

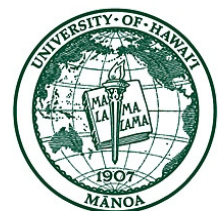
## Horticulture Collaborative Research Support Program (Horticulture CRSP)



### Request for Immediate Impact Project Full Proposals

Date of Release: November 25, 2009  
Applications Due Date: December 18, 2010  
Announcement of Selections: January, 2010

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**Sponsored by the United States Agency for International Development and  
participating U.S. and host country institutions around the world.**

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## **PREAMBLE**

To ensure early results from the Horticulture CRSP, the first year of funding will be devoted to Immediate Impact Projects. Our intent in selecting pre-proposals for preparation of full proposals has been to identify proposals that can be quickly prepared, reviewed, and implemented, and that will result, if funded, in activities that address the priorities, objectives, and themes of the Horticulture CRSP (see Appendix G).

## **DURATION AND TIMING**

Immediate Impact Projects will be funded for a maximum of 1 year. The award period will be 2/1/10 to 1/31/11.

## **AVAILABLE FUNDS**

The maximum amount awarded per project will be \$150,000. We have selected 38 high priority pre-proposals for preparation of full proposals, and intend to fund approximately 14. Our intent in reviewing full proposals will be to examine not only the manner in which the proposal's objectives address the issues and themes of the Horticulture CRSP, but also to look for fiscal constraint that will provide opportunities for maximizing the number of proposals that can be funded.

## **COST SHARING AND INDIRECT COSTS**

There is a mandatory cost-sharing requirement of 25% of the total requested federal funds. Indirect costs are limited to 20% of modified total direct costs.

## **TRAINING**

In keeping with the HORTICULTURE CRSP theme of Information Accessibility, training will be a primary component of the HORTICULTURE CRSP at all levels. In addition to funding traditional training activities such as short-term education and exchanges, funded Immediate Impact Projects will be expected to include outreach components, particularly focusing on entrepreneurial women.

## **TRANSPARENCY, MONITORING AND EVALUATION**

To achieve a transparent, dynamic, effective and responsive program, the Horticulture CRSP includes a monitoring and evaluation requirement that incorporates a results-driven framework, the foundation of which is a continuous cycle of evaluation. Each Immediate Impact Project Proposal must include a results-based monitoring and evaluation plan (see Appendix B-1, Monitoring & Evaluation).

## **ORGANIZATION AND FORMAT**

Applications for Immediate Impact Research awards must contain the following elements:

1. Cover Page(s)
  - a. Project Title
  - b. Lead institution applying for the award

- c. Names, titles, mailing addresses, e-mail addresses, and telephone & FAX numbers of Principal Investigators and Collaborators
2. Signature page to be signed by an authorized representative of the lead institution, and sent by FAX to 530-752-7182 (Appendix A). Form can be downloaded from [http://hortcrsp.ucdavis.edu/IIP\\_proposals](http://hortcrsp.ucdavis.edu/IIP_proposals)
3. Project abstract: One page with the following components:
  - a. 150-200 word abstract
  - b. Keywords (maximum 5)
  - c. Targeted countries/region(s)
  - d. Summary budget:
    - US Institution(s) Budget Request \$ \_\_\_\_\_
    - US Institution(s) Matching Funds \$ \_\_\_\_\_
    - Developing Country Institution(s) Budget Request \$ \_\_\_\_\_
    - Developing Country Institution(s) Matching Funds (if any) \$ \_\_\_\_\_
4. Technical Narrative (6 page maximum)
  - a. Introduction (justification, statement of problem, approach and expected impacts)
  - b. Horticulture CRSP objectives addressed (see Appendix G)
  - c. Specific project objectives
  - d. Activities and methodology required to accomplish each objective
  - e. Timeline of activities and expected outcomes
  - f. Outreach and extension activities and outputs
  - g. Integration of gender issues into project activities (see Appendix F)
  - g. Roles and responsibilities of key personnel and partner organizations
4. Literature Cited
5. Monitoring and Evaluation Plan (Appendix B)
6. Statement of institutional experience in the proposed region(s)/country(s) (1 page maximum)
7. Curricula Vitae for Lead PI, Co-PIs, and key project personnel (2 pages max. per CV)
8. Budget, including cost-sharing, using the Horticulture CRSP Interactive Budget Form (download from [http://hortcrsp.ucdavis.edu/IIP\\_proposals](http://hortcrsp.ucdavis.edu/IIP_proposals)).
9. Budget Justification and Cost Sharing Narrative (Appendix C)
10. Additional sources of support (if any): Please indicate the objectives addressed by the additional funding in comparison with the current funding request and the respective costs
11. Signed Assurance Statement (APPENDIX D; download from [http://hortcrsp.ucdavis.edu/IIP\\_proposals](http://hortcrsp.ucdavis.edu/IIP_proposals))

