Application 3: Trading up or trading off? Understanding human-environment interactions to inform climate compatible development strategies

Important note: This is a real application which has been doctored for the purposes of training. Information has been removed from the application and the application has been anonymised. The UREC does not endorse this application as a model.

The application, shown on the following pages, was discussed at the workshop. A summary of the key points raised by the participants and the UREC follows (this is not an exhaustive list):

- There is a risk of possible psychological harm for the participants as sensitive subjects may arise during the discussion – participants should be reminded that they are free to leave the research at any point.
- There is also a risk of raising expectations that are unable to be met.
- There is a lack of information about ensuring personal safety within the application.
- The application mentions a simple way of describing the methodology, possibly with a diagram – it would good for this to be included with the application.
- The methodology isn’t in language which is clear to a lay person.
- There is no mention of how the data will be stored securely, especially while in Tanzania.
- The application is ESRC-funded so it will require review by a UREC lay member.
- The researcher will verbally explain the research to participants and obtain verbal consent. The script/information that will be read to participants could be included.
- The researcher will adhere to local customs and approach the village leaders first who will then help to identify potential participants. There is a risk of participants feeling coerced to take part.
- The researcher has sought to mitigate risks where identified.
This form has been approved by the University Research Ethics Committee (UREC)

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<tr>
<th>Date:</th>
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<tbody>
<tr>
<td>Name of applicant:</td>
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<tr>
<td>Research project title:</td>
<td>Trading up or trading off? Understanding human-environment interactions to inform climate compatible development strategies</td>
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**Complete this form if** you are a **member of staff or a postgraduate research student** who plans to undertake a research project which requires ethics approval via the University Ethics Review Procedure.

**or**

**Complete this form if** you plan to submit a ‘generic’ research ethics application (i.e. an application that will cover several sufficiently similar research projects). Information on the ‘generic’ route is at: www.sheffield.ac.uk/ris/other/gov-ethics/ethicspolicy/approval-procedure/review-procedure/generic-research-projects

If you are an undergraduate or a postgraduate-taught student, this is the wrong form.

**PLEASE NOTE THAT YOUR DEPARTMENT MAY USE A VARIATION OF THIS FORM: PLEASE CHECK WITH THE ETHICS ADMINISTRATOR IN YOUR DEPARTMENT**

This form should be accompanied, where appropriate, by all Information Sheets/Covering Letters/Written Scripts which you propose to use to inform the prospective participants about the proposed research, and/or by a Consent Form where you need to use one.

Further guidance on how to apply is at: www.shef.ac.uk/ris/other/gov-ethics/ethicspolicy/approval-procedure/review-procedure

Guidance on the possible routes for obtaining ethics approval (i.e. on the University Ethics Review Procedure, the NHS procedure and the Social Care Research Ethics Committee, and the Alternative procedure) is at: www.shef.ac.uk/ris/other/gov-ethics/ethicspolicy/approval-procedure/ethics-approval

Once you have completed this research ethics application form in full, and other documents where appropriate, check that your name, the title of your research project and the date is contained in the footer of each page and email it to the Ethics Administrator of your academic department. Please note that the original signed and dated version of ‘Part B’ of the application form should also be provided to the Ethics Administrator in hard copy. Ethics Administrators are listed at: www.shef.ac.uk/polopoly_fs/1.99105!/file/Ethics-Administrators.pdf

I confirm that I have read the current version of the University of Sheffield ‘Ethics Policy Governing Research Involving Human Participants, Personal Data and Human Tissue’, as shown on the University’s research ethics website at: www.shef.ac.uk/ris/other/gov-ethics/ethicspolicy
Part A

A1. **Title of Research Project:** Trading up or trading off? Understanding human-environment interactions to inform climate compatible development strategies

A2. **Contact person** (normally the Principal Investigator, in the case of staff-led research projects, or the student in the case of supervised-postgraduate researcher projects):

| Title: *** | Name: *** |
| Post: *** | Department: *** |
| Email: *** | Telephone: *** |

