

## Internship positions June 2024

Dear students,

Throughout the year, MetaMeta welcomes interns and thesis students to collaborate with us on our themes and projects. We currently have several positions available, as described below. To apply for these positions, please contact the individuals mentioned in the vacancy, and attach 1) your CV and 2) an introduction/motivation letter.

Quick overview of the positions:

1. Financing mechanisms for water resources and landscape management
2. Modelling and measuring changes in the local climate
3. The benefits of water buffering
4. Making life lighter: Improving rural laundry
5. Roadside spring protection to improve water security (RoSPro)

If you have an excellent idea or motivation for your thesis or internship with MetaMeta that aligns with our themes but is not reflected in our current vacancies, we still welcome your application. In this case, please reach out to David Mornout at [dmornout@metmeta.nl](mailto:dmornout@metmeta.nl), including 1) your CV and 2) an introduction/motivation letter.

We look forward to hearing from you.

Best regards,

The MetaMeta Team

## Internship Opportunity 1 – Financing mechanisms for water resources and landscape management

<i>Title</i>	Financing mechanisms for water resources and landscape management
<i>Contact person within MetaMeta + contact details</i>	Long Hoang – Program Manager <a href="mailto:Lhoang@metameta.nl">Lhoang@metameta.nl</a>
<i>Internship or Thesis</i>	Both thesis and internship possible
<i>Short intro on scope of the internship</i>	<p>Finance to invest on management of the water resources and landscapes in developing countries is amongst the top priorities on the agendas of governments, international development partners, and the local communities. While the demand for investment is rapidly increasing due to climate change and population growth, financial mobilization seems lagging behind. This challenge calls for creative and more effective financing mechanisms.</p> <p>MetaMeta Research, in collaboration with the financial department of GOPA AFC, seeks to develop concrete opportunities linked to specific country contexts (foreseeing Ethiopia, but flexible) to mobilize finance for water resources and landscape management, possibly linking to agricultural projects. Key questions to be addressed include:</p> <ul style="list-style-type: none"> <li>- What are the concrete business cases for financing water, landscape and agriculture investments?</li> <li>- For each business case, which financing mechanisms (loans, grants, hybrid, PPP, etc.) are applicable?</li> <li>- Which funding schemes, donors and governmental bodies are interested in the business case and the financing mechanisms?</li> </ul>
<i>Background ideally needed</i>	International development, land and water management, environmental economics, finance, payment for ecosystem services, micro-credit
<i>Skills ideally needed</i>	<ul style="list-style-type: none"> <li>- Ability (to learn) to design and deploy data collection and fact finding including online surveys, and interviews</li> <li>- Strong analytical thinking applied for reviewing literature/project documents and analyse interviews</li> <li>- Demonstrable excellent English writing skill</li> </ul>
<i>Resources on the topic (e.g. website / blogs etc. that give a good impression of topic)</i>	- Books, blogs, project reports available
<i>Timing</i>	As soon as possible (July 2024 or later)
<i>Location</i>	From Wageningen office, with possibility to travel to, and work with colleagues at GOPA AFC in Bonn.