## **SUBMISSION**

Immediate Impact Research Applications are to be submitted electronically in PDF format.

### Document Layout:

Paper size: standard 8.5" x 11"

Line spacing: single spaced

Margins: 1 inch on all sides

Minimum font size 12 point

### ***How and Where to Submit***

Applications must be submitted as an email attachment to [hortcrsp@ucdavis.edu](mailto:hortcrsp@ucdavis.edu) by December 18, 2009 at 5:00pm PST and should have "**Horticulture CRSP Immediate Impact Award Application**" in the subject line. In addition, the signature page with signature of Authorized Representative must be faxed to: 530-752-7182. Submissions will be acknowledged by return email within one business day.

## **DUE DATE**

All applications must be received in electronic forms by close of business December 18, 2009 (5:00 p.m. Pacific Daylight Savings Time). Applications received after the deadline may not be considered for funding.

## **EVALUATION CRITERIA**

All proposals will be subject to peer review, and reviewers will use the criteria outlined in Appendix E.

## **ADDITIONAL INFORMATION**

Additional information is available at <http://hortcrsp.ucdavis.edu>. For clarifications and questions, e-mail [hortcrsp@ucdavis.edu](mailto:hortcrsp@ucdavis.edu).



**APPENDIX A**

Horticulture Collaborative Research Support  
Program (Horticulture CRSP)

***Signature Page***

Submit this form via fax to 530-752-7182 by 5:00pm PST on December 18, 2009.

**Immediate Impact Project Award**

**Due: 12/18/2009**

**Proposal submitted to the Management Entity of the Horticulture CRSP  
under the Regents of the University of California**

Title:

PI:

University:

Total Amount Requested:     \$

By signing and submitting this proposal, the individual applicant or the authorized official of the applicant's institution is:

1. Certifying that statements made herein are true and complete to the best of his/her knowledge; and
2. Agreeing to accept the obligation to comply with the Horticulture CRSP award terms and conditions if an award is made as a result of this application.

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Authorized Signature

Date

*If you have any questions, please send an email to [hortcrsp@ucdavis.edu](mailto:hortcrsp@ucdavis.edu), or call (530) 752-7992*

## **APPENDIX B-1 Monitoring and Evaluation Plan**

Projects funded to address the goals of the Horticulture CRSP will be evaluated based on a results-based (logical) framework and all proposals must include a monitoring and evaluation (M&E) plan. Projects will address **Objectives** through defined **Activities** which will have specific **Outcomes** (deliverables/outputs) and **Measures of Success**. Please refer to the Performance Indicators Table (Table B-2) when completing your M&E plan. Within this framework, we define the following terms

- **Objectives.** A statement of intention. Objectives should be specific, measurable, achievable, realistic and time-bound.  
e.g. reducing postharvest losses of leafy vegetables in East Africa.
- **Activities.** Research or training/outreach programs intended to achieve the objectives.  
e.g. determine the benefits of perforated plastic bags for reducing water loss, evaluate the use of evaporative coolers for short term storage and transport, & conduct a 3-day workshop and demonstration for women's farmer groups.
- **Outcomes (Deliverables/Outputs).** Expected results of the activities.  
e.g. documented effects of plastic bags and evaporative coolers on weight loss, 50 women farmers trained in postharvest technology
- **Measure of Success.** How will you decide if your activity was successful?  
e.g. perforated plastic bags and evaporative cooling significantly reduce water loss of leafy greens, trainees have a significantly increased understanding of postharvest technology
- **Documentation of Success.** How will you objectively document the success of your activities?  
e.g. extension bulletin in local language(s) on benefits of perforated bags and evaporative cooler, results of pre- and post-training quizzes to document knowledge gained.
- **Impact.** What is the long-term result of the activities and outcomes, e.g.  
reduced losses of leafy greens after harvest

A suggested format for the monitoring and evaluation plan is shown in Table B.1 with entries describing activities, outcomes, measures of success, and means of documenting success for an imaginary project aimed at reducing losses of leafy greens. A blank table can be downloaded at [hortcrsp.ucdavis.edu/IIP\\_proposals](http://hortcrsp.ucdavis.edu/IIP_proposals).

