



**UNITED NATIONS
UNIVERSITY**

Duty station: Dresden, Germany

VACANCY ANNOUNCEMENT

Doctoral Research Project "Resource Nexus Issues Revealed by COVID-19 for Professional Communities in the Agri-Food Supply Chain" Personnel Service Agreement (Three positions)

Organisational Unit : United Nations University Institute for Integrated Management of Material Fluxes and of Resources (UNU-FLORES)

Reference Number : 2021/UNU/FLORES/PSA/DR/SCG/60

Closing Date : 14 July 2021

About United Nations University

The United Nations University (UNU) is an international community of scholars engaged in policy-oriented research, capacity development and dissemination of knowledge in furthering the purposes and principles of the Charter of the United Nations. The mission of UNU is to contribute, through research and capacity building, to efforts to resolve the pressing global problems that are the concern of the United Nations and its Member States.

For the past four decades, UNU has been a go-to think tank for impartial research on human survival, conflict prevention, sustainable development, and welfare. With more than 400 researchers in 12 countries, UNU's work spans the 17 Sustainable Development Goals' full breadth, generating policy-relevant knowledge to effect positive global change. UNU maintains more than 200 collaborations with UN agencies and leading universities and research institutions across the globe. For more information, please visit <http://unu.edu>.

United Nations University for Integrated Management of Material Fluxes and of Resources (UNU-FLORES)

UNU-FLORES develops strategies to resolve pressing issues in the sustainable use and integrated management of environmental resources such as water, soil, waste, energy, and other geo-resources that are of concern to the United Nations and its Member States – particularly in developing and emerging economies. Based in Dresden, Germany, the Institute engages in research, capacity development, postgraduate teaching, advanced training, and knowledge dissemination to advance the Resource Nexus. <https://flores.unu.edu/>

Project Description

The global COVID-19 pandemic has resulted in an unexpected increase in food prices, which has exposed the fragility of the existing global agri-food supply chain in some areas of the world. COVID-19 showcased

the importance of strengthening the resilience of food systems and revealed the urgent need to improve the sector's ability to withstand shocks and reduce future risk. This particularly relates to the urban and peri-urban areas in the Global South that rely on substantial food imports (approx. 200,000 tons of food annually per 1 million inhabitants), often transported over hundreds or even thousands of kilometres. On the one hand, this is ecologically unsustainable due to high energy use and carbon footprint; on the other hand, it creates a potentially risky dependence on complex transport infrastructures. For some food imports, a substitution by local products can be meaningful. Urban and peri-urban agriculture (UPA) has multiple benefits, including improvements in nutrition and reduction of hunger (SDG 2), more sustainable consumption and production patterns (SDG 12), and helping to combat climate change and its impacts (SDG 13). Moreover, it can help diversify food sources and reduce the dependence on long-distance imports. Therefore, UPA is recognised as a suitable strategy to recover from crises like COVID-19 by building a more sustainable and resilient agri-food system. However, the limitations of UPA must also be considered, which may be due to limited land resources in urban areas, or a less suitable environment (e.g., in terms of climate, soils, water availability etc.) as compared to other production regions. Against this background, the Doctoral cohort will analyse methods to enhance the sustainability and resilience of the agri-food system.

The successful Doctoral candidates will have the opportunity to conduct research work under one of three topic areas under the guidance of Doctoral supervisors at both UNU-FLORES and Technische Universität Dresden. Students will also collaborate with fellow Doctoral students and senior scientists in research, event organisation and participation, publications where possible, and contribute to the Implementation Plan of UNU-FLORES and the mission of the United Nations. As a facet of the project, the students must consider the impact of their research on communities, and the potential for their research to be transferred upon completion of the Doctoral.