A2.1. **Is this a postgraduate researcher project?** If yes, please provide the Supervisor’s contact details:

| Title: *** | Name: *** |
| Post: *** | Department: *** |
| Email: *** | Telephone: *** |

A2.2. **Other key investigators/co-applicants** (within/outside University), where applicable. Please list all (add more if necessary):

| Title: | Name: |
| Post: | Department: |
| Email: | Telephone: |

| Title: | Name: |
| Post: | Department: |
| Email: | Telephone: |

A3. **Proposed Project Duration:**

Start date: ***
End date: ***

A4. **Mark ‘X’ in one or more of the following boxes if your research:**

- [ ] involves adults with mental incapacity or mental illness
- [ ] involves prisoners or others in custodial care (e.g. young offenders)
- [ ] involves children or young people aged under 18 years
- [ ] involves using samples of human biological material collected before for another purpose
- [ ] involves taking new samples of human biological material (e.g. blood, tissue) *
- [ ] involves testing a medicinal product *
- [ ] involves taking new samples of human biological material (e.g. blood, tissue) *
- [ ] involves additional radiation above that required for clinical care *
- [ ] involves investigating a medical device *
- [ ] is social care research
- [X] is ESRC funded

* If you have marked boxes marked * then you also need to obtain confirmation that appropriate
University insurance is in place. The procedure for doing so is entirely by email. Please send an email addressed to insurance@shef.ac.uk and request a copy of the ‘Clinical Trial Insurance Application Form’.

It is recommended that you familiarise yourself with the University’s Ethics Policy Governing Research Involving Human Participants, Personal Data and Human Tissue before completing the following questions. Please note that if you provide sufficient information about the research (what you intend to do, how it will be carried out and how you intend to minimise any risks), this will help the ethics reviewers to make an informed judgement quickly without having to ask for further details.

A5. Briefly summarise:

i. The project’s aims and objectives:
   (this must be in language comprehensible to a lay person)

The aim of this research is to understand and evaluate interactions and trade-offs between and within rural communities, the environment and the associated ecosystem services (ES), to inform the design and implementation of climate compatible development strategies in Tanzania. The research will focus on water and carbon-related ES in rural Tanzania, and on potential payments for ecosystem services (PES) and PES-like climate compatible development mechanisms. In order to meet this aim, the following five objectives will be addressed:

1. To explore the provision, use and distribution of ecosystem services within the context of climate change.
2. To understand the local decision-making processes, motivations, attitudes, beliefs, and preferences in relation to land and natural resource use, and in relation to the provision and use of ecosystem services.
3. To identify and understand any trade-offs within and between communities and the environment.
4. To explore how climate compatible development strategies are likely to ‘playout’ in these contexts.
5. To identify sustainable design inputs and lessons for the implementation of PES and PES-like CCD strategies.

ii. The project’s methodology:
   (this must be in language comprehensible to a lay person)

An interdisciplinary participatory methodology will be employed; integrating qualitative and quantitative data into an agent-based model coupled with a participatory geographic information system (GIS) spatial environment to develop ‘bottom-up’ sustainable design inputs to inform future implementation of climate compatible development schemes within the research area. Agent-based models consist of agents that interact within an environment. Societies are ‘grown’ from the bottom-up, with individual rules of agents’ actions and interactions leading to the emergence of structures and patterns of behaviour. Participatory agent-based modelling involves developing the agent ‘rules’ in close association with the actual actors on the ground through participatory methods.

As such, there will be a significant period of fieldwork undertaken in Tanzania. A five month trip will be taken from xxx-xxx to collect the bulk of the data. Qualitative and quantitative information will be collected in four rural village communities in the Kilombero district of the Morogoro region of Tanzania. This will be done through purposively sampled questionnaires, semi-structured interviews with key stakeholders, and community mapping exercises. The data will then be integrated and analysed in order to develop the ‘rules’ for the agent-based model.

