Advertisement

Junior Professional Officer

Specialist (Genetic Resources)

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)

I General information Title: Specialist (Genetic Resources) Sector of Assignment: **Genetic Resources Country:** India Location (City): Hyderabad International Crops Research Institute for the Semi-Arid Tropics Agency: (ICRISAT) **Duration of Assignment:** Initially one year with the possibility to extend up to 3 years P1 step 1 or P2 step 1 in the first year, depending on the level of Grade: education and relevant working experience

Note : this post is opened in the context of the Junior Professional Officer (JPO) scheme sponsored by the Government of the Netherlands and is addressed exclusively to **people with the Dutch nationality.** For criteria see the website of the Dutch Ministry of Foreign Affairs:

http://www.minbuza.nl/en/key-topics/development-cooperation/associate-experts-programme.

II Duties, responsibilities and Output Expectations

General

This position will contribute directly to identifying potential gaps in genetic resource collections and in strategic planning for their assembly/collection before they are extinct.

1. *Responsibility 1 (40% time)*

Summary of duties and expected output

- Field experimentation and crop management (Enhance knowledge of wild genetic resources of sorghum and pearl millet) (30%)
- Recording field and laboratory observations on pre- and post-harvest traits (Phenotypic characterization and agronomic evaluation of wild genetic resources of sorghum and pearl millet following standard descriptors) (30%)
- Wild species evaluation and database development (Developing taxonomic key for identification at species level) (20%)
- Cytological work to support species identification and taxonomic relations in sorghum and pearl millet wild species (Improving knowledge on classification of wild species at species level) (20%)
- 2. Responsibility 2 (30% time)

Summary of duties and expected output

- Evaluation of wild relatives of sorghum and pearl millet for major insect pests and diseases in a multi-disciplinary screening environment (20%)
- Characterization of wild relatives of finger millet and foxtail millet following standard descriptors (20%)
- Evaluation of wild relatives of sorghum and pearl millet for tolerance against drought and



Closing date 30 April 2012 salinity (20%)

- Cytological work to support species identification and taxonomic relations in finger millet and foxtail millet wild species (20%)
- Developing taxonomic key for identification at species level in finger millet and foxtail millet wild relatives (10%)
- Cross compatibility studies between wild species and the respective crops (10%)

3. Responsibility 3 (30% time)

- Summary of duties and expected output
- Evaluation of wild relatives of finger millet for tolerance to drought and salinity (20%)
- Identifying gaps in collections by comparing global databases with ICRISAT data (20%)
- Database development and analysis of data sets (20%)
- Future plans for research on assembly/collection, evaluation and utilization of wild relatives of these crops (20%)
- Studying fertility behavior of cultivated x wild progenies (10%)
- Summarizing the results and report writing (10%)

III Learning elements and expectations

The JPO learning programme includes the following elements

- Field experimentation and crop management (1 year)
- Recording field and laboratory observations on pre- and post-harvest traits (1 Year)
- Wild species evaluation and database development (2 year)
- Data analysis and reporting the results (2 Year)
- Research planning and integration of research results from available databases (2-3 years) Upon completion of the assignment the JPO will have/ will be able to
- Knowledge in identifying gaps and priorities areas for the collection/assembly of wild relatives and the determination of appropriate field locations for collection.
- Practical knowledge on the potential of crop wild relatives and their use in crop improvement activities.
- Expertise in identification of gene pool affinities and use in breeding programs.
- Experience in field experimentation, data collection and taxonomical classification.
- Work in a multidisciplinary, multicultural research team including NARS scientists.

IV Supervision

Title of supervisor:

Assistant Research Program Director-Grain Legumes and Principal Scientist and Head Gene Bank

Content and methodology of supervision

Immediate supervisor and the Research Program Director will supervise the Specialist. Evaluation will take place each year. The candidate will be asked to fill a standard performance evaluation form of ICRISAT. The supervisor will discuss with the candidate about the activities, achievements and constraints in carrying out the agreed activities. The specialist will participate in all planning meetings of the research team, seminars, scientific workshops and symposia. He/she will be requested to prepare and give seminars on topics of his/her own work as well as integrating other researcher's results/information on technology. In addition, the incumbent will participate in stakeholders meetings, integrating issues related to technology transfer into the research strategy.

V Required Qualifications and Experience

Education:

Master degree in Agriculture or equivalent

Working experience :

Preferably 2 to maximal 4 years relevant working experience, including internships and voluntary work.

Languages :

Fluency in English is essential and knowledge of French, Hindi or any other Indian languages will be an advantage.

Key competencies

- Good knowledge of plant taxonomy
- Experience in field experimentation and data collection
- Data management and ability to analyse research results
- Independent and original thinking
- Scientific articles and reports writing

VI Background information on Agency/Department/Section

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is a non-profit, nonpolitical organization that conducts agricultural research for development in Asia and sub-Saharan Africa with a wide array of partners throughout the world. It belongs to the Consortium of Centers supported by the Consultative Group on International Agricultural Research (CGIAR). ICRISAT is headquartered in Hyderabad, Andhra Pradesh, India, with two regional hubs one each for East and Central Africa at Nairobi, Kenya and West and Central Africa at Bamako, Mali and four country offices at Niger, Nigeria, Malawi and Zimbabwe in Sub-Saharan Africa. ICRISAT staff collaborates closely with NARES, sister IARCs, ARIs, NGOs and private sector organizations. Please visit our website: www.ICRISAT.ORG

The ICRISAT genebank conserves 119,739 germplasm accessions of its five mandate crops and six small millets. This includes accessions of related wild species of sorghum (458), pearl millet (750), finger millet (105) and foxtail millet (54). Majority of these accessions needs systematic characterization/evaluation for enhanced use in crop improvement.

VII Information on living conditions at Duty Station

Living conditions in Hyderabad, India are good. Housing is comfortable and secure and there is plenty of opportunity for shopping, recreation, sport and dining out. There are good international air travel connections. Medical, dental and primary education facilities are available locally.

VIII How to apply

Applications including curriculum vitae (giving contact address with email Id, date of birth, nationality, marital status – if married with spouse and children details), list of publications, and names and addresses of three referees should be sent to Human Resources, ICRISAT, Patancheru, Andhra Pradesh 502 324, India, by email to: <u>icrisatjobs@cgiar.org</u> before 30 April 2012.

Applicants will receive acknowledgement of receipt of their submission. Only shortlisted candidates will be contacted.