



**Building Bridges
between Different Ways of Knowing*
for Climate Change Mitigation**

in Maasailand

**Beth E. Elness-Hanson's
Marie Skłodowska-Curie Post-doctoral Fellowship**

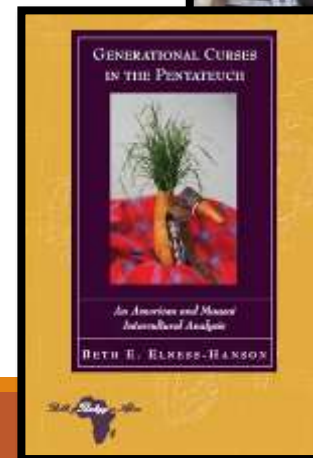
***Ontological Bridge-building for Climate Change Mitigation in Maasailand**

Today

- A brief introduction to me, time, and place
- A brief introduction to the Maasai in East Africa
- The problem
- The aim of the postdoctoral project
 - A bit of the research methods
 - A bit of the expected results
- Discussion

A convergence of my experiences

- Bachelor's degree in **biology**, University of Minnesota (1998)
- Taught at **MaaSae Girls Lutheran Secondary School** for 3 years as ELCA volunteer missionary (2002-2004)
 - Taught **biology**
 - Taught Form 2 **Bible, Old Testament**
- PhD in Old Testament, VID Specialized University, 2016
 - Intercultural approach
 - Engaged anthropological protocol for qualitative research with **Lutheran Maasai theologians and clergy**
 - Part of Knut Holter's Norwegian Research Council project grant, "**Maasai and the Bible**"
- Sustained Maasai relationships
- A "**midwife**" for something God is creating



Where?

- **Tanzania (2-years)**

- **Tumaini University Makumira (TUMa)**,
“associated partner”
- North Central Diocese
of the Evangelical Lutheran Church in Tanzania
- Makumira, Monduli, Ketumbeine

- **Norway (1-year)**

- **VID Specialized University**, Stavanger,
primary research institution
providing administrative oversight



Serengeti



The Maasai

- Dwell predominantly in **East Africa**
 - From the Samburu region of central **Kenya** (1.2 million)
 - To the Parakuyu area of south-central **Tanzania** (800,000)
- Historically, exclusively **pastoralists**
- Believing in a **monotheistic creator, Engai**, as the source of **blessings**
 - When it rains, the Maasai say, “*Engai* has come!”
- Harmony is maintained by **following the traditions**
 - That *Engai* made known through divinations by the traditional shamen (*laiboni*)
 - Implemented through the collective wisdom of the male elders in alignment with traditions
- About **35% Christian**, mostly Roman Catholic and Lutheran



Triangulated Worldview



Hilary Marlow

University of
Cambridge

Maasai



God

Christian

Humanity

Non-human creation

- Biblical ecotheological framework of “Triangulated Shalom”

The Problem

- Anthropologist Sara de Wit demonstrated a “**cognitive dissonance**” [clash] between the “**climate ontologies**” [understandings of climate change]
 - of the **scientific messaging**
 - and the **traditional Maasai worldview** (de Wit, 2020).
- Thus, the Tanzanian **governmental efforts** in climate change prevention education are **not effective** among Maasai (de Wit, 2018).
- Yet, as a result of the **HIV/AIDS pandemic**, there is an **established basic model** within the Lutheran church in Maasailand that provided a strategic role in **bridging the chasm** between the scientific knowledge and a skeptical people group, resulting in **effective outcomes** among the Maasai (Watt, Jacobson, et al., 2009).
- In addition, the World Council of Churches “calls upon **African religious leaders** to challenge triumphalist theologies, **mobilize for local action**, and convene multi-religious meetings on climate change” (Chitando, 2017).



Sara de Wit
Leiden University

Is this a significant problem?



Sara de Wit
Leiden University



Dorothy L. Hodgson
Rutgers University

So, really! **What is the Maasai carbon footprint?**
Why a climate change mitigation effort for pastoralists?

- Complex issues around **indigenous land rights** (Gastorn 2016, 181)
- de Wit identifies government pressures upon the Maasai include the **“ideological hijacking” of the concept of “carrying capacity”** of the land, which serves the government’s rationale to reduce Maasai herd size (de Wit 2018, 30).
- Anthropologist Dorothy Hodgson’s work among the Maasai recognized that **so-called “development”** is “central to the establishment, exercise, and expansion of state power...,” which integrally relates to increasing tax revenue (Hodgson 2001, 8, 203).

