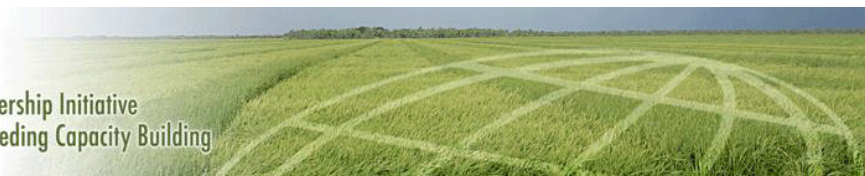




**GIPB**  
Global Partnership Initiative  
for Plant Breeding Capacity Building



## **The Global Partnership Initiative for Plant Breeding Capacity Building in coordination with the International Bioenergy Platform**

### **Cross-sectoral Collaboration of the FAO Inter-Departmental Working Group on Bioenergy**

#### **Launches the Call for Studies and Analysis on**

### **Harnessing the potential of selected underutilized bioenergy crops**

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Many underutilized or neglected plant species are grown or used very little, or very locally, but have great promise for contributing to sustainable energy production, livelihood and rural development. However, success in domestication and production of underutilized bioenergy crops will depend on a wide range of preconditions. Among the most basic of these is the understanding of the genetic resources available through natural selection over time and from selections of adapted material by farmers and breeders.

So far, the genetic resources of underexploited bioenergy crops in general are very poorly documented; little is known about the genetic variability, its useful characteristics, how to access breeding material and share it as a public good, and how to utilize it in breeding programmes to generate improved cultivars suitable for production in different agro-ecological and socio-economic conditions.

Over the past five years, FAO has been involved actively in the development of GIPB - the Global Partnership Initiative for Plant Breeding Capacity Building (<http://km.fao.org/gipb/>), which is an internationally facilitated platform dedicated to enhancing the capacity of developing countries to improve crops for food security and sustainable development through better plant breeding and delivery systems. With GIPB, it should be possible to promote a framework for capacity building in sustainable use of bioenergy crop genetic resources. In addition, the existing FAO EcoCrop (<http://www.fao.org/AG/AGL/agll/ecocrop.htm>) and EcoPort databases (<http://ecoport.org/>) can be enhanced to include expanded information on bioenergy crops and their genetic resources to enable the sharing of information so urgently needed for domestication and development of new and underutilized bioenergy crops.

The International Bioenergy Platform (IBEP) (<ftp://ftp.fao.org/docrep/fao/009/A0469E/A0469E00.pdf>) is a mechanism for organizing and facilitating a multidisciplinary and global approach to sustainable energy. The overall objective of IBEP is to ensure the delivery of sustainable, equitable and accessible bioenergy sources and services, irrespective of gender, wealth, location or culture, in support of sustainable development, energy security, poverty reduction and climate change mitigation. IBEP is expected to provide analysis and information for policy and decision-making support; to build and strengthen institutional capacity at all levels; to enhance access to energy services from sustainable bioenergy systems; and to facilitate opportunities for effective international exchange and collaboration.

This call for studies and analysis aims at expanding information on genetic resources of selected bioenergy crops that will be linked to the EcoCrop and EcoPort databases. The information will also support the development of a guide on genetic resource assessment and use, which will help ongoing efforts directed at enhancing the potential of underutilized bioenergy crops for smallholder producers. These information resources will help bridge the knowledge gap and assist stakeholders to improve their ability to resolve constraints relating to genetic diversity characterisation and utilization. It should assist in achieving the goal of productivity increase and sustainability of production systems of neglected and underutilized bioenergy crops.

***This is the first call under this Award Scheme, which is being made in coordination between the GIPB and the International Bioenergy Platform, under a cross-sectoral collaboration program of the FAO Inter-Departmental Working Group on Bioenergy. All interested parties are hereby invited to submit Letters of Intention, which are going to be considered for award in the second semester of 2008.***

***The following terms and conditions will apply:***

Priorities for support under this Award Scheme:

Grants will be awarded to the best Letters of Intention for production of expanded up-to-date information on genetic resources and breeding of selected bioenergy species, together with detailed analysis of their potential as bioenergy crops adaptable to sustainable smallholder production systems. Key elements to be considered in the preparation of Letters of Intention are:

***Plant species***

Species of interest under this Award Scheme are jatropha (*Jatropha curcas* L.), castor bean (*Ricinus communis* L.), sugar beet (*Beta vulgaris* L.), sweet sorghum (*Sorghum bicolor* L.) and Pongamia (*Pongamia pinnata* L.). Only one species must be considered per Letter of Intention. The same applicant may submit more than one Letter of Intention.

