

## Call for applications for the EU-funded DeSIRa PhD fellowship programme

**A call for applications for four PhD scholarships in natural resources farmer management or socio-economic aspects of climate-smart agroforestry and efficient use of tree resources in the Eastern Province and peri-urban areas of Kigali city**

**Deadline: 2020-02-09**

### Purpose

The impact of climate change is being increasingly felt in the Global South, and particularly in rural and peri-urban environments. Both rely on natural resources that are under pressure from multiple demands for food security, livelihoods and development. Agroforestry in a broad sense is often portrayed as one of the high potential solutions. This is especially true for Rwanda, a land locked country in central Africa that has seen a major population increase over the past decennia and where the pressure for land is among the highest in Africa.

This DeSIRa – project is a five-year research and development project funded by the EU that aims to respond to these challenges. The project partnership includes ENABEL and IUCN as implementing partners, and KU Leuven, Ghent University (UGent) and the University of Rwanda (UR) as university partners, acting in collaboration with agencies such as ICRAF, and Rwanda Agriculture Board (RAB). Focus will largely be on Eastern province and the peri-urban area south of Kigali. The project aims to achieve five interlinked results:

Result 1. Development of tested knowledge on scalable agroforestry systems and their components from an ecological services perspective (including biodiversity, carbon sequestration, water retention, microclimate and productivity);

Result 2. Development of tested and proven knowledge in the further development and diversification of climate resilient, high nutrition value chains from agroforestry landscapes;

Result 3. Development of locally tested expertise and knowledge on high efficient, durable, affordable and user-friendly improved cooking stoves (ICS) and their supply chains;

Result 4. Identification and tackling of the most important socio-economic barriers to restoration and adoption of agroforestry practices, and implementation of new opportunities for economic incentives;

Result 5. Increased institutional capacity to create enabling conditions for agroforestry-based landscape restoration and improved and sustainable use of biomass energy.

### Call for applications

As part of DeSIRa, this project supports four (4) PhD scholarships, hosted by one of the two Flemish Universities KU Leuven or Ghent University (UGent) in Belgium:

PHD 1 LANDSCAPE-SCALE IMPACT OF AGROFORESTRY ON (FUNCTIONAL) BIODIVERSITY  
(WILL CONTRIBUTE TO RESULT 1; HOSTED BY UGENT)

PHD 2 AGROFORESTRY IMPACTS ON THE SOIL WATER BALANCE  
(WILL CONTRIBUTE TO RESULT 1; HOSTED BY UGENT)

PHD 3 BIOMASS ASSESSMENT (LANDSCAPE WIDE) AND COMPARISON OF ENERGY SAVING STOVES  
(WILL CONTRIBUTE TO RESULT 3; HOSTED BY KU LEUVEN)

PHD 4 SOCIO-ECONOMICS AND ADOPTION OF AGROFORESTRY PRACTICES  
(WILL CONTRIBUTE TO RESULT 4; HOSTED BY KU LEUVEN)

These scholarships will support staff capacity development at e.g. UR, RAB, RWFA, ... and other Rwandese governmental institutions or NGO's. At the same time the research and development (R&D) agenda will advance through the R&D activities of the PhD fellows. Given the strong emphasis on local development impact, the appointed fellows will have to spend considerable time in Rwanda.

## Relevant profiles

### *Academic criteria*

- You hold a MSc degree, preferably with distinction, in a related field:
  - PhD 1: Earth Sciences (biology, biodiversity, forestry, geography, natural resources), or Agronomy or Agricultural/Bio Engineering or a related scientific discipline;
  - PhD 2: Earth Sciences (soil sciences, hydrology, geology, geography, natural resources), or Agronomy or Agricultural Engineering or a related scientific discipline;
  - PhD 3: Earth Sciences (natural resources, geography, ... ), or Agricultural Engineering or a related scientific discipline;
  - PhD 4: Socio-economics, or Agricultural Engineering (option agricultural economics) or a related scientific discipline;
- You have relevant experience in the research topic that you apply for (specify this clearly in the application letter);
- You have excellent analytical skills; and
- You develop a detailed project proposal (pre-proposal) demonstrating that you have the ability to finish it and produce a fully researchable and competitive proposal.

### *Professional vocation*

- You are staff member of UR, RAB, or other Rwandese governmental institutions or NGO's, or you are taking arrangements to join one of these institutions after the PhD research project. You will be expected to continue working for the concerned Rwandese institution for at least 4 years after graduation.

### *Communication skills*

- You have excellent communication skills and written/verbal knowledge of the English language; and
- Experience in writing scientific papers (international scientific A1 journals) is strongly appreciated.

### *Personal skills and attitude*

- You are highly motivated to undertake academic research in an international and interdisciplinary context;
- You are hard-working and able to manage a project independently, taking initiatives and meeting deadlines;
- You are ready to bring creativity, uncovering hidden issues that will benefit the project, science and local livelihood in general;
- You are frank and willing to respect agreements; you believe in project confidentiality and proper data handling and processing;
- You demonstrate good interpersonal skills to interact with other project partners and stakeholders;
- You demonstrate leadership and are willing to supervise MSc and BSc students;
- You are willing to spend long periods in Belgium for research; and

- Female candidates are strongly encouraged to apply.

