



**THE UNIVERSITY OF ZAMBIA
DIRECTORATE OF RESEARCH AND GRADUATE STUDIES**

**DETAILED GUIDELINES FOR MS & PhD SCHOLARSHIP APPLICATIONS ON
CLIMATE-SMART AGRICULTURE STUDIES**

DEADLINE: October, 15th 2013

The Food and Agriculture Organization of the United Nations (FAO) with support from the European Union is providing competitive grants to fund academic research in the area of Climate Smart Agriculture starting in September 2013. Proposals are therefore invited from Zambians for scholarship support for studies on Climate Smart Agriculture. The grant will support student research¹ in areas relating to the socio-economic analysis of tradeoffs and synergies between food security, adaptation to climate change, and mitigation of GHG emissions. Faculty members are encouraged to contribute as Co-Principal Investigators or supervisors.

Research areas from which to pick include:

- 1) Conservation agriculture, agroforestry and soil & water conservation (SWC)
- 2) Diversification of crop production into other activities (e.g. livestock, dairy, , fisheries)
- 3) The role of agriculture as a driver of deforestation (given the importance of Zambia as a UN-REDD country)
- 4) Investments and financing to support CSA for smallholder agriculture
- 5) Agricultural practices to increase soil carbon and productivity

Potential research questions may include:

- What types of conservation and erosion control practices are practiced by farmers in different agro-ecological zones of Zambia? What are the food security implications of these practices? What are the mitigation co-benefits?
- What are the drivers or determinants of adoption/ dis-adoption of these practices? How are the institutional arrangements promoting or hindering their uptake? What are the investment, maintenance, and opportunity costs associated with adoption of these practices? How do farmers address the lag between adoption costs and the benefit stream from adoption? How can farmers address the tradeoffs between communal cattle grazing traditions and productivity contributions of crop residues/soil cover? Which policies are the most effective in building an enabling institutional environment for transition to CSA?
- To what extent do traditional agro-forestry systems, in combination with the above practices, contribute to farmer resilience to climate uncertainty? Is there a role, in the institutional context of Zambia, for these traditional agro-forestry systems in providing financing through mitigation funds?
- Crop-livestock interaction – jointness in agricultural production and livestock technology adoption and their impact on household welfare. What is the impact of diversification into livestock/fisheries in terms of vulnerability to climatic events? What environmental tradeoffs exist when introducing livestock/fisheries, and how are these best addressed?
- What is the impact, in terms of food security and farmer resilience, of recent efforts to reduce deforestation? What are the (opportunity) costs of avoiding deforestation? How does the existing institutional setting and land tenure regime affect efforts to reduce deforestation? What type of investments are necessary to reduce the impacts of leading drivers of deforestation in Zambia, i.e. chitemene/shifting cultivation practice, agricultural expansion into forests and charcoal production?
- What are the current investment programs in the agriculture sector (by sub-sector, structure/size of the investments, financing sources, etc.)? What types of project finance are used in the country? What are the existing and potential financing mechanisms that could work in smallholder agriculture?

¹ Four new MS students at UNZA and 4 continuing MS students & 1 PhD student in any reputable university (including those outside Zambia) will be supported by these scholarships. See your call for proposals for detailed eligibility requirements.

- What are the potential agricultural practices that can increase productivity as well as contribute to soil carbon sequestration? How long does it take for farmers to observe the yield benefits from such practices (given the constraints on land, labor, credit or other inputs)? What is the scale of soil carbon that can be sequestered under a reasonable adoption scenario in Zambia? Which institutional support mechanism would be needed to support the adoption of such practices?

Eligibility

Please refer to the call for proposals that apply to the scholarship support you are applying for (depending on whether you are a new MS student or continuing MS/PhD student) for eligibility requirements.

Selection process

A selection committee will assess the concepts and applicants with promising research topics will be informed by 15th September 2013 and requested to submit their full proposals by October 5th 2013. Applicants will make oral presentations of their proposals to the selection committee on 18th October 2013. A teleconference (skype) will be arranged with applicants enrolled in universities outside Zambia. The applicants will submit their final proposals by 1st November 2013.

Letters of Recommendation

Applicants whose research concepts have been accepted will be required to obtain a letter of recommendation from the university/departments/faculty. Besides, your main faculty research supervisor must submit a short letter of recommendation by email in support of your proposal. Student eligibility should be addressed in the letter by the student's main faculty research supervisor. Letters must be received by the application deadline for the final proposals. It is the candidates' responsibility to arrange for supporting letters,

Guidelines

Concept Note for Proposed Work (5-page limit): The Concept Note should be *no more than five single-spaced typed pages excluding references and any relevant annexes.* The concept note should include (a) a clear project title, (b) statement of the problem (research gap), (c) objectives, (d) hypotheses and (d) proposed procedures (data needs/sources, analytical procedures) (see Table for guidance).

