

The impact of climate change on Kenya's Tana river basin

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