD	DUE 5/1: Expense reports 5/15: Date of receipt of expense reports Review preset rotation of IRs on BOD TC Meeting to review workplans & budgets to submit to BOD
JUN	BOD Meeting to approve final budget figures & workplans	BOD Meeting to approve final budget figures & workplans		BOD Meeting to approve final budget figures & workplans	BOD Meeting to approve final budget figures & workplans (Conf. call)
JUL	PIs requested to begin preparations of Annual Activity Progress Reports via On-Line Reporting System	PIs requested to begin preparations of Annual Activity Progress Reports via On-Line Reporting System	PIs requested to begin preparations of Annual Activity Progress Reports via On-Line Reporting System	USAID/W Management Review PIs requested to begin preparations of Annual Activity Progress Reports via On-Line Reporting System	PIs requested to begin preparations of Annual Activity Progress Reports via On-Line Reporting System
AUG	DUE 8/1: Expense reports 8/15: Date of receipt of expense reports Subcontracts amended FY04A obligation FY04 budgets requested	DUE 8/1: Expense reports 08/15: Date of receipt of expense reports Subcontracts amended FY05A obligation FY05 budgets requested	DUE 8/1: Expense reports 8/15: Date of receipt of expense reports Subcontracts amended FY06A obligation FY06 budgets requested	DUE 8/1: Expense reports 6/15: Date of receipt of expense reports Subcontracts amended FY07A obligation FY07 budgets requested	DUE 8/1: Expense reports 6/15: Date of receipt of expense reports Subcontracts amended FY08A obligation FY08 budgets requested
SEP	DUE 9/15: Budget sheets	DUE 9/15: Budget sheets	DUE 9/15: Budget sheets	DUE 9/15: Budget sheets USAID/W-BIFAD Extension Presentation	DUE 9/15: Budget sheets 09/29/07 End date of current grant

*TC Meeting and Regional Planning Meeting dates are tentative. The TC meetings will take place in December or early January. The Regional Planning Meetings will take place during the months of January to April.