**Table B.1.**

Objective X. Reduce postharvest losses of leafy vegetables in East Africa			
Activities	Outcomes	Measure of Success	Documentation of Success
1. Determine the benefits of perforated plastic bags for reducing water loss  2. Determine the benefits of evaporative cooling for short term storage and transport.  3. Three day workshop and demonstration for women's farmer groups	Methods for reducing weight loss of leafy greens and improving product quality during transport and storage identified	Methods that significantly improve product quality are known, extended and adopted.	Experimental results documented.  Extension bulletin in local language(s) on benefits of perforated bags distributed and available.  Training events held and evaluated.  Adoption survey.

**APPENDIX B-2 Performance Indicators Table**

Please complete the Horticulture CRSP Performance Indicator Table (Table B-2; downloadable at [hortcrsp.ucdavis.edu/IIP\\_proposals](http://hortcrsp.ucdavis.edu/IIP_proposals)). Select the relevant indicators for your project and provide an estimate of the numbers for each activity selected. These indicators will be benchmarks for project success. This form must be submitted with your application and should be referred to for information when completing your Monitoring and Evaluation Plan (Appendix B-1).

Table B.2 *Horticulture CRSP Performance Indicators*

Indicator	FY 2010 Planned	Notes
Policy and Enabling Environment		
Number of policies/regulations/administrative procedures analyzed as a result of USG assistance.		
Number of policy reforms/regulations/administrative procedures presented for legislation/decreed as a result of USG assistance.		
Number of policy reforms/regulations/administrative procedures passed for which implementation has begun with USG assistance. (Outcome Indicator)		



Indicator	FY 2010 Planned	Notes
Number of individuals who have received USG supported short-term agricultural enabling environment training - Female		
Number of individuals who have received USG supported short-term agricultural enabling environment training - Male		
Number of individuals who have received USG supported long-term agricultural enabling environment training - Female		
Number of individuals who have received USG supported long-term agricultural enabling environment training - Male		
Number of farmers adopting improved technology or management practices. (Outcome / Impact Indicator).		
Number of new technologies or management practices under research as a result of USG assistance.		
Number of new technologies or management practices made available for transfer as a result of USG assistance.		
Number of new technologies or management practices being field tested as a result of USG assistance. (Custom Indicator)		
Number of additional hectares under improved technologies or management practices as a result of USG assistance.		
Number of rural households benefiting directly from USG interventions		
Number of producers organizations, water users associations, trade and business associations, and community-based organizations (CBOs) receiving USG assistance		
Number of agriculture-related firms benefiting directly from USG supported interventions.		
Number of women's organizations/associations assisted as a result of USG interventions.		
Number of public-private partnerships formed as a result of USG assistance.		
Number of individuals who have received USG supported short-term agricultural sector productivity training - Female		
Number of individuals who have received USG supported short-term agricultural sector productivity training - Male		
Number of individuals who have received USG supported long-term agricultural sector productivity training - Female		
Number of individuals who have received USG supported long-term agricultural sector productivity training - Male		
Number of research projects or new technologies of potential benefit to U.S. horticultural industries		
<b>Postharvest Handling and Technology</b>		
Number of marketers adopting improved technology or management practices. (Outcome / Impact Indicator) - Female		
Number of marketers adopting improved technology or management practices. (Outcome / Impact Indicator) - Male		
Number of new technologies or management practices under research as a result of USG assistance.		
Number of new technologies or management practices made available for transfer as a result of USG assistance.		
Number of new technologies or management practices being field tested as a result of USG assistance. (Custom Indicator)		