***State-of-the-art of genetic resources, pre-breeding and breeding work***

Minimum elements to be considered in the proposed study are:

1. introduction, 2. issues of concerns for genetic resource assessment, 3. genetic diversity and distribution, 4. available genetic resources (location-specific), 5. genetic resources characterization, evaluation and documentation, 6. existing indigenous/traditional varieties, 7. pre-breeding and breeding programs, 8. priority traits and major approaches to selection, 9. methods and strategies of multiplication/propagation and dissemination, 10. existing commercial cultivars and availability (sharing and utilization).

***Potential as bioenergy source and limitations***

Minimum elements to be considered in the proposed study are: 1. Introduction, 2. potential of the species as a bioenergy source; 3. existing experiences of use of the species as energy source; 4. potential as bioenergy crop adaptable to sustainable smallholder production systems; 5. key traits to be targeted by breeding programs; 6. major limitations and strategies to maximize the species value as a bioenergy crop; and 7. issues requiring policy guidance.

***Deliverables***

Comprehensive coverage study and analysis with pictures, tables, case studies, etc. A final document of 30 to 50 pages is expected, using single-spaced lines, Arial font, and size 12.

Proposals content and format

Proposals should be presented as Letters of Intention (maximum 3-pages length, single spaced, Arial font, size 12) indicating the species to be studied and outlining the authors' state of knowledge and proposed approach to produce a study that covers at least the elements indicated above. An updated full CV of the proponent must accompany the Letter of Intention.

Eligibility of grantees

Any individual or group of individuals working in recognized governmental, public, non-governmental and/or private institutions and civil society bodies are eligible to apply.

Size and duration of grant

All work must be completed no later than 31 December 2008. Each approved proposal will be paid US\$ 4000 upon delivery and approval of the work by the GIPB Secretariat.

### Intellectual Property Rights

The GIPB and the International Bioenergy Platform of the FAO Inter-Departmental Working Group on Bioenergy will have full rights to use the information generated through this award scheme for the purpose of supporting efforts to enhance the potential and the sustainable use of neglected and underutilized bioenergy crops.

### Evaluation Criteria

Reviewers shall take into account the following factors when evaluating the Letters of Intention:

- (a) Substantiated information that indicate the applicant's knowledge of the biology and the state-of-the-art of genetic resources, pre-breeding and breeding work on the species to be targeted by the study;
- (b) Substantiated information that indicate the applicant's knowledge and view on the potential of the species as a bioenergy source;
- (c) Qualifications of the applicant to conduct the proposed project, as indicated by the general content of the Letter of Intention and the full CV.

### The Process

#### *Submission of applications:*

All Letters of Intention must be made in English and sent electronically (either scanned or in PDF format with signature) to: [gipb-awards@fao.org](mailto:gipb-awards@fao.org).

or by hard copy or fax to:

The Global Partnership Initiative for Plant Breeding Capacity Building - GIPB  
Plant Production and Protection Division - AGPC  
FAO Office C-784/778  
Viale delle Terme di Caracalla  
00153 Rome  
Italy

FAX +39 06 57056347

Only applications accompanied by a full CV of the applicant, in English, will be considered.

#### *Deadline for submission of applications:*

All applications must be received by 1st September 2008.

#### *Review of applications*

All applications will be reviewed by the GIPB Secretariat that may enter into correspondence with the applicant in order to seek any necessary clarification. Applications may also be reviewed by external reviewers.

#### *Notification of grant award*

Applicants will be notified of the outcome of their application by the end of September 2008. Successful applicants will be sent a Grant Agreement for signature.

### Disbursement of the grant

Disbursement of funds will be made upon satisfactory completion of the work.