## Internship Opportunity 2 : Modelling and measuring changes in the local climate

<i>Title</i>	Modelling and measuring changes in the local climate
<i>Contact person within MetaMeta + contact details</i>	Francesco Sambalino – Program Manager <a href="mailto:fsambalino@metameta.nl">fsambalino@metameta.nl</a>
<i>Internship or Thesis</i>	Internship
<i>Short intro on scope of the internship</i>	<p>Tree restoration plays an important role in climate change mitigation and adaptation. However, we don't yet have evidence of the human health benefits of this restoration or the impact it has on reducing heat stress. MetaMeta is part of the consortium conducting a comprehensive study to evaluate how trees can be used to alter microclimates and protect Tanzania's millions of outdoor agricultural workers from the long-term health risks of heat exposure. The research will build on land restoration work in central Tanzania which has championed local farmers to regenerate nine million native trees in three years.</p> <p>MetaMeta will measure/model changes in the local climate at farms where an agroforestry program is taking place. We will be doing that using Arduino sensors, remote sensing and modelling, and invite you to be part of this. The internship task will be tailored to the intern need and capabilities and may encompass: modelling the microclimate using R, drone imagery postprocessing (extracting canopy height model), data cleaning and analysis in Python/R, dataloggers and microclimate sensor design.</p>
<i>Background ideally needed</i>	programming, land and water management, climate science
<i>Skills ideally needed</i>	<ul style="list-style-type: none"> <li>- Programming experience (R/Python)</li> <li>- GIS and remote sensing experience</li> <li>- Modelling</li> <li>- Data analysis/statistics</li> </ul>
<i>Resources on the topic (e.g. website / blogs etc. that give a good impression of topic)</i>	<ul style="list-style-type: none"> <li>- <a href="https://thewaterchannel.tv/videos/webinar-recording-microclimates-unveiled/">https://thewaterchannel.tv/videos/webinar-recording-microclimates-unveiled/</a></li> <li>- <a href="https://thewaterchannel.tv/thewaterblog/3-pillars-for-microclimate-management/">https://thewaterchannel.tv/thewaterblog/3-pillars-for-microclimate-management/</a></li> </ul>
<i>Timing</i>	As soon as possible (July 2024 or later)
<i>Location</i>	From Wageningen office, with potentially the possibility to travel to Tanzania (not required).

### Internship Opportunity 3 : The benefits of water buffering

<i>Title</i>	The benefits of water buffering
<i>Contact person within MetaMeta + contact details</i>	Francesco Sambalino – Program Manager <a href="mailto:fsambalino@metameta.nl">fsambalino@metameta.nl</a>
<i>Internship or Thesis</i>	Internship
<i>Short intro on scope of the internship</i>	<p>Water harvesting systems, agroforestry and in general sustainable land and water management have the capacity of increasing the amount of water that is kept in a landscape. While there are models that can quantify the amount of water that can be stored through these systems, there is a need to quantify what are some of the secondary benefits that can be accrued over time:</p> <ul style="list-style-type: none"> <li>- Biomass production</li> <li>- Carbon sequestration</li> <li>- Monetary benefits</li> </ul> <p>The internship will require the candidate to deep dive in one or more of these secondary benefits domain, and unveil an overview of simple methods to quantify them.</p>
<i>Background ideally needed</i>	Development economics, land and water management, econometrics, climate studies, agricultural sciences;
<i>Skills ideally needed</i>	<ul style="list-style-type: none"> <li>- Critical thinking and innate curiosity to chase the objective deep down into the rabbit hole;</li> <li>- Scientific literature proficiency the creativity and flexibility to adapt the best scientific practice to the needs of simplified decision-making tools;</li> </ul>
<i>Resources on the topic (e.g. website / blogs etc. that give a good impression of topic)</i>	A number of resources and books are available via <a href="http://www.bebuffered.com">www.bebuffered.com</a> and <a href="http://www.thewaterchannel.tv">www.thewaterchannel.tv</a> .
<i>Timing</i>	From July 2024 onwards (or later)
<i>Location</i>	From Wageningen office