Indicator	FY 2010 Planned	Notes
Number of new value added or processing products developed and/or introduced		
Number of rural households benefiting directly from postharvest, value added or on-farm processing interventions		
Number of individuals who have received USG supported short-term postharvest training - Female		
Number of individuals who have received USG supported short-term postharvest training - Male		
Number of individuals who have received USG supported long-term postharvest training - Female		
Number of individuals who have received USG supported long-term postharvest training - Male		
Number of research projects and/or technologies of potential benefit to U.S. horticultural industries		
<b>Horticulture Market System Development</b>		
Number of new farmer marketing associations, or similar, formed as a result of USG assistance.		
Number of new marketing opportunities created		
Number of new horticultural products being exported		
Quantity of new horticultural products being exported		
Number of rural households benefiting directly from marketing strategy interventions		
Number of private sector marketing firms benefiting directly from USG supported interventions.		
Number of women's organizations/associations assisted as a result of USG interventions.		
Number of public-private partnerships formed as a result of USG assistance.		
Number of individuals who have received USG supported short-term marketing training - Female		
Number of individuals who have received USG supported short-term marketing training - Male		
Number of individuals who have received USG supported long-term marketing training - Female		
Number of individuals who have received USG supported long-term marketing training - Male		
Number of research projects and/or technologies of potential benefit to U.S. horticultural industries		
<b>Institutional and Capacity Building</b>		
Number of host country institutions, agencies and organizations in direct cooperation or collaboration		
Number of workshops conducted for host country institution, agency, and organization personnel		
Number of host country professionals attending workshops, training conferences, or similar - Female		
Number of host country professionals attending workshops, training conferences, or similar - Male		
Number of graduate degrees earned by host country as a result of Hort CRSP project - Female		

Indicator	FY 2010 Planned	Notes
Number of graduate degrees earned by host country as a result of Hort CRSP project - Male		
Number of certificate training programs conducted		
Number of certificates earned by host country professionals - Female		
Number of certificates earned by host country professionals - Male		
Number of U.S. faculty providing training or instruction in host country - Female		
Number of U.S. faculty providing training or instruction in host country - Male		
Number of host country extension workers, university faculty or other host country professionals involved in providing training to other host country professionals - Female		
Number of host country extension workers, university faculty or other host country professionals involved in providing training to other host country professionals - Male		
Number of host country professionals directly involved in conduction Hort CRSP research activities - Female		
Number of host country professionals directly involved in conduction Hort CRSP research activities - Male		

## **APPENDIX C      Budget**

### **Instructions**

The financial guidelines for the Horticulture CRSP are found in the Code of Federal Regulations, 22 CFR 226, at [http://www.access.gpo.gov/nara/cfr/waisidx\\_05/22cfr226\\_05.html](http://www.access.gpo.gov/nara/cfr/waisidx_05/22cfr226_05.html). Limitations exist relating to the purchase of agricultural commodities, motor vehicles, pharmaceuticals, pesticides, rubber compounding chemicals and plasticizers, used equipment, and fertilizer. The eligibility of commodities is discussed in detail in ADS Chapter 312 which can be found at <http://www.usaid.gov/policy/ads/300/312.pdf>.

### **General Instructions**

1. Use the budget form provided ([hortcrsp.ucdavis.edu/IIP\\_proposals](http://hortcrsp.ucdavis.edu/IIP_proposals)).
2. Provide a separate budget justification for the main institution and each subaward using the budget categories from the budget form.
3. Enter data only in yellow or salmon-colored cells on the budget form. The green and blue cells are formula-driven and should not be altered. The salmon-colored cells represent the escalation factor, if applicable, to be applied to the calculations.
4. Construction costs are not allowed.

### **Details**

#### ***Personnel***

Administrative salary is not allowed as a direct cost; it should be viewed as part of the indirect costs or administrative fee. Principal Investigator salary is allowable up to the appropriate percentage of effort on the project. List all personnel by position; in addition, provide names for senior personnel. The budget form is driven by annual salary rates; enter the percentage of the FTE charged to the project in the "unit" box.

#### ***Fringe Benefits***

Enter the benefits percentage as it pertains to the relevant position in the personnel section. Do not include student tuition/fees here. If fringe benefits are included in the salary portion listed above, leave the benefits at zero and put an explanation in your budget justification.