Marie Skłodowska-Curie post-doctoral fellowship

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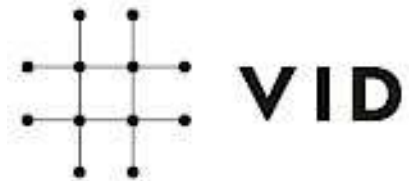
AIM: Decolonizing climate science messaging through integrating indigenous knowledge and values for developing contextually-sensitive best practices of climate change mitigation

Building a bridge between “climate ontologies”
[Building Bridges between Different Ways of Knowing]

- With a biblical ecotheological framework;
- Collaboratively developed pedagogical resources will educate and equip the Maasai with the best practices for mitigating climate change that are strategically designed for their context;
- The collaboration with trusted local leaders, leverages existing educational and social systems within the Lutheran church in Tanzania;
- Developing resources for Maasai leadership; these can support stronger agency for more self-determination in conversations with the Tanzanian government. (more)



European Union
Primary funder



**VID Specialized
University**
Additional support

Marie Skłodowska-Curie post-doctoral fellowship

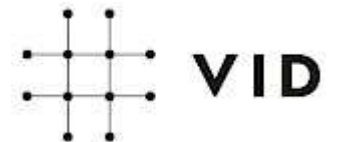
“Ontological Bridge-building for Climate Change Mitigation in Maasailand”

Decolonizing climate science messaging

- through integrating indigenous knowledge and values
- for developing contextually-sensitive best practices of climate change mitigation



European Union
Primary funder



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University
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Leveraging EU money to be a blessing to the Maasai people group!

Multi-disciplinary & holistic

- **Integrating:**
 - Indigenous knowledge and anthropological analysis
 - Climate science and contextual environmental ethics
 - Pedagogical theory and practical dissemination
 - Paulo Freire (1970) Ujamaa Centre's community-based Bible study (West, 2013)
 - Faith-based communal systems and educational structures
 - Empirical research and singing!
- **Collaboration with Maasai stakeholders:**
 - Vice Chancellor of Tumaini University Makumira (TUMa), Rev. Prof. Dr. Joseph Parsalaw
 - Bishop Solomon Massangwa, North Central Diocese
 - Maasai theologians and pastors
 - Maasai biology teacher
 - Maasai confirmation director/teacher
 - Maasai women's group leader
 - Maasai TEE director
 - Maasai environmental scientist
- **Rev. Dr. Knut Holter, primary supervisor (VID, Norway)**