Project 1 Food Security and the Socio-economic Development

The main objective of the Doctoral research is to analyse food security and socio-economic development in urban and peri-urban areas and develop a robust methodology to identify, measure, and interpret sustainability assessment indicators to enhance food security and socio-economic development of peri-urban areas for the resilience of urban food supply. One of the most affected communities during the COVID-19 pandemic are the family-level and smallholder farmers already negatively impacted by climate change. In working at the science-policy interface, cross-cutting challenges will be addressed to support decision-making processes and the Sustainable Development Agenda. The research design should consider ecological principles, risk reduction, and human well-being. It is suggested to address but not limited to the following questions:

- How can community-based agricultural systems be strengthened for food security and socio-economic development?
- How can peri-urban food production develop sustainably?
- What socio-ecological challenges must be addressed to align with sustainable and economic goals?

Project 2 Food Security and Climate Change Mitigation

The main objective of the Doctoral research is to address how urban and peri-urban farming enhances ecosystem services for climate change mitigation at a local and regional level while also augmenting urban food security from a long-term perspective. Urban and peri-urban farming has increasingly gained attention due to its great potential to mitigate climate change by sequestering carbon and reducing greenhouse gas (GHG) emissions, thus becoming a local strategy to reduce global climate risks. Despite the significant potential, the co-benefits of urban and peri-urban farming for climate change mitigation and a secure and resilient food supply are not strongly represented in the scientific literature. Moreover, GHG mitigation is mostly discussed in terms of energy use and associated economic costs. Studies on piloting and validating UPA primarily exist at the micro-level. It is thus necessary to investigate its broader impacts on climate change mitigation. The study may cover carbon sequestration (e.g., through soil restoration), GHG emission reduction or changes in surface energy balance with possible consideration of crop varieties and cropping patterns where feasible. As part of the research, the successful candidate will develop a robust methodology to measure the co-benefits of UPA for climate change mitigation (e.g., quantification of

carbon sequestration and GHG emission) and the security and resilience of urban food supply; as well as undertaking the required data acquisition, statistical analysis, and evaluation.

Project 3 Governance for more sustainable and resilient agri-food systems

The main objective of the Doctoral research is to analyse the governance conditions for more sustainable and resilient agri-food systems, with a particular emphasis on the governance of agri-food chains in peri-urban settings and the global south. Governance conditions are defined broadly and can encompass, for instance, institutional arrangements, participatory approaches, and capacities of public authorities to design policies for more sustainable and resilient agri-food systems or different governance instruments and tools for fostering the implementation of respective policies. The Doctoral project will develop and test a suitable theoretical model for governing sustainability transitions of agri-food systems. This model shall be based on systematic literature reviews and be tested based on a comparative case study design using mixed-method designs (e.g., survey, documentary, and interview methodology). As an expected outcome, governance conditions for increasing sustainability and resilience within the agri-food chain shall be defined, with lessons learnt for both research and policymakers being derived.

Responsibilities

- Perform research in one of the three projects related to the topic "Resource Nexus Issues Revealed by COVID-19 for Professional Communities in the Agri-Food Supply Chain";
- Research, write and publish papers in peer-reviewed scientific journals;
- Perform field visits, data collection, and analysis as required;
- Organise activities, such as workshops, related to the research project;
- Contribute to teaching activities, with a focus on e-learning and capacity development;
- Contribute to the Institute's educational programme, including events such as academic seminars, the Dresden Nexus Conference, teaching activities etc.;
- Develop approaches for dissemination of knowledge to other regions that face similar challenges;
- Work closely in collaboration with the supervising team, and eventually co-supervise Master theses in the research field;
- Report progress to the supervising team and in the project management system of UNU;
- Responsible for maintaining the database of the research project;
- Perform other duties as assigned by the supervisor and the Director.