#### ***Travel***

Enter all domestic travel as one line item on the budget form in the "Travel 1 – Domestic" box. Provide a full explanation of domestic travel in the budget justification. Enter each anticipated international trip as a separate line item on the budget form and provide a full explanation for each trip in the budget justification, including the method by which airfare costs were determined and per diem rates where applicable. Include a travel budget for the P.I. and lead host-country partner to attend the 3-day Inception Workshop tentatively to be held in east Africa in late spring 2010.

**Equipment**

Equipment is defined as tangible, non-expendable property having a useful life of more than one year and an acquisition cost of \$5,000 or more per unit. Include the potential vendor source in the budget narrative for each item.

**Supplies**

List specific supplies and costs if possible; if specifics are unknown, list types of supplies and explain the basis of cost in the budget narrative. No miscellaneous or contingency categories are allowed.

**Contractual Services**

This category is not for subaward expenses; those are detailed separately. Enter any consultant expenses or other vendor contractual services here. Include rates as appropriate in the budget narrative.

**Subawards**

All subaward expenses must be detailed on a separate worksheet included within the budget workbook. The subaward totals will roll up to the main budget detail pages. Subawards are not limited to a certain percentage of the award as long as the goals of the project will be met. Each subaward should be referenced briefly in the main institution's budget narrative; a separate budget narrative is required for each subaward.

**Tuition**

Graduate student tuition and fees should be included here. Staff fees for licenses, etc. should be included as an "other direct cost".

**Other Direct Costs**

Some examples are greenhouse fees, maintenance agreements, honoraria, repairs, analyses, and long-distance toll charges. Include the method of calculation in the budget narrative, if applicable. Travel fees and insurance should be included under "Travel".

**Indirect Costs (Overhead)**

Indirect costs are limited to the lesser of federally-negotiated campus research rates or 20.0% of modified total direct costs (MTDC) for U.S. universities, international centers, and host country institutions. Institutions with no negotiated rate may charge an administrative fee of up to 20.0% MTDC; however, the administrative fee should be kept as low as possible. Provide a detailed explanation for the administrative fee, if applicable, and include rates in the budget narrative as appropriate.

**Cost Sharing**

Cost sharing is required at 25% of the total federal funds requested. Include the cost-sharing narrative at the end of the relevant budget justification for each institution that will contribute to the cost-sharing total. The cost share must consist of non-federally funded contributions that meet the criteria detailed in 22 CFR 226.23. Cost sharing may include, but is not limited to: 1) principal investigator/senior personnel effort; 2) in-kind contributions; 3) cash contributions; 4) unrecovered indirect costs; 5) indirect costs on principal investigator/senior personnel effort. Cost-sharing documentation from the contributing entity must be provided at the time of proposal submission (in most cases, this will be in the form of a letter signed by the authorized organizational

representative). Some items that are ineligible for cost sharing are existing equipment, administrative services, office and lab space, and administrative fees in lieu of indirect costs. The cost share may come from any combination of the main institution and subaward(s) as appropriate. List any non-personnel cost share items under “Other Direct Costs” on the cost-share budget sheet(s), including any third-party cost share and unrecovered indirect costs. Any subaward cost-sharing information should be entered separately on the relevant subaward cost-share budget page; all totals will roll up to the main budget detail sheets.

***The budget narrative should be compiled in the following order:***

- Main institution budget narrative (with cost-sharing justification, if applicable).
- Subaward(s) budget narrative(s) in order of placement on the budget form (with cost-sharing justification(s), if applicable).
- Cost-sharing documentation in order of the institutions on the budget form.

*Please address any budgetary questions to Heather Kawakami at [hekawakami@ucdavis.edu](mailto:hekawakami@ucdavis.edu), 530-754-7968.*

## APPENDIX D *Assurance Statement*

### ASSURANCES – NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

**PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.**

**NOTE:** Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 7. 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in

Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).

6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681- 1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation

Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in

purchases.

8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

**Previous Edition Usable**

**Standard Form 424B (Rev. 7-97) Authorized for Local Reproduction Prescribed by OMB Circular A-1029.**

Will comply, as applicable, with the provisions of the Davis- Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327- 333), regarding labor standards for federally-assisted construction subagreements.

10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.