This data will also serve as ‘results’ in its own right, thereby ‘triangulating’ the data, and providing
empirical data for the evaluation of the agent-based model, a key part of the modelling process. The data from the community mapping exercises (both in terms of the mapping output and the discussion surrounding the process) will be analysed and input to a GIS model, which will be integrated with the agent-based model to provide a spatial environment within which agents will interact.

After returning to the UK to undertake the modelling and preliminary analysis, a two-month return trip will be undertaken to consolidate data, evaluate the model, conduct follow-up interviews (with the original participants, NGOs, academics, and local and national government officials), and to provide feedback to participants.

A short Kiswahili course will be undertaken in order to gain conversational language skills, which will help to build relationships with participants, but a translator will be employed for the duration of the fieldwork, who will also act as a research assistant. A fieldwork diary will be kept daily throughout both fieldwork sessions to record reflections and to ensure any other information is captured.

Particular ethical issues that arise with this methodology include:

- Use of a research assistant/translator
  - Be aware that risks apply to them too
  - Ensure they are fully aware of all relevant potential issues, and spend time before the data collection starts discussing the ethical issues with them.

- The collection of personal data

- Recording of interviews and group discussions
  - Gain consent from all participants before recording.
  - Destroy the recordings in line with the University ethical guidelines once they have been transcribed and the data has been used.

- Sensitive information in the form of the participants’ ethnicity

- Indirect participants as some of the exercises are likely to be conducted outside.

- Discussions are likely to include land tenure rights, which might inflame any tensions

- Community mapping can often involve drawing lines to segregate areas of land, which could inflame any tension around land tenure issues.
  - Conduct the mapping exercises in smaller groups with a particular ‘set’ of stakeholders.

- Questions about the participant’s use of the forest may involve discussion of illegal activities (such as logging or collecting wood for charcoal in forest protected areas)
  - Ask if they are happy for this information to be shared
  - Ensure anonymity of data
  - This might particularly be an issue when feeding back information to the participants in the second fieldwork trip

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**A6. What is the potential for physical and/or psychological harm/distress to participants?**

| Low |

**A7. Does your research raise any issues of personal safety for you or other researchers involved in the project?** (especially if taking place outside working hours or off University premises)

| Risks involved with fieldwork abroad generally, and with rural Tanzania specifically. These include the risks of overexposure to sun, insect bites/stings, scorpion and snakes, attacks by mammals, |
weather-related risks in wet season, risk of abuse or attack, and vehicle-related risks such as breakdown, accident, and car jacking.

If yes, explain how these issues will be managed.

| Full risk assessment conducted and signed off by supervisors and department before fieldwork commences |

A8. How will the potential participants in the project be:

i. Identified?

| • Adhere to local customs (get specific advice from research assistant) |
| • In the village communities, approach the village leaders first and explain the research to them. They will be able to help with the identification of potential participants. This is in accordance with the local customs. |
| • The village communities will be identified during preliminary discussions with district officials, again in accordance with local customs. |

ii. Approached?

| • Will get permissions and letters of introduction from the relevant national, regional, and district officials in a top-down manner as is expected. |
| • Will then take advice on the local customs from the district contact and research assistant |

iii. Recruited?

| • As discussed below, the research will be explained to the potential participants, along with what participation in the research will involve, gaining informed consent before the individuals become participants. |
| • Potential research assistants will be identified through contacts at the University of Dar es Salaam and the Sokoine Agricultural University. An ‘reciprocal’ interview will be conducted where the research will be fully explained, setting out what will be required by the research assistant, and determining the research assistant’s suitability and willingness to participate. A contract will be agreed outlining the assistance duration, requirements, hours, and wage. |

A9. Will informed consent be obtained from the participants?

