Call for research notes/applications to a training course on:

Value Chain Research
on Neglected and Underutilized Species of Plants

Dates and venue: **24-28 Sept September 2012, Accra, Ghana**
Deadline for application: **10 July, 2012**

We hereby invite young scientists from **Benin, Ghana, Mali, Nigeria and Senegal** to submit a Research Note and apply for participation in a training course on: Value Chain Research on Neglected and Underutilized Species of Plants.

Background

Neglected and underutilized plant species (NUS) include hundreds of locally domesticated and wild species, which are rich in nutrients and adapted to low-input agriculture. NUS and their traditional production systems can play a key role in supporting rural livelihoods. They are important in strategies to alleviate the effects of biotic and abiotic stresses – particularly those related to climate change. Their commercialization can provide income opportunities and many NUS species are important in traditional pharmacology. Due to the intensification of agriculture and the commoditization of food markets towards a narrow range of the most important food crops, diversity of NUS and associated local knowledge is rapidly being lost. Research on NUS, therefore, needs strengthening.

A Partnership of five African and two European organizations[1] are implementing the project **"Building human and institutional capacity for enhancing the conservation and use of Neglected and Underutilized Species of crops in West Africa, and Eastern and Southern Africa"**. The project is funded by the European Union in cooperation with the ACP Science and Technology Programme during 2009-2012.

The objective is to contribute towards poverty reduction and greater food and nutrition security in West Africa, and Eastern and Southern Africa through enhanced conservation and use of neglected and underutilized species (NUS). The specific aim is to strengthen the ability of young scientists to

[1] Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), Uganda; International Foundation for Science (IFS), Sweden; Bioversity International, Italy; African Network for Agriculture, Agroforestry and Natural Resources Education (ANAFE), Kenya; Institut de Recherche et de Développement sur la Biodiversité des Plantes Cultivées, Aromatiques et Médicinales (IRDCAM), Benin; Plant Genetic Resources Research Institute (PGRRI), Ghana; University of Nairobi, Kenya; and University of Malawi, Malawi. The project is associated with Crops for the Future and the CGIAR Research Programmes on Climate Change, Agriculture and Food Security, and on Institutions, Policies and Markets.

develop and manage inter-disciplinary, multi-stakeholder research projects on NUS and to publish research results.

This call

To this end, the project provides training on Value Chain Research on Neglected and Underutilized Species of Plants. The course will be held on 24 - 28 September 2012, in Accra, Ghana.

The training course is jointly organized by:

- Bioversity International - http://www.bioversityinternational.org/
- The Plant Genetic Resources Research Institute, Ghana
- Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) - http://www.ruforum.org/

Aim

The overall aim of the training course is to improve the quality and effectiveness of applied research on value chains of **priority NUS crops in West Africa** (see Annex 1 for a list of priority NUS).

Specifically, the course aims to increase young scientists' understanding and awareness of methods for conducting research on the value chain on NUS crops from seeds and genetic resources to the consumer, "farm-to-fork".

Methods

The 5-day course puts particular emphasis on:

- multi-disciplinary and multi-stakeholder approaches to value chain analysis and improvement
- problem-based learning (PBL) that puts emphasis on using participants own research experiences
- lessons learned from field visits in Accra (i.e. local market, processing plants, etc.)
- lectures on key topics.

To achieve this, it is essential that participants are preparing case studies of their own value chain work prior to the training course. A 'Research Note' is a part of the application procedure and a key criterion for selection. Selected participants will then be requested to document their case studies in greater detail prior to the training course.

The course will be flexible and adaptive, adjusting content and methods to best meet participants' emerging needs.

Who should apply?

Applicants eligible for this call should:

- **Be nationals of and living in Benin, Ghana, Mali, Nigeria or Senegal**
- Be national scientists attached to a university, research institution or a research oriented and not-for-profit NGO in the region
- Be under 35 years (men) or 40 years (females) of age and at the beginning of their research career
- Have at least a Master's or equivalent degree.
- Be involved in research on regional priority NUS species. **Please refer to the list of priority species and research themes (Annex 1).**
- We particularly welcome applications from female scientists.

Applications should include:

- Application form, including an Abstract/Research Note of not more than 400 words
- Curriculum Vitae

The application form, and course information is available at
http://www.bioversityinternational.org/training/upcoming_training_events.html

Applications should be sent via email to: **ghana-course@cgiar.org**

Deadline for applications is 10 July, 2012.

Late applications will not be considered.
Only selected participants will be notified.

Annex 1. Priority species and research topics in West Africa

A regional stakeholder workshop for West Africa was held on 8-10th June, 2010, in Cotonou, Benin, with 24 participants from Benin, Ghana, Mali, Nigeria and Senegal. Building on national studies conducted in Benin and Ghana, and the knowledge and experiences of the workshop participants, a list of regional priority species for NUS research was developed (Table1). A major criterion in the priority setting was the potential for impact on livelihood, nutrition and income generation.

Table 1. Priority species for NUS research in West Africa

Type of crop	**Priority species**
Cereals	• Fonio (*Digitaria exilis)* • Pearl Millet *(Pennisetum glaucum* and *Pennisetum spp)*
Legumes	• Kersting's groundnut *(Macrotyloma* (=*Kerstingiella*) *geocarpum)* • African yam beans (*Sphenostylis stenocarpa)* • Bambara groundnut (*Vigna subterranea)*
Leafy vegetables	• *Corchorus olitorious* • *Amaranthus cruentus* • *Crassocephalum rubens* • *Telfairia occidentalis* • *Cassia obtusifolia*
Roots and tubers	• Bitter yam (*Dioscorea dumetorum*) • Elephant ears/taro/cocoyam *(Colocasia esculenta)* • *Xanthosoma spp*
Fruit trees	No regional priority species was agreed upon, due to differences across countries

Secondly, the stakeholder workshop identified research priority for the different groups of NUS crops in West Africa: cereals and legumes, leafy vegetables and roots and tubers, and fruit trees. Across all groups there are major gaps regarding networking, research capacity, access to funds and exchange of information. Specific research priorities were identified for each group of crops (Table 2)

Table 2. Priorities research theme for NUS in West Africa

Research theme	Cereals and Legumes	Leafy vegetables and roots and tubers	Fruit trees
Genetics	• Ethnobotanical studies • Genetic diversity studies	• Ethno-botanical studies • Local knowledge • Genetic diversity • Conservation	• Genetic studies (diversity, collections, domestication) • Ethnobotanical studies
Ecology	• Biological studies • Ecological adaptation of NUS	• Biotic and abiotic constraints: pests and diseases, climate change, water utilization,	• Ecological and biological studies
Agronomy	• Improvement of production • Pest management techniques	• Agronomy and breeding • Production systems • Domestication • Cultural practices	• Pest and disease management • Best practices for cultivation
Post-harvest	• Post harvest handling • Value addition • Entrepreneurship	• Value addition: processing, product development, branding • Post-harvest handling, preservation, shelf life	• Post harvest technology
Socio-economics	• Socio economic studies • Value chain analysis	• Utilization: nutrition, health • Socio-economic studies: marketing, income generation, value chain analysis • Economic value	• Marketing (value chain, processing, uses, values, development of product, branding) • Participatory research for up-scaling, mainstreaming and impact delivery