## Offers of the DeSIRa programme

The selected PhD candidates will benefit from:

- An appointment in the DeSIRa project as a PhD fellow. The starting date would be May –June 2020.
- A 48 months stipend at the Flemish Universities UGent or KU Leuven that provides for travel, accommodation, visa costs and living costs. The PhD funding is conditional to the successful defence of a PhD proposal and obtaining sufficient course credits during the first stay in Belgium.
- The support of Flemish and Rwandese BSc and MSc students that choose to do thesis research in Rwanda.
- Interdisciplinary and inter-institutional co-supervision and expert advice. Each PhD fellow will be supervised by at least one promoter and co-promoter from a Flemish University. At the Rwandese side a supervisory role is envisaged for scientists from ICRAF, NUR, ... .

The DeSIRa project offers:

- A yearly airplane ticket between Rwanda and Belgium
- At KULeuven a stipend in Belgium of 1412 Euro/month for a likely pre-doc phase of 6 – 9 months and of 2100 Euro/month for a doctoral program of 39-42 months. During the pre-doc phase costs for insurance, tuition fee and housing are covered for the time spent in Belgium. In the doc phase the student needs to cover the costs for insurance, tuition fee, housing, ... from his/her stipend.
- At UGent there is no pre-doc phase, but there are 48 months of doc phase of 2100 Euro/month. In the doc phase the student needs to cover the costs for insurance, tuition fee, housing, ... from his/her stipend.

## Conditions of employment

The successful incumbent will be required to:

- Be in Rwanda when most of the field activities will take place (e.g. from July to December).
- Register as a PhD student at UGent (PhD 1 & 2) or KU Leuven (PhD 3 & 4) and join the relevant Doctoral School (Bioscience Engineering Doctoral School at UGent (<https://www.ugent.be/doctorschools/en>); Arenberg Doctoral School at KU Leuven <https://set.KULeuven.be/phd>)
- Comply with UGent resp. KU Leuven's approved policies, procedures and practices of the involved doctoral schools
- Candidates who did not obtain a MSc. at a Flemish university with distinction will generally have to successfully complete a 30-credit pre-doctoral program within 6 months or one year based on an assessment of the candidate by the doctoral school. This program is compiled (tailor-made) by faculty representatives of the doctoral school and the promoters and includes relevant courses at UGent or KU Leuven and the write-up and defence of a research proposal. Please check the following website for full details about the pre-doctoral program at KU Leuven: <https://set.KULeuven.be/phd/predoc.htm>
- Commit to attending project team meetings as required;
- Commit to completing their doctoral degree (PhD) by October 2024;
- Be willing to sign a Student-Supervisor agreement / social contract committing to participation in the programme; the achievement of specific yearly milestones; and a service obligation of 4 years at their national 'home' institution, after completion of the doctoral degree.

## Application procedure

Applicants should submit at least:

- (i) An application letter stating for which PhD profile you are applying, your motivation, your relevant experience and research interests, and how these relate to the position;
- (ii) A 5 to 6-pages research proposal for the selected PhD research topic;
- (iii) A detailed CV including a publication list;
- (iv) A copy of all your degrees, diploma's and relevant certificates;
- (v) Your most recent academic transcripts of record (incl. BSc. and MSc.);
- (vi) A reference letter of at least two reference persons able to assess your academic capacities (e.g. who have been directly involved in your masters or other research); and
- (vii) A letter of support from your Head of Department or Director supporting your participation to this programme.

Application closing date and contact details for submission and for enquiries

Applications will be received until **9 February 2020**. Please direct enquiries and applications to the following contact points:

- For UGent (PhD 1 and PhD 2): Prof. Ann Verdoodt ([ann.verdoodt@ugent.be](mailto:ann.verdoodt@ugent.be))
- For KU Leuven (PhD 3 and PhD 4): Dr. Bruno Verbist ([Bruno.Verbist@ees.KULeuven.be](mailto:Bruno.Verbist@ees.KULeuven.be))

## Selection procedure

### Process

The selection committee will consider only eligible and complete applications. After a pre-selection based on the application files, pre-selected candidates will be contacted for an oral interview/written exam. Interviews will take place as required until February 2020.

### Tentative calendar

1. Application deadline: 9 February
2. Selection of the candidates: 28 February
3. Visa application by the selected candidates: March - May 2020
4. Arrival in Leuven & Ghent : June 2020
5. End of July 2020 start of fieldwork (PhD and MSc students) in Rwanda
6. Start of course work for the (pre)doctoral programme in Leuven: 25 September 2020

### Important to note

KU Leuven and UGent reserve the right to disqualify ineligible, incomplete and/or inappropriate applications. KU Leuven and UGent reserve the right to make no awards at all, to cancel the award if the conditions are not met, and to effect changes to the conditions of the award, if the need arises.