Vice Chancellor
Parsalaw



Bishop
Massangwa

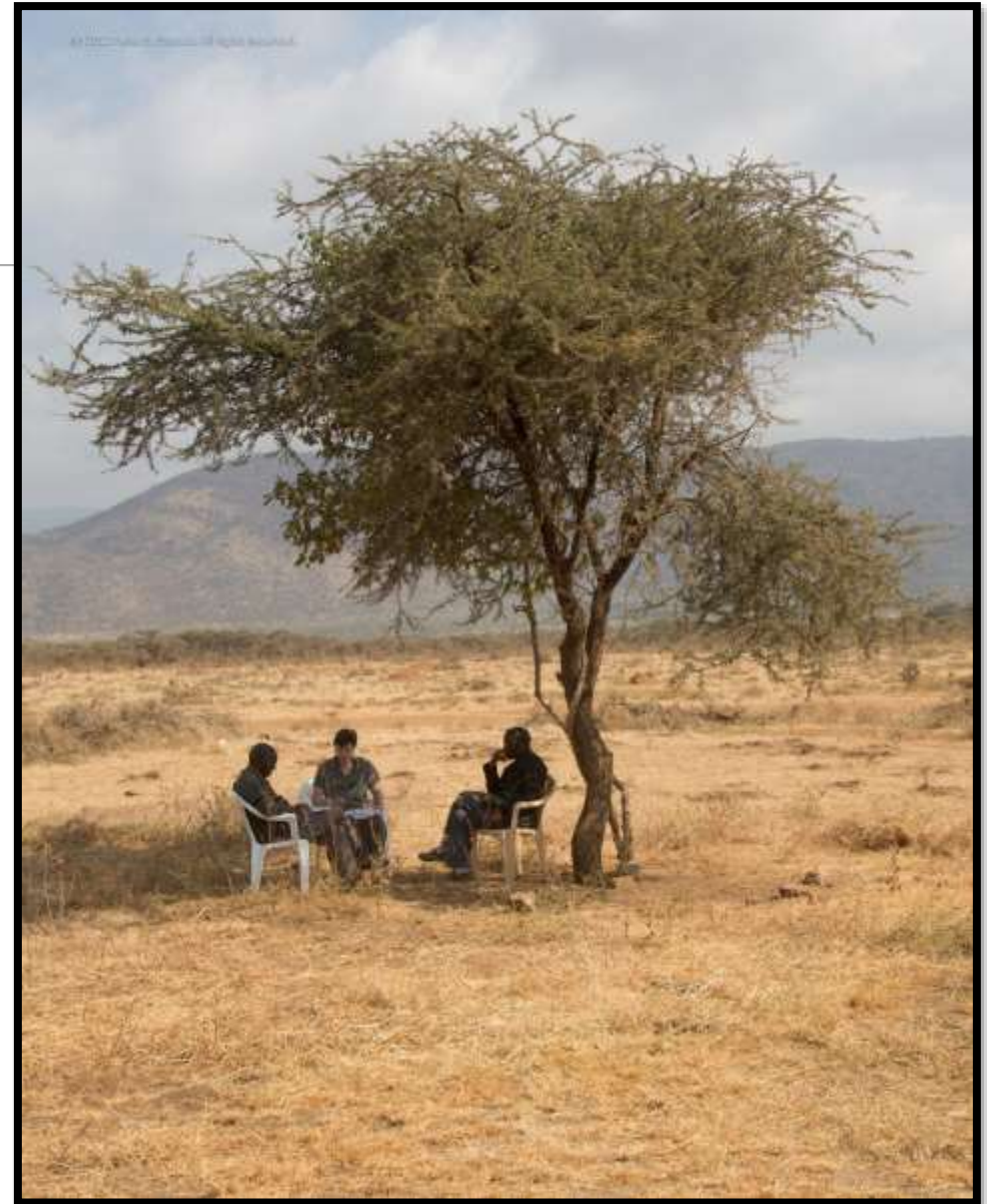


Rev. Dr.
Holter



Collaboration

- Leveraging EU money to be a **blessing** to the Maasai
- Strong **collaboration** with Maasai stakeholders
- “**People support what they help create.**”
- Maasai determined **core values**
- Maasai determined **learning outcomes**



4 Research Groups

1. Lutheran middle-school biology students (minors!)

- Form 2 Tanzanian National Curriculum includes both environmental studies in biology and, for Christian schools, Bible knowledge on the Book of Genesis, with core texts for environmental ethics.
- Curricular components of 2 to 5 sessions will be collaboratively developed with a Maasai secondary school teacher from Maasai determined core values and learning outcomes.

2. Confirmation students (minors!)

- Established ELCT strategy for HIV/AIDS content dissemination
- Only a modest amount of students are able to attend secondary school in Maasailand, as it is not government funded.
- Can reach more youth through confirmation
- Gender balanced
- Curricular components of 2 to 5 sessions will be collaboratively developed with a Maasai confirmation teacher from Maasai determined core values and learning outcomes.



4 Research Groups



3. Women's groups (vulnerable population!)

- Women are the center of the Maasai family and society.
- “If you teach the mama, the whole family will learn” (Elness-Hanson, 2021).
- An important strategy to integrate indigenous knowledge
- Curricular components of 2 to 5 sessions will be collaboratively developed utilizing the South African Ujaama Centre community-based Bible study methods (West, 2013). A Maasai woman will partner in the developing the Bible studies from Maasai determined core values and learning outcomes.

4. Lay pastors

- Lay pastors have a higher percentage of women in Maasailand, providing more gender balance.
- The TEE training center at Oldonyo Sambu that serves the predominantly Maasai regions will be the targeted research location (Justo, 2020).
- Curricular components of 2 to 5 sessions will be collaboratively developed with a Maasai theologian from Maasai determined core values and learning outcomes.



Need for Biblical Theologians

Biblical theologians have a distinctive role in **bridging the gap** between climate science and the Maasai worldview.

- **Similar worldview** (“Triangulated Shalom”)
- **Local church leaders are more trusted** than government scientists from Dar es Salaam.



