# Call for Proposals on 'Measuring and Assessing the Impacts of the Diffusion of Crop Varieties in Africa'

**Background:** The Project *Measuring and Assessing the Impacts of Diffusion of Crop Varieties in Africa* aims to enhance food security and alleviate poverty in Sub-Saharan Africa by improving the performance of food crop genetic research and development with the sustained provision of more complete and reliable information on varietal adoption and impact.

This project is a major building block towards the construction of a routine system for monitoring varietal adoption and impact in Sub-Saharan Africa. Three main activities drive the project: documenting key performance indicators of crop genetic improvement, collecting nationally representative survey data on varietal adoption, and assessing the impact of varietal change. The project itself builds on research in the CGIAR conducted in the 1990s (Evenson and Gollin 2003).

Measuring and Assessing the Impacts of the Diffusion of Crop Varieties in Africa is funded by the Bill & Melinda Gates Foundation. Bioversity International is the main grantee, and seven CGIAR Commodity Centers and their partners are sub-grantees. The CGIAR sub-grantees include AfricaRice, CIAT, CIMMYT, CIP, ICARDA, ICRISAT, and IITA. Bioversity International convenes the project as the institutional applicant with project management and reporting responsibility; the Independent Science and Partnership Council of the CGIAR provides intellectual leadership and coordination through the Standing Panel on Impact Assessment (SPIA), three members of which serve on the Project Steering Committee (PSC).

The participating CGIAR Centers are heavily involved in the first two objectives of the project: (1) to describe investments in and uptake of products of crop genetic improvement in priority country-by-commodity combinations in Sub-Saharan Africa and (2) to verify and gain a deeper understanding about the adoption and diffusion of new varieties in a nationally representative setting of selected priority countries and food crops in Sub-Saharan Africa.

This call for proposals responds to the third project objective: To gain a more comprehensive understanding of the impact of crop improvement on poverty, nutrition, and food security. A restricted competitive grants framework has been proposed as the instrument for carrying out work on the project's impact assessment objective, and \$US 775,000 has been allocated for this purpose. It is envisioned that three to five grants in the range of \$100,000 to \$250,000 will be awarded on a competitive basis. An outstanding proposal that involves several centers may be considered for a grant of more than \$250,000.

**Dates, Modalities, and Restrictions:** The research project is for three years and started in December 2009. Funding for competitive grant awards on impact assessment is scheduled for November 2010. Therefore, the duration for research on impact assessment is expected to be two years.

A two-stage selection process is proposed. Prospective grantees will submit a three-to-five page concept note by August 15<sup>th</sup> to a peer-review panel convened by the PSC. Selection and notification will take place by September 7<sup>th</sup>. Authors of successful concept notes will have five weeks to submit a 10-15 page proposal by October 15<sup>th</sup> 2010. Authors of winning proposals will be notified by November 15<sup>th</sup>. An invitation to submit a full proposal is not a guarantee that the final proposal will be accepted.

Grants are restricted to partnerships with CGIAR Centers participating in Objectives 1 and 2 of the project. These include: AfricaRice, CIAT, CIMMYT, CIP, ICARDA, ICRISAT and IITA. The main grantee does not have to be from the CGIAR, but it should partner with one or more of these seven Centers already in the project. At the same time, it is expected that project proposals submitted by these seven centers will draw on expertise resident in Advanced Research Institutes (ARIs), universities and other relevant organizations (including IFPRI and Bioversity).

Research Priorities and Criteria. Objective 3 responds to the need to fill the profile of impact-related information nearer to the Millennium Development Goals of reducing poverty and increasing food security via crop varietal change. It also contributes toward reestablishing in-depth impact assessment as a core focus of CGIAR social science research. Selected studies will be funded to assess the effects of new varieties in several areas especially those, such as gender-specific impacts, that are characterized by a sparse literature. Several genres of studies will support this objective that is partially based on the quantification of adoption outcomes in Objectives 1 and 2. Methods for assessing the impacts may potentially include:

- Household surveys to quantify adoption impacts in a specific setting (could be an extended HH level survey planned under Objective 2)
- Modeling exercises at the country-, sub-regional or regional level that may feature geo-referenced spatial diversity in consequences or be linked to household data for deeper analysis.
- Methods based on existing panel data (from household surveys) to assess one or two priority impacts in a rigorous setting.
- Other innovative methods such as applications of spatial data bases on poverty incidence.