11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking

water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93- 205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL \_\_\_\_\_

TITLE \_\_\_\_\_

APPLICANT ORGANIZATION \_\_\_\_\_

DATE SUBMITTED \_\_\_\_\_



## **APPENDIX E      Application Review Criteria**

Impartial peer reviewers will evaluate all applications, and their advice will be key to the funding decisions recommended by the Horticulture CRSP Program Council. The primary criteria for evaluating proposals are:

Project Impact: How well does the proposed project contribute to attainment of the Horticulture CRSP Objectives? Specifically, how well does the proposed research build local scientific and technical capacity, apply research findings and technical knowledge to increase small producers' participation in markets, and facilitate the development of policies that improve local horticultural trade and export capacity. Does the project address horticultural crop development in one of the target regions and/or are the results transferable to other countries or regions? (20 points)

Capacity Building: How well do the degree, faculty exchange, certificate and short-term training programs build capacity for sustaining future horticulture development in the target host countries? How well does the proposed research enhance host country infrastructure for research and education, such as facilities, instrumentation, networks, and private industry partnerships? (20 points)

Scientific Merit: How important is the proposed activity to advancing knowledge and understanding in "horticulture" and related disciplines? To what extent do the proposed activities utilize "leap frog" or "disruptive" technologies and explore creative and original concepts? Are the proposed research and outreach methods appropriate? Can the proposed research be technically implemented within the proposed time frame and budget and given the available resources? Are proposed research and extension activities effectively targeted towards project objectives? (20 points)

Participatory Partnerships: How well qualified is the research team to conduct the project? Is the proposed team sufficiently diverse institutionally (universities, IARCs, NGOs, etc.), disciplinarily (social, biological and physical), and by gender for the intended research? Were developing country stakeholders and/or USAID Missions sufficiently involved in the conception and design of the research application? How well does the research proposal integrate stakeholders into the research program? Strength of past-performance in diverse participatory research and development projects? Effectiveness of identified groups of local stakeholders? (15 points)

Gender and Enabling Environment: How well is the gender of stakeholders (end-users, trainees, and other participants) taken into account? To what extent has gender sensitivity been integrated into activities? How well does the proposed activity broaden the participation of women? Does the project contribute to policies and/or market access that will ultimately alleviate poverty, enhance quality of life, and improve economic livelihoods? (15 points)

Monitoring, Evaluation and Impact Plan: How well is the Monitoring and Evaluation (M&E) plan developed and designed specifically for the proposed project? Are benchmarks

established so progress toward achieving objectives can be measured? Are activities, outcomes, measures of success, and methods for documenting success established so progress towards achieving objectives can be measured? (10 points)

The Horticulture CRSP Program Council will seek a balance between regions, themes, and institutions in making their final recommendations to the Management Entity of Horticulture CRSP.

## **APPENDIX F      Gender assessment for Horticulture CRSP RFAs**

### **MINIMUM USAID GENDER GUIDELINES:**

1. USAID guidelines on gender consider that ALL projects should be gender sensitive.
2. USAID guidelines ask everyone to do their utmost to include women as 50% of beneficiaries in ALL areas of your project. This means that if you cannot do so you need to provide justification or when possible find a creative way around constraints.

### **PRINCIPLES :**

1. Gender refers to social characteristics of men and women, such as their different roles within the family or in farming and the types of behavior expected of them (for instance, women are gentle and faithful, men are strong and free). These issues speak to the ability of women and men in specific communities to carry out certain farming activities, to be able to travel outside their immediate area for training and meetings, to be sufficiently educated to participate in training, and so on.
2. Gender stereotypes will vary among cultural groups. It is necessary to be aware of how they function in your particular cultural group because they will affect constraints for both sexes. For instance, if you want to add more weeding on a man's crop and weeding is a woman's task in that culture, you may not get your technology adopted. Include in your proposal an assessment of how you will deal with this.
3. Gender issues also speak to who farms which crops and/or which practices do they do in farming. What are the differential usages of men and women regarding natural resources (water, firewood, etc.)? For instance, women's inability to participate in formal employment or their restraints in mobility may result in their using natural resources in order to get cash. For instance, in Africa women may cut down trees to sell the wood because they have no other income source.
4. Gender issues also exist in regard to scientists, extension agents, and students. This includes both numbers and in men's and women's perspectives.
5. Consider that one of the CRSP goals is to sensitize host country stakeholders at all levels - farmers, extension agents, local and national government officials, researchers, university faculty, etc. - to gender issues.

