

PhD in Climate Change and Land Use – “West African Science Service Centre on Climate Change and Adapted Land Use” (WASCAL)

Deadline: May 31 2011

The WASCAL Graduate Research Programme in Climate Change and Land Use (GRP-CCLU) is pleased to announce that up to 10 fully-funded (tuition, stipend, research and travel grants) scholarships are available for applicants from the following ten West African Countries to study for PhD in Climate Change and Land Use **at the Kwame Nkrumah University of Science and Technology, Kumasi, Ghana:**

Ghana, Nigeria, The Gambia, Cote d’Ivoire, Republic of Benin, Burkina Faso, Niger, Togo, Mali and Senegal.

BACKGROUND

This German-government sponsored PhD programme aims at providing state-of-the-art training for professionals in Climate Change and Land Use. The programme is strongly multidisciplinary and jointly organised by twelve institutions from eleven countries (i.e. the ten West African Countries listed above and Germany). Participants will acquire knowledge on the causes of climate change, the implications of climate change on land use for the West African sub-region, and the policy and management practices that may be put in place to mitigate and adapt to the impact of the changing climate on land use.

The populations in the West African sub-region are mainly agrarian, thus scientific knowledge of climate change and its impact on land use are essential for developing appropriate adaptation and mitigation measures. The variation in climate conditions compounded by poor land management practices are threats to development of the region. The region, which is generally poor, is yet to effectively develop geographic information system and remote sensing technologies for land administration. These, when developed are expected to make available useful data and information for effective land use management.

The West African sub-region is faced with the following challenges, which may hinder the bid towards effective land use management:

- Limited opportunities for land use and geo-scientists to improve their capacity at the graduate level.
- Lack of electronic science infrastructure for land use education and training.
- Gaps between climate and land use research findings and implementation.
- Lack of awareness about the value of climate and land use information among decision makers.

Considering the identified knowledge and capacity gaps, and the unsustainable management of land in the sub-region accompanied by recent climate change, the sub-region risks not achieving the MDGs. Therefore, there is a pressing need for a comprehensive understanding of the changing climate of the region and its impact on land use. This calls for adequately trained human resources in land use and related geo-sciences for sustainable development and use of land for the present and future generations.

In light of the above, the German initiative “*West African Science Service Centre on Climate Change and Adapted Land Use*” (WASCAL) is supporting the establishment of a **Graduate Research Programme in Climate Change and Land Use (GRP-CCLU)** (based at the Kwame Nkrumah University of Science and Technology, Kumasi Ghana), focusing on capacity building at the PhD level to help develop the knowledge necessary for sustainable land use and management in the face of climate change. The programme will train participants in developing skills in data acquisition, analysis and interpretation of spatial data focusing on the use of remote sensing, GIS and empirical and mathematical modelling tools as related to climate change and land use. This should develop adequate human capacity in the sub-region for developing appropriate adaptation strategies to manage the impact of climate change on land and to develop resilient land use systems.

This initiative seeks to give support to West African universities to synergize their efforts on a regional basis and maximize their capabilities to improve the training of land use experts and geoscientists for better overall results and increased benefit to West Africa. The programme ultimately aims at strengthening the research, educational and policy capacity and competency of West-African countries to deal with issues of climate change through adapted land use on a scientific basis in partnership with German institutions. It is expected that these PhD fellows upon graduation will be competent for engagement by universities, research institutes, and the public service.

ENTRY REQUIREMENTS

In conformity with the entry requirement of the Kwame Nkrumah University of Science and Technology, the successful candidate will have a minimum of:

- Second Class (Upper Division) in their first degree.
- Good Masters degree in Soil Science, Agricultural Engineering (Soil and Water Engineering option), Civil Engineering (Water Resources/Hydrology option), Geomatic Engineering, Natural Resources (Silviculture and Forestry, and Watershed management), Mathematics, Geography, Land Economy, Atmospheric Physics, Climatology, and other relevant disciplines, with an average of at least 60%. *Submit academic transcripts.*
- Candidates from non-Anglophone countries must have an internationally recognised Certificate of Proficiency in the English Language ([TOEFL](#) or [British Council, IELTS](#)) with above average score. *Otherwise they will undertake a three-month intensive English training at KNUST.*
- Age Limit: 40years or less.
- Evidence of current and previous employment.
- Experience with modelling and GIS would be an advantage but not a prerequisite.
- Full time availability from October 1, 2011 for a period of three years.
- Demonstrate adequate intellectual capacity, maturity and effective decision making and problem solving potentials.
- Provide 2 referees, one of whom must be the supervisor at the Master’s level.
- Submit both soft and hard copies of his/her project pre-proposal (about 6 – 8 pages double space), which will be fine-tuned under the guidance of their supervisors, if admitted. In addition, each candidate should forward a 500 – 1000 word motivation brief with “WASCAL GRP-CCLU PhD” as the heading, outlining
 - Why you want to study Climate Change and Land Use at the PhD level
 - What is your current occupation or job
 - Why you are well-suited to study this programme
 - How your admission into the PhD Climate Change and Land Use Programme will fit into your professional vision.

