



CLIMATE CHANGE PERCEPTIONS in the LAKE VICTORIA BASIN

In the MECCA project, a team of social scientists and natural scientists aimed to understand people's perceptions of climate change in East Africa (Lake Victoria) and West Africa (Lagos) and feed these perceptions into climate models to evaluate the perceptions.

Known causes of climate change

- Natural changes in the sun's activity or large volcanic eruptions
- Human activities like burning of fossil fuels like coal, oil, and gas.

Climate change is a long-term shift in temperatures and weather patterns

In the MECCA project, we have done several studies between 2019 and 2023 in Uganda, Kenya and Tanzania with over 2,000 participants, including farmers, livestock keepers, fishers, urban dwellers, scientists and policymakers and implementors. Our findings show that:

1. How do people in the Lake Victoria Basin perceive climate change?

- They perceive climate change as a very serious threat.
- They feel worry, fear, and sadness concerning climate change.
- People in East Africa believe that climate change is very likely to harm them and others.



2. Climate change is perceived to be caused by:

Deforestation	Droughts	Industrialization	Greenhouse gas emissions	Changes in rainfall

3. Climate change is perceived to result in:

Droughts	Changes in rainfall	Food insecurity	Fish stock changes	Poor human health	Temperature change

Any gaps in climate literacy?

- There is a relatively high level of agreement between the results of experts (e.g., scientists) and community members.
- The climate models project temperature rises and rainfall increases, in line with people's perceptions.
- Experts may underestimate the consequences of climate change that society is already facing.
- Droughts are more likely to be a consequence of climate change than a cause.



To address climate change as per the people in the Lake Victoria basin, we should first address;

Deforestation	Land degradation	Agricultural practices

The best strategies that can address climate change are;

Afforestation	Education	Environmental regulations

Entities that should implement strategies that address climate change are;

The government	Individuals	Communities at Lake Victoria

MECCA is a research project that is a collaboration between Utrecht University (the Netherlands), the University of Bergen (Norway) and Potsdam Institute for Climate Impact Research (Germany), the Fisheries Resources Research Institute (Uganda), Kenya Marine and Fisheries Research Institute (Kenya), Tanzania Fisheries Research Institute (Tanzania) and Lake Victoria Fisheries Organization. The MECCA project is part of AXIS, an ERA-NET initiated by JPI Climate, and funded by NWO (Grant no. 7934), DLR/BMBF (Grant no.) and RCN (Grant no. 300227) with co-funding by the European Union (Grant No. ID 776608).