The Horticulture CRSP ME can provide further help in formulating gender-sensitive criteria for your specific proposal. It can also offer training of trainers for teachers and trainers so they can incorporate gender training in their courses.

### **ASSESSMENT CRITERIA (Use those that apply to the work you are doing.)**

#### **General:**

1. Review your stakeholder/participant list and consider the gender issues with each group.
2. In writing your proposal make the sex of your participants explicit - eg. Men and women farmers/students.

3. Go beyond numbers to consider gender stereotypes that might hamper participation of one group or other.
4. Add relevant gender training to all training programs, long and short term.

**Farm/Enterprise level:**

Specify the gender division of labor for Horticulture CRSP activities in your target area. Make it clear in your proposal what these are and the implications for your proposal.

1. Identify constraints on women - mobility, resources, etc. - so you can include ways of dealing with this in your proposal.
2. Clarify whether you will be dealing with men or women producers, marketers, and other stakeholders, or both. If not with both, please explain why not.
3. In addition to being gender sensitive, we ask you to be farmer sensitive. Show us that farmers and other stakeholders have been consulted on the various phases. And thus that what you are proposing corresponds to their needs.

**Extension level:**

1. Aim at working with a minimum of 50% women. If necessary figure out how to find relevant women in or near the communities who might be able to work as assistant extension agents. For instance, you will be working with extension services. You want to provide extension workers with bicycles but women in that area have traditionally not ridden bicycles. How will you handle this? Discuss the constraints in your research area in your proposal as also any relevant constraints on women/men farmers.
2. At the community level take into account how men and women are organized into associations, how group activities are structured, and what tasks provide for group communication such as doing laundry by the stream, or drinking tea under the shade tree.
3. Please provide gender assessment of the information knowledge transmission systems associated with your problem statement.

**Training:**

1. Short-term in-country training. Programs should be designed to include both sexes.
2. All courses should provide gender training at some level relative to the course subject and level.
3. Degree and certificate training should be offered to students of both sexes. The guidelines you should include in your proposal should be on the lines that 50% women is the desired percentage and the minimum percentage of female students should be 33%. If the percentage of women will be lower than 50% please provide an explanation for this and state what your project will do to ameliorate the situation.

**Scientists:**

Include women scientists in both the US and host countries. If you cannot do this, explain the constraints that have prevented this.

## **APPENDIX G      Background Information, the Horticulture CRSP**

### **CRSPs**

Collaborative Research Support Programs (CRSPs) are funded by the US Agency for International Development (USAID), and have the following goals and characteristics:

- Coordinated, multi-disciplinary research programs that are collaboratively developed and cooperatively implemented, with shared responsibilities between US and host country institutions and scientists. CRSP goals are to support economic growth and to reduce poverty through the generation of knowledge and technologies important to the development of agriculture and natural resources of developing and transition countries, while also contributing to the improvement of agriculture in the US.

- Long-term activities, carried out largely in developing countries, following “global plans” of research goals and strategies to reach them. Research proposals are selected competitively and are subject to approval by USAID and by BIFAD.

- Development of the human and institutional capability of research organizations in the countries where CRSP activities are located. Research projects are a vehicle for this capacity development, as are graduate degree programs, research assistantships, and workshops. The institutional relationships established between CRSPs and host country institutions are intended to be enduring and to transcend the life of the CRSP.

### ***HORTICULTURE CRSP GOALS, OBJECTIVES, AND STRATEGIES***

#### **Goals**

In addressing the priorities outlined in the RFA and the Global Horticulture Assessment (GHA), the Horticulture CRSP emphasizes challenges and opportunities in seven key areas – gender equity, sustainable crop production, postharvest technology, food safety, market access, and financing. Constraints in each of these areas can limit the opportunity for limited resource communities to participate in the value chain. Equally, in each area there are exciting opportunities to deploy innovative technologies, introduce new germplasm, and create innovative marketing partnerships and strategies that will facilitate their participation. The goals of the Horticulture CRSP are to realize the opportunity that horticultural development offers, of meeting the food needs and improving nutrition and human health in the developing world, while providing opportunities for diversification of income and consequent economic and social advancement of the rural poor and particularly women. The results of the research and training activities for the Horticulture CRSP will increase food security and improve the quality of life of people in developing countries while bringing an international focus to the research, teaching, and extension efforts of U.S. institutions. These goals will be achieved through collaborations between U.S. universities and national and regional institutions abroad that are active in horticulture research and development. Initial programs will target developing countries in sub-Saharan Africa, South Asia, and Latin America.