- How your home country stands to benefit after your training
- You may also add other relevant information and/or experience you feel is necessary to support your application.

In addition, the candidate must have the ability to travel to Germany for a period of 3 – 6 months for PhD course training and supervisory workshops.

APPLICATION PROCEDURE AND CONTACT

In order to be considered for admission for a GRP CCLU PhD scholarship,

Option 1

Candidates should **apply to the GRP CCLU through the WASCAL partner institution in their home country**, as follows:

Send the **application letter, academic transcripts, graduation certificate, curriculum vitae, names, phone numbers and e-mail addresses of 2 referees, and publications** (if applicable) **before May 24 2011**. To complete the application form see “***Completing Application Form.***”

Short listing of candidates will be done by **the WASCAL partner institutions in the various home countries, and two names finally submitted** to the Kwame Nkrumah University of Science and Technology **for one candidate to be selected** for each country. There may be the need for a selection interview in/or near Kumasi OR via telephone. The date of the interview will be communicated after short listing. The selection interview is mandatory to support the final selection of candidates.

Option 2

Candidates may also **apply directly to the GRP CCLU by submitting all information requested** via email to Prof. S. N. Odai at snodai@yahoo.com (Cell +233 244 79 7711) and copy Dr. Wilson Agyare at wagyare@yahoo.co.uk **before May 31 2011**.

Send the **application letter, academic transcripts, graduation certificate, curriculum vitae, names, phone numbers and e-mail addresses of 2 referees, and publications** (if applicable). To complete the application form see “***Completing Application Form.***”...

1. **Completing Application Form** Access the KNUST application form via <http://www.knust.edu.gh/downloads/14/14231.pdf>
2. Access referee form at <http://www.knust.edu.gh/downloads/14/14414.pdf>
3. Carefully read the **IMPORTANT NOTES** on the **Application Form**
4. Complete application form and scanned recent passport-size picture
5. The deadline for receiving completed application forms and all necessary documents at the GRP CCLU is **31st May 2011**.
6. Submit the signed application form and other information by email to Prof. S. N. Odai at snodai@yahoo.com and copy Dr. Wilson Agyare at wagyare@yahoo.co.uk.

KNUST in collaboration with the GRP-CC Board will short list candidates and select one candidate for each country. There may be the need for a selection interview in/or near Kumasi OR via telephone. The date of the interview will be communicated after short listing. The selection interview is mandatory to support the final selection of candidates. ***Successful candidates will then submit hardcopy of the application package.***

RESPONSIBILITIES OF PARTICIPANTS

The PhD participant's tasks will be to

- Attend all classes for the required modules in the course work phase and pass all examinations.
- Develop a comprehensive research proposal with detailed literature review and methodology.
- Undertake diligently the selected research topic within the context of this programme.
- Timely feedback and submission of reports and assignments is cardinal.
- The international nature of the programme will demand good working relations between people of different cultures, so participants must show maturity in working in groups.
- The participant is expected to publish at least 2 papers from his/her research findings in international peer reviewed journals before qualifying to graduate.

The participant once selected will be offered a three-year scholarship beginning from October 1, 2011 and ending September 31, 2014, which is expected to result in a PhD. The award is subject to annual review; participants found to be seriously underperforming may be given some assistance if deemed necessary or withdrawn from the programme.

The selected candidate will be enrolled **in the Kwame Nkrumah University of Science and Technology, Kumasi**, and will attend all lectures at Kumasi but will have the opportunity to visit any of the partner universities for research and discussions when necessary.

FINANCIAL MATTERS

All scholarship-holding PhD fellows will receive a stipend of € 500.00 per month (but will receive €350.00 during pre-course preparations) to cover accommodation and other expenses for the months spent in Ghana. Approved travel costs, costs for fieldwork, etc., will be reimbursed. The disbursement of scholarship funds will be connected to the successful delivery of research work deliverables to be agreed upon between the project coordinator, the supervisor and the PhD fellow at the onset of the research work.

The PhD fellow will travel to Germany once during the course of the PhD fellowship period (October 2011 – September 2014) to participate in PhD level courses and joint supervision. The trip will be 3 – 6 months in duration. Airfare will be paid for by the project and a monthly stipend of about €1000.00 (to cater for lodging and personal expenses) will also be provided for each month spent in Germany.

Qualified but non-scholarship fellow with own financial resources are encouraged to apply, but will be required to show evidence of financial support for tuition, personal support and support for field research activities.

EMPLOYMENT OPPORTUNITIES

Participants graduating from this multidisciplinary and multinational programme will gain skills as scientific officers, managers of natural resources or academics expected to find employment in conservation agencies and bodies, land and forestry agencies, research institutions, nature reserves, overseas aid programmes, international NGOs, environmental protection agencies, departments of agriculture, water resources or soil, and universities.

WEBSITES

KNUST website: <http://www.knust.edu.gh>

WASCAL website: <http://www.wascal.org> OR <https://icg4wascal.icg.kfa-juelich.de>