#### Internship Opportunity 4 : Making life lighter: Improving rural laundry

<i>Title</i>	Making life lighter: improving rural laundry
<i>Contact person within MetaMeta + contact details</i>	Meghna Mukherjee & David Mornout (Program Managers) <a href="mailto:mmukherjee@metameta.nl">mmukherjee@metameta.nl</a> & <a href="mailto:dmornout@metameta.nl">dmornout@metameta.nl</a>
<i>Internship or Thesis</i>	Internship
<i>Short intro on scope of the internship</i>	<p>Laundry is a topic easily forgotten in the debate on water, sanitation and hygiene (WASH). Yet, in the way laundry is done, there is scope for making it easier and more hygienic, and for saving water in the process too. This critical issue deserves more attention and action to help lift the burden of domestic work on women and girls and improve the quality of their lives.</p> <p>Despite its huge demand for precious time and its impact on women's health and hygiene, the need to improve the laundry process has been largely overlooked. Improving laundry situations should become part of WASH and water or gender projects implemented by governmental and non-governmental organisations.</p> <p>In your internship, you will contribute to MetaMeta's ongoing assessment of the laundry situation in a variety of countries and contexts, and help to put this topic on the map by means of formulating and implementing research and action projects. Your internship would include but not limited to developing needs assessment tools, partnership development, capacity development materials, developing communication materials, Monitoring packages which will lead to improved quality of life and well being.</p>
<i>Background ideally needed</i>	International / rural development, water management, WASH, gender studies
<i>Skills ideally needed</i>	<ul style="list-style-type: none"> <li>- Research (incl. interviews, stakeholder consultation, data collection/analysis, and writing)</li> <li>- Critical thinking and feeling for the topic</li> <li>- Interest in international collaboration / rural development</li> </ul>
<i>Resources on the topic (e.g. website / blogs etc. that give a good impression of topic)</i>	<p><a href="https://www.downtoearth.org.in/blog/governance/making-life-lighter-how-improving-rural-laundry-can-be-key-to-better-hygiene-dignity-88080">https://www.downtoearth.org.in/blog/governance/making-life-lighter-how-improving-rural-laundry-can-be-key-to-better-hygiene-dignity-88080</a></p> <p><a href="https://thewaterchannel.tv/thewaterblog/making-life-lighter-on-improving-laundry/">https://thewaterchannel.tv/thewaterblog/making-life-lighter-on-improving-laundry/</a></p> <p><a href="https://thewaterchannel.tv/videos/laundry-practices-in-india/">https://thewaterchannel.tv/videos/laundry-practices-in-india/</a></p>
<i>Timing</i>	July 2024 onwards (as soon as possible)
<i>Location</i>	From Wageningen office

**Internship Opportunity 5 : Roadside spring protection to improve water security (RoSPro)**

<i>Title</i>	Introducing roadside spring protection to improve water security (RoSPro)
<i>Contact person within MetaMeta + contact details</i>	Luwieke Bosma – Program Manager <a href="mailto:Lbosma@metameta.nl">Lbosma@metameta.nl</a>
<i>Internship or Thesis</i>	Internship
<i>Short intro on scope of the internship</i>	<p>In this assignment you will contribute to the development of methodology for the impact assessment and cost benefit analysis for roadside spring protection in Nepal. We are currently in the implementation phase, after having completed first a baseline survey and the design phase.</p> <p><a href="#">Click here for a short description of the project.</a></p> <p>Implementation is done through local stakeholders, and there are several things we aim to develop in this process as project team:</p> <ol style="list-style-type: none"> <li>1. Develop a methodology for the impact assessment (based on the baseline questionnaire and other socio-economic data)</li> <li>2. Develop methodology and carry out Cost-Benefit Analysis</li> <li>3. Document the good practices and the steps in this process. Make linkages to other knowledge products and contribute to knowledge dissemination and communication objectives.</li> </ol>
<i>Background ideally needed</i>	Development economics, land and water management, econometrics, climate studies, agricultural sciences;
<i>Skills ideally needed</i>	<ul style="list-style-type: none"> <li>- Ability (to learn) to design and deploy data collection and management</li> <li>- Data analysis/statistics, research</li> <li>- Critical thinking and feeling for finance</li> </ul>
<i>Resources on the topic (e.g. website / blogs etc. that give a good impression of topic)</i>	Resources are available in the shared drive of the project.
<i>Timing</i>	January - May <b>2025</b>
<i>Duration</i>	5 months