#### **Objectives**

The Horticulture CRSP objectives are:

1. To build local scientific and technical capacity,

2. To apply research findings and technical knowledge to increase small producers' participation in markets, and
3. To facilitate the development of policies that improve local horticultural trade and export capacity.

Strategies for achieving these goals and objectives include:

- To develop knowledge pertaining to horticultural agriculture as a means of building sustainable human, economic, technological and institutional capacity via interventions and strategies, and
- To organize and extend the knowledge developed in modalities that can be readily adapted and implemented for sustainable farming, value chain building, education, training, and decision-making at global, national, regional and local levels.
- Integrated and cross-cutting strategies to achieve these goals are:
- To identify the constraints to production, postharvest, food safety, marketing, environmental and enabling environment for stakeholders in horticultural value chains, particularly small enterprises and those led by women,
- To build institutional and personal capacity through horticultural research activities and their applications
- To invest in education, training, and extension of technology to smallholder producers, agricultural support personnel and institutions in host-country partnerships
- To build and support linkages between producers and markets and their infrastructure through policy recommendation, information and technology interventions for gender-empowering, financial and socioeconomic solutions
- To provide specific and flexible mechanisms through public and private partnership and stakeholder interactions to reduce poverty, improve nutrition, support gender equity, promote food security and invest in pro-poor educational and economic development of small holder production and competitiveness in high-valued horticultural products.

The Horticulture CRSP expects applicants for Immediate Impact awards to implement these strategies via 'problem-solving' methodology for 'Farm to Fork' capacity-building at all levels of the horticultural value chain.

#### Major themes

The Immediate Impact Projects selected for funding by the Horticulture CRSP will address one or more of the central themes of the Horticulture CRSP – Information Accessibility, Innovation, and Gender Equity.

#### *Information accessibility*

The Global Horticulture Assessment notes the desperate need in rural communities for information – on marketable crops and varieties, on production techniques, postharvest handling, and market requirements and access. Successful Immediate Impact applications will include strategies for extending information and technologies developed during the

project, and eventually linkages to the developing Horticultural Knowledge Center (<http://hortcrsp.ucdavis.edu/GHIC/html>).

### *Leapfrog technologies*

The Horticulture CRSP Immediate Impact Projects that explore 'disruptive' or 'leapfrog' technologies will provide advanced tools, in an appropriate form, to stimulate and facilitate horticultural development in the developing world. An example of this approach is to capitalize on the rapidly decreasing cost and increasing efficiency of photovoltaic devices to power innovative technologies for horticultural applications. Electric water pumps, reverse osmosis desalinizers, and Peltier effect small-scale coolers are all examples of such strategies. The Horticulture CRSP will also encourage Immediate Impact Projects that harness the explosion in knowledge of the molecular and biochemical basis of plant growth and development to develop novel germplasm (through biotechnology, marker-assisted, or conventional breeding) that addresses constraints to horticultural production, particularly biotic and abiotic stresses.

### Gender equity

In the developing world, women provide as much as 90% of the labor for the production of horticultural crops. Although they represent a reservoir of production and marketing knowledge of what are often termed 'women's crops' they usually are compensated with lower wages and less permanent positions than those available to men. Lacking knowledge of how finance works and where to get it, as well as collateral to insure it, women have unequal access to technology and production inputs and therefore reduced opportunities for economic advancement. All Immediate Impact Projects should consider gender and enabling environment issues. Project proposals specifically addressing gender inequality will be expected to evaluate gender-based constraints, provide leadership and technical training, and provide outreach or policy assistance to develop solutions. Some training activities are expected to target women, including training for female extension specialists.

### Impacts

In addition to the innovation, training, and capacity building noted above, success for the Horticulture CRSP will include demonstrable impacts in

- Increased production of selected horticulture products in target countries
- Increased trade of selected horticulture products in target countries
- Increased value-addition of selected horticulture products in target countries
- Investment in host country agri-industry that increases employment