Yes [X] No [ ]

If informed consent or consent is NOT to be obtained please explain why. Further guidance is at: [www.shef.ac.uk/ris/other/gov-ethics/ethicspolicy/policy-notes/consent](http://www.shef.ac.uk/ris/other/gov-ethics/ethicspolicy/policy-notes/consent)
A9.1. This question is only applicable if you are planning to obtain informed consent:

How do you plan to obtain informed consent? (i.e. the proposed process?):

- Using a translator, explain the research project and its purpose clearly, taking care to explain what data will be collected, how, and what it will be used for. Check the participants understand. Answer any questions or concerns they may have at all points throughout the research. Verbal consent will be recorded in fieldnotes.
- A particular issue with informed consent in this project is that the participants may have difficulty understanding the techniques used (in particular the agent-based modelling). Devise a clear and simple way to explain the methodology, perhaps with the use of a diagram.

Remember to attach your consent form and information sheet (where appropriate)

A10. What measures will be put in place to ensure confidentiality of personal data, where appropriate?

- Participants will be anonymised in the interview transcripts, analysis and interpretation, and any research outputs.
- Only myself and my research assistant will be aware of the individuals the data refers to.

A11. Will financial/in kind payments (other than reasonable expenses and compensation for time) be offered to participants? (Indicate how much and on what basis this has been decided)

Refreshments will be provided for participants. No other payments will be made.

A12. Will the research involve the production of recorded media such as audio and/or video recordings?

YES    X    NO

A12.1. This question is only applicable if you are planning to produce recorded media:

How will you ensure that there is a clear agreement with participants as to how these recorded media may be stored, used and (if appropriate) destroyed?

- Obtain informed consent from all participants before starting the recording
- Check they are happy for the recordings to be transcribed and used.
- Stop the recording at any point if the participant(s) seem uncomfortable with it.
- This may be particularly difficult in group exercises, and so particular caution will be taken recording during the mapping exercises.

Guidance on a range of ethical issues, including safety and well-being, consent and anonymity, confidentiality and data protection are available at: www.shef.ac.uk/ris/other/gov-ethics/ethicspolicy/policy-notes
Title of Research Project:
Trading up or trading off? Understanding human-environment interactions to inform climate compatible development strategies

I confirm my responsibility to deliver the research project in accordance with the University of Sheffield’s policies and procedures, which include the University’s ‘Financial Regulations’, ‘Good Research Practice Standards’ and the ‘Ethics Policy Governing Research Involving Human Participants, Personal Data and Human Tissue’ (Ethics Policy) and, where externally funded, with the terms and conditions of the research funder.

In signing this research ethics application form I am also confirming that:

- The form is accurate to the best of my knowledge and belief.
- The project will abide by the University’s Ethics Policy.
- There is no potential material interest that may, or may appear to, impair the independence and objectivity of researchers conducting this project.
- Subject to the research being approved, I undertake to adhere to the project protocol without unagreed deviation and to comply with any conditions set out in the letter from the University ethics reviewers notifying me of this.
- I undertake to inform the ethics reviewers of significant changes to the protocol (by contacting my academic department’s Ethics Administrator in the first instance).
- I am aware of my responsibility to be up to date and comply with the requirements of the law and relevant guidelines relating to security and confidentiality of personal data, including the need to register when necessary with the appropriate Data Protection Officer (within the University the Data Protection Officer is based in CiCS).
- I understand that the project, including research records and data, may be subject to inspection for audit purposes, if required in future.
- I understand that personal data about me as a researcher in this form will be held by those involved in the ethics review procedure (e.g. the Ethics Administrator and/or ethics reviewers) and that this will be managed according to Data Protection Act principles.
- If this is an application for a ‘generic’ project, all the individual projects that fit under the generic project are compatible with this application.
- I understand that this project cannot be submitted for ethics approval in more than one department, and that if I wish to appeal against the decision made, this must be done through the original department.

Name of the Principal Investigator (or the name of the Supervisor if this is a postgraduate researcher project):

***

If this is a postgraduate researcher project, insert the student’s name here:

***

Signature of Principal Investigator (or the Supervisor):

***

Date:***

Email the completed application form and provide a signed, hard copy of ‘Part B’ to the Ethics Administrator (also enclose, if relevant, other documents).