



2021/2022 Scholarship for the Doctor of Philosophy (PhD) degree in Development Studies (Sustainable Energy Technologies) at UDSM

CALL FOR APPLICATIONS

Background of candidate: The Institute of Development Studies (IDS), University of Dar es Salaam (UDSM) and The Science, Technology and Innovation Policy Research Organization (STIPRO) are pleased to announce a scholarship to pursue a 3-year full time PhD programme to a Tanzanian candidate with background in, development studies, human geography, social science and related areas. The scholarship is part of the renewable energy project that is being implemented by the Danish Institute for International Studies (DIIS), STIPRO and other two organizations in Ghana and Denmark.

Project title: Energy struggles: renewable energy in Africa

Funding agency: Danish International Development Agency (**DANIDA**)

Female candidates are especially encouraged to apply to take advantage of the funding opportunity available.

Funding period: Three academic years, beginning in the 2021/2022 academic year. The scholarship includes study stays at the Denmark Technical University in Copenhagen, Denmark.

Number of places: One (1)

Brief project summary: The overall objective of this project is to contribute to a better understanding of how a transition to renewable energy can occur in sub-Saharan Africa. Many countries have set targets for solar and wind, but implementation has been slow and uneven. With rising energy consumption, there is a risk that the continent will become a more significant contributor to climate change. Understanding the difference between targets and the implementation of renewable energy in developing countries is still little developed. In the literature, there has been a tendency to focus on how technical innovation in renewable energy can drive a transition of energy systems. It is, however, increasingly clear that politics and power play a decisive role in the prioritization of energy projects. The project aims to develop a conceptual framework for the study of the political economy of energy that can analyse and help explain how energy projects

are prioritized in different countries. It will conduct research on the development of the energy sectors in Tanzania and Ghana, which have both set targets for renewable energy. The two countries differ in the degree of the state's involvement in their energy sectors, Ghana having liberalized more than Tanzania. The project's hypothesis is that this difference caters for different dynamics in the energy sectors that decisively influence how an energy transition can occur. The project team intends to use multidisciplinary approaches to undertake research on the relative importance of technological capabilities, state capacity, and policy coalitions in the energy sectors. The project pays particular attention to the role of access to energy services for the poor, which is a priority for both Tanzania and Ghana, as well as for Danish development assistance. The project also aims to provide evidence-based findings that can lead to more informed decision-making in partner countries with regard to the choice of renewable energy technologies.

Objectives of project:

1. The overall objective of this project is to contribute to a better understanding of how an energy transition can occur in sub-Saharan African countries.
2. The research objective is to analyze how new renewable energy is prioritized in policy formulation and implementation in Tanzania and Ghana.
3. As part of this, the project will develop a conceptual framework for the study of the political economy of energy, which can analyze and help explain the prioritization of energy technologies and projects in different countries.
4. The project's policy objective is the provision of evidence-based findings that can lead to more informed decision-making in partner countries with regard to (i) the factors that are important for the prioritization of different energy technologies, and (ii) how best to promote new renewable energy.

The PhD candidate at UDSM will work with the project team to answer the following key research question:

- What role does the development of technological capabilities play in the prioritization of energy technologies?
 - To what extent have local firms improved their capabilities in new renewable energy technologies vis-à-vis more established technologies, and how important is this for the prioritization of energy technologies in a country?
 - How have state organizations promoted the building of technological capabilities in different technologies, in particular new renewable energy, and what role, if any, do support structures like training schemes, local content policies, infant industry and domestic market protection play in this?

Key activities will include the following:

- Mapping of markets for major technologies (such as solar PV, hydro and gas), i.e., major foreign and local manufacturers, equipment suppliers and suppliers of sub-components, and related services (including logistics, transport, construction, and operation and maintenance) (survey of industry reports and interviews with key industry informants).
- In-depth analyses of market developments and capability-building for one niche technology (solar PV) and one conventional technology (hydro or gas) as part of global value chains to identify importance of different actors and transnational linkages in capabilities. Niche development focus on actor network formation, learning processes, experimentation and expectations.
- Analysis of the role of industry support structures such as local content policies and energy planning for capability development in new renewable and more established energy technologies respectively. Focus on whether and how local firms in different technologies have improved their capabilities through various types of learning mechanisms, influenced policy coalitions and the extent to which this can explain the choice of technologies in the two countries.
- Assessment of the capacity of state organizations to facilitate the building of capabilities and integrate new renewable energy technologies into energy systems.

Entry requirements

In conformity with the general UDSM's PhD entry requirements and Specifically the PhD in Development Studies at IDS, the successful candidate should have a minimum of:

- a) Academic qualifications:
 - Bachelor degree with First or Second Class (Upper Division), and
- b) Master's degree with an average of at least 60% preferably in development studies, human geography, social science or related areas.
- c) Age: Not more than 40 years by 31st December, 2021.

In addition

- d) Applicants with at least one publication in a journal as first author have an advantage.
- e) Applicants with demonstrated ability to plan and carry out research, including empirical fieldwork, based on qualitative research methods, have an advantage.
- f) Applicants must present evidence of current and previous employments, if any and commitment to 3-year full time availability for the program.

Scholarship Application

- **ELECTRONIC COPIES** of the application letter and supporting documents should be sent to **info@stipro.or.tz** for application to be considered. The document shall include;
- Detailed CV and two letters of reference (one from a supervisor at the Master's level)
- Official transcripts and certified copies of certificates for Bachelor and Masters degrees
- A letter of motivation (max. 2 pages) with the heading outlining why you want to study, what makes you well-suited to study in your chosen specialization, current occupation, how the programme will fit into your professional vision, how your (home) country stands to benefit after your training.
- A short concept note (max. 3 pages) outlining the research. The concept note should include the title of the study; Problem statement and/or research question; theoretical approach and proposed research methodology.
- Deadline for the submission of application forms is 23rd December, **2021**.
- Application forms submitted after the deadline will not be processed.

Other information

- Candidates who meet the condition above will be screened against a set of criteria and those shortlisted will be invited to an online interview and to present their proposals.
- The assessment committee will consist of a panel of researchers from IDS and partner institutions in the Energy Struggles research project. The partners in the research project are DIIS, STIPRO, Kwame Nkrumah University of Science and Technology (KNUST), UNEP DTU Partnership, and University of Ghana (UG).
- Only the shortlisted candidates will be asked to apply for admission to the PhD program in Development Studies at UDSM
- The final selection will be based on successful admission for the selected candidate.

Enquiries

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