The concept note will mainly be judged on criteria related to desirability of the proposed research on the assessment of large-scale impacts of research on Crop Genetic Improvement by the CGIAR and its national partners on CGIAR goals. See Table 1 for the specific criteria and associated weights to be used in judging and ranking the concept notes and proposals. Criteria related to technical feasibility will loom larger in the assessment of the proposals (Criteria 1 and 2). Concept notes should contain information on the proposed objectives of the assessment research, the priority for focus of the assessment research with a brief review of the subject matter area, research methods, linkages to research in the project's Objectives 1 and 2 (see the attached overall project proposal and plan for objectives 1 and 2), institutional partnerships, and total budget needed to fund the research. Note that the total budget should be inclusive of direct and indirect costs. The indirect costs allowed under this grant cannot exceed 15% of direct

costs. In the second stage, proposals should be characterized by greater depth of coverage particularly in the areas of research methods and budgeting information.

More comprehensive proposals featuring multi-Center partnerships are preferred to single Center submissions. Proposals addressing consequences further down the impact pathway, i.e. those that more directly effect poverty, nutrition, food security and other impacts, are preferred to proposals that only focus on productivity and economic outcomes. However, systematic treatment of productivity and economic effects of varietal change across the 17 food crops in the project are also desirable topics. For example, comprehensive research that addresses the estimation of the productivity effects of varietal change in the form of so-called k factors and economic cost-benefit analysis that updates the work of Maredia and Raitzer (2006) for Sub-Saharan Africa as a whole would qualify as desirable topics for funding.

Table 1. Criteria and weight for proposal selection under Objective 3.

Criteria	Weight	Comments
1. Likely scale of impacts to be estimated	20	preference given to regional level (modeling) studies
2. Ability to assess specific impacts on food security, gender, poverty and the environment	25	
3. Innovativeness of methods that could substantially enhance the ability to carry out future impact assessment	15	
4. Capacity and reputation of the proposed grantee	15	
5. Breadth and relevance of major partners collaborating in the proposed project	10	
6. Other outstanding characteristics of the proposal	10	e.g., commodities under-evaluated, or particularly important to the poor, assessed impacts in priority areas where literature is sparse or negligible, etc.
7. Cost effectiveness	5	e.g., high co-financing by grantees, low indirect costs, etc.
Total	100	

#### DIIVA Objective 3 Proposal Submission Guidelines and Important Terms and Conditions of the Grant

- I. <u>Proposal Organization and Format:</u> All proposals must contain following elements:
- A. Cover page (completed "Cover Page" sheet—see attachment)
- B. Summary page (completed "Summary" sheet—see attachment)
- C. Technical Approach (not more than 12 pages)
  - 1. Background
    - a. Modern Varietal Change in the Target Crop by Country Combinations
    - b. Brief description of the modern varieties of research interest and their sources
    - c. Expected levels of adoption with an emphasis on the recent past
    - d. Identification of sources of benefit driving adoption and order of magnitude estimates of their size relative to replaced varieties
    - e. Brief review of impact assessment research relevant to the proposed study
    - f. Study objectives
  - 2. Methodology: Thorough description of types of impacts to be measured and procedures to be used especially novel techniques. Discussion should be supported by the published and grey literature on impact assessment/evaluation.
  - 3. Data
    - a. Proposed for collection directly with funding from Objective 3
      - --Content
      - --Sample Design
    - b. Proposed for collection from Objective 2 (if relevant)
      - -- Content related to impact assessment
      - -- Requirements for sample design
    - c. Other sources of data that contribute to proposed research objectives
  - 4. Risks: Brief description of the major risks affecting project success, for example (but not limited to) political insecurity, natural disasters and coordination failures, and how they will be managed.
- D. Cost Application (no page limit)
  - 1. Budget Table: Include total budget requested (over two years--2011 and 2012) by institutions for the following categories
    - a. Direct Costs:
      - Personnel
      - Supplies & Operations
      - Equipment
      - Training/Workshops
      - Travel (including per diems) International & Local
      - Other Expenses
    - b. Indirect Costs (not to exceed 15% of direct costs):
    - c. Total costs (not to exceed \$250,000):
  - 2. Budget narrative (explanation of proposed costs in budget tables)
  - 3. Statement on the extent of co-funding by different institutions and from other donors in generating inputs that contribute to the proposed research