Required Qualifications and Experience

- An excellent academic profile including a Master's degree (grade 2.5 or [equivalent](#)) Environmental, Natural, Social, Economic, or Political sciences, Environmental Ecology, Geography, Remote Sensing, Public Administration, Public Policy, or a related field;
- Proven skills in statistical analysis and fieldwork experience;
- Proven expertise in inter and transdisciplinary research, including interactions with relevant authorities and stakeholders;
- [Demonstrated](#) proficiency in English, with excellent writing and presentation skills; Working experience in developing countries is mandatory; knowledge of their agricultural system(s) is highly desirable;
- Experience related to the Agri-Food supply chain would be highly beneficial;
- Strong planning, organisation, and time management skills, with the ability to communicate clearly and efficiently;
- Must be flexible with the ability to establish priorities and work within prescribed timeframes;
- An excellent team player with strong interpersonal skills, as demonstrated by the ability to work in a multicultural, multi-ethnic environment with sensitivity and respect for diversity.

Duration and remuneration

UNU-FLORES shall pay a monthly stipend of EUR 1,566 for the duration of the Doctoral research. This stipend is intended to cover relocation, living, and education expenses. It is anticipated that the research shall be completed in three years, but a one-year extension may be possible. Funding is provided by the [Sächsisches Staatsministerium für Wissenschaft, Kultur und Tourismus](#) through public funds according to the budget approved by the Saxon State Parliament, [CzechGlobe – Global Change Research Institute of the Czech Academy of Sciences \(GCRI\)](#), and UNU-FLORES. The successful candidates will be part of the UNU-FLORES Doctoral programme, and work in close collaboration with UNU-FLORES, TU Dresden, and CzechGlobe. While the Doctoral programme is tuition-free, [semester fees](#) of approximately EUR 250-300 will need to be paid directly to TU Dresden for enrolment. For additional information on the programme and the admission procedure, please visit our [website](#).

The duration of the initial contract is 1 year. This is Personnel Service Agreement (PSA) contract with UNU, with the possibility for renewal subject to requirements and satisfactory work performance. The mandatory age of retirement for PSA is 65 years.

Please note that due to the ongoing situation with COVID-19 and the travel restrictions imposed by national authorities, the selected candidate may be required to start the appointment remotely and until further notice.

Starting Date: as soon as possible

Application Procedure

Interested applicants should submit their application and all required documents listed below online through [Impactpool](#):

1. A completed and signed Doctoral Programme [application form](#);
2. A letter of motivation setting out how your qualifications and experience match the requirements of the position;
3. A full CV with a list of publications A short research proposal (max two pages) describing how you would approach the research topic;
4. A short research proposal (max two pages) explaining how you would approach the research topic;
5. Copies of **ALL** university transcripts;
6. Copy of TOEFL/IELTS or evidence proving that English was the language of instruction for at least one of the previously completed degree programmes, in the form of a letter issued by the relevant university authority;
7. Abstract of MSc thesis (or equivalent);
8. Two reference letters.

Please note only shortlisted candidates will be contacted.

Assessment

Evaluation of qualified candidates will include may include an assessment exercise which may be followed by a competency-based interview, background checks and references.

Special notice

PSA holders do not hold international civil servant status, nor are they considered a "staff member" as defined in the UN Staff Rules and Regulations.

PSA holders may be assigned to any of the activities or offices of the United Nations University. The Rector reserves the right to appoint a candidate at a level below that advertised.

UNU is committed to diversity and inclusion within its workforce, and encourages all candidates, irrespective of gender, nationality, religious and ethnic backgrounds, including persons living with disabilities to apply and become part of the organisation. Applications from developing countries, and from women are strongly encouraged. Eligible internal applicants are encouraged to apply.

UNU has a zero-tolerance policy on conduct that is incompatible with the aims and objectives of the United Nations and UNU, including sexual exploitation and abuse, sexual harassment, abuse of authority and discrimination.

Information about UNU rosters

UNU reserves the right to select one or more candidates from this vacancy announcement. We may also retain applications and consider candidates applying to this post for other similar positions with UNU at the same grade level and with similar job description, experience, and educational requirements.

Scam warning

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