Statement of Purpose: The statement should be *not more than one page* and should be used to explain to the selection committee how the proposed research addresses the national development priorities and how consistent is the proposed research with the overall CSA project. Include the budget outlining research and travel costs. Include any additional information you wish to include to support your application within the Statement of Purpose.

Deliverables

Required main activities deliverables for researches funded under this program include, but are not limited to:

- carry out field visits to collect data to support their research;
- write, revise and finalize their theses and dissertation for submission in collaboration with their Faculty Supervisors;
- prepare draft working papers of approximately 20 pages in length in collaboration with their Faculty Supervisors;
- prepare two-page draft policy briefs based on their theses/dissertation in collaboration with their Supervisors;
- make oral presentations of their draft policy briefs to relevant policy makers.

Outputs	Timing
1. Final MSc theses (for continuing MSc students)	31 Oct 2014
2. MSc Thesis Proposals (for entering students at UNZA)	31 July 2014
3. Detailed PhD dissertation proposal (for the PhD student)	30 Nov 2014
4. Two-page policy briefs to be presented to policy makers	30 Sept 2014
5. Draft working papers for potential journal submission	30 Nov 2014

Table: Guidance for writing the concept notes (some elements may not be relevant for some applications)

Research Objective and Methods	
<i>Specific research questions</i>	Indicate the specific research questions addressed by the analysis
<i>Relevance to Climate Smart Agriculture</i>	Balance between different elements of CSA (food security & risk, adaptation, mitigation)
Scope of Analysis	
<i>Sectoral/ Thematic focus</i>	Thematic foci of the analysis (e.g. agricultural productivity, food security, resilience, climate change mitigation, etc.).
<i>Spatial scale (scalability)</i>	Spatial scale of the analysis (farm, local, national,) for which the analysis is carried out and results are valid
<i>Socio-economic and biophysical dimensions</i>	Indicate the socio-economic and biophysical aspects to be considered in the analysis
<i>Timeline</i>	Present a detailed research plan with specific timelines and milestones
<i>Budget</i>	A detailed budget will be required when submitting a full proposal. However, for the concept, the applicant must indicate a lump sum budget.
Methods, Data, and Participation	
<i>Methods and tools</i>	Specific analytical methods and tools applied in the assessment as well as details of their application
<i>Data and scenarios</i>	Data and methods to be applied to address the research question being posed
<i>Data constraints</i>	Indicate data constraints (e.g. availability, quality, applicability)
<i>Treatment of uncertainty</i>	Sources of uncertainty (due to e.g. problems with data, models, underlying assumptions) and their treatment
<i>Involvement of stakeholders</i>	Yes/No (in the case of yes, indicate key stakeholder groups who will contribute to the assessment and the format of their involvement)
Outputs of Analysis	
<i>Metric(s)</i>	Specific measures/measurements and units in terms of which results are presented (e.g. change in mean crop yields, variance in farm income, rate of adoption of technology, or other indicators)
<i>Guidance for action</i>	Insights provided on cost and benefits of Climate Smart Agriculture options

Evaluation Criteria and Selection Process

Proposals will be evaluated with emphasis on intellectual merit, innovation, and likelihood of success.

More specifically, the following criteria will be considered:

- The relevance of the proposed activity to farmers in Zambia, and the potential to upscale to regions outside of the study area
- Alignment with the mandate of the project to examine the synergies and tradeoffs between food security, adaptation to climate change, and mitigation
- Clarity in the objectives
- Qualifications of the candidates to conduct the project
- How well-conceived and organized is the proposed activity? Is there sufficient access to resources?

Submission of applications or request for further information

Interested and already enrolled students in recognised Universities in Zambia or the southern African region are invited to apply. Applications by e-mail should be sent to misael.kokwe@fao.org with a copy to thkalinda@unza.zm, thomsonkalinda@gmail.com, aslihan.arslan@fao.org and mortonmwanza@yahoo.com. The e-mail must state clearly in the **Subject line**: “Climate Smart Agriculture Study Grants”.

The deadline for submission of applications for 2013 is October, 15th, 2013



Ministry of Agriculture and Livestock



European Union