Transformation Needed

- **Gus Speth**, former Chairman of the Council on Environmental Quality under President Carter stated:
 - “I used to think that top environmental problems were biodiversity loss, ecosystem collapse and climate change. I thought that thirty years of good science could address these problems. I was wrong. The top environmental problems are **selfishness, greed and apathy**, and to deal with these **we need a cultural and spiritual transformation**. And we scientists don’t know how to do that” (Curwood & Speth 2016).
- **The church knows how to engage transformation.**



Impacts & Deliverables

■ Impacts include:

- **Developing and analyzing** the effectiveness of culturally-sensitive curricular components for each research group
 - **Disseminating resources** through the educational and social structures of the Lutheran church in Maasailand,
 - Providing Maasai leaders more **resources** for stronger **self-determination** in dialogues with the government.
- As the local church made a difference in the **health of the people** regarding HIV/AIDS, it can make a difference in the **health of the environment**.

■ Deliverables include:

- Open access of **research findings**
- Open access **pedagogy resources**
 - Royalty-free curricular components for 4 research groups
 - Analysis of effectiveness
- **Song production**
 - A music competition where the best practices are put to music (part of secondary school learner-centered teaching and a culturally valued means of learning), and the winner's prize is recording the song and distribution in CD/MP3/other formats
- Articles for **academic journals (2)**
- Articles for **global church**

Methods

■ Collaborative development

- Learning outcomes and core values
- Best practices of climate change mitigation in Maasailand

■ Co-written curricular components

- for 4 target groups
- with Maasai collaborators (paid)

■ Empirical research

- Surveys (paper)
 - Pre-learning surveys,
 - post-learning surveys, and
 - a six-month follow-up post-learning survey for a longitudinal analysis
- Research data analysis will identify any development in climate change mitigation praxis:
 - Cognitive
 - Affective
 - Behavioral
- Identify the strongest outcomes from the four research groups
 - Informs best practices
 - Informs resource allocation for applying research findings for optimal outcomes in future initiatives

Ethical Issues

- Research takes place, a **low-income country**
 - **Benefit-sharing actions** (not just “extractive” research)
- Regulations for research with human participants:
EU/Norway, Tanzania
 - “Guidance for Applicants: Informed Consent” in European Commission - Research Directorate-General Directorate L - Science, Economy and Society, Unit L3 - Governance and Ethics (https://ec.europa.eu/research/participants/data/ref/fp7/89807/informed-consent_en.pdf)
 - Informed consent
 - **Vulnerable populations**
 - Minors
 - Women with limited literacy
- Data management plan

Research Authorization

1. European Union/Marie Skłodowska-Curie (Done!)
2. NSD - Norwegian Centre for Research Data (*Norsk senter for forskningsdata*)
3. Tanzania Commission for Science and Technology (COSTECH)
4. **Blessing of the Bishop of the North Central Diocese, Dr. Solomon Massangwa**
5. Agreement at each research site
 - 7-8 sites
 - Modest honorarium provided

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Maasai herders in Ngorongoro, Tanzania. About 82,000 Maasai could be removed from the UNESCO world heritage site over the next five years. Photograph: Gonzo Franck/Reuters/Alamy

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Herders lodge appeal against ruling in their case against the Tanzanian government, which they say is violently evicting them from ancestral land



Maasai women and children at a village on the border with Tanzania in Narok, Kenya, after protests against their eviction from ancestral lands turned violent, 21 June 2022. Photograph: Daniel Irungu/CPA

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'It's becoming a war zone': Tanzania's Maasai speak out on 'forced' removals

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Maasai women and children from Ngorongoro hold a prayer meeting on Tanzania's border with Kenya, to which thousands have fled. Photograph: Daniel Irungu/EPA-EFE/Shutterstock



Q & A

- **Your questions**



Discussion

- **My questions for you!**

Impacts: In Evaluation

■ Reviewer's comments

1. “The potential societal and economic, as well as environmental and political impacts of the project are described extensively and well.
2. “The project can be realistically expected to significantly improve the lives of a large ethnic community.
3. “The credibility of the project’s primary impact – climate change mitigation through the promotion of collaboration between climate science and traditional worldviews – is particularly convincingly presented.
4. **“The influence of the project could extend well beyond its duration and the project results and experience may be applied to other communities in a similar situation.**
5. **“Moreover, the results of the proposed research could potentially be used in different international faith-based educational systems around the world.”**

My questions for you

- 1. “...the project results...may be applied to other communities in a similar situation.**
 - Do you have a similar situation in your ministry context with a clash of understandings? Perhaps a different issue?
- 2. I believe that you can help me be more sensitive!**
 - If you have a similar situation, what would be important to know?
 - What wisdom would you like to share with me?