#### E. Annexes (no page limit)

- 1. Literature cited
- 2. Responses to specific concerns raised by reviewers
- 3. Timeline of proposed activities/milestones by objectives
- 4. Curriculum Vitae of proposed PIs (not more than 2 pages each).
- II. Other Instructions: Proposal must be prepared using Times New Roman font size 12. It can be submitted either as an MS Word file or saved as a PDF. Page size cannot exceed 8 ½ x 11. All pages except for the Cover page and Summary sheet must be numbered. Additional required elements include: Authorized institutional signature on the Cover page.
- III. <u>Proposal Submission</u>: One proposal file comprised of all the items under I (A to E) must be submitted electronically by the deadline of October 22, 2010 as an attachment to an email to <u>Timothy.Kelley@fao.org</u> and copied to <u>James.Stevenson@fao.org</u>. Proposals that do not meet this deadline or the specified content and format will not be considered.

#### IV. Some Important Terms and Conditions of the Grant

Contracting institution and project oversight: Proposed Lead institution of a successful proposal will be contracted by Bioversity International—the main grantee of the DIIVA project award from the Bill & Melinda Gates Foundation. Bioversity International convenes the project as the institutional applicant with project management and reporting responsibility; the Independent Science and Partnership Council of the CGIAR provides intellectual leadership and coordination through the Standing Panel on Impact Assessment (SPIA), three members of which serve on the Project Steering Committee (PSC). Dr. Tom Walker serves as the Project Manager on behalf of the PSC.

**Project time frame:** The proposed project activities (including the submission of a final report) should be planned within the time frame of January 1, 2011 to November 30, 2012.

**Reporting requirements:** Technical and financial reports are required to be submitted by the Lead institution to Bioversity in a format to be specified and frequency that will correspond with the release of funds in three installments (based on deliverables) over the project time frame.

**Public Access:** The following condition of the funding agency (Bill and Melinda Gates Foundation) will apply to any grant resulting from this request for proposal:

Grantee "...will make the results\* of the project or any reports or other publications regarding the project funded by this grant (collectively, the "Materials") available to the public\*\*: (i) on hard copy media free of charge (other than reasonable processing and shipping costs) and/or (ii) for free unlimited access and use via an Internet site which you will use reasonable efforts to have listed with major Internet search engines."

<sup>\*</sup>Results include data

<sup>\*\*</sup> Materials must be made available to the public within two years of the date when data collection is initiated.

# DIIVA Objective 3 Proposal <u>Cover Page</u> (Please complete and submit this page as part of the proposal)

Title of the Proposal:		
Names of Principal Investigators, institutional affiliation and contact email address		
Names of Collaborators, institutional affiliation and contact email address		
Total budget requested by institutions		
Institution		Total budget requested (U.S. \$)
	TOTAL	
Lead institution to be contracted by Bioversity for this proposal		
Name and contact information of an authorized person (who can make contractual decisions) from the Lead institution		
Signature of the authorized person		

## DIIVA Objective 3 Proposal Summary Page

(Please complete and submit this page as part of the proposal)

1. List the proposed crop and country combinations and estimated size/scale of adoption of improved varieties:

Country	Crop(s) targeted by country	Ballpark estimate of the size/scale of adoption of improved varieties (in 2009) for a given crop/country combination (specify units of adoptione.g., hectares)

### 2. Types of impacts to be assessed

Type of impact	Yes/No	If Yes, indicate proposed measures	
Poverty			
Food security			
Nutrition			
Gender			
Environment			
Economic			
Other			

3. List the main objectives of this study (add rows if required):

#	Objective
1	
2	
3	
4	

4. Provide an Abstract of the <u>Proposed Methodology and Data to be Collected</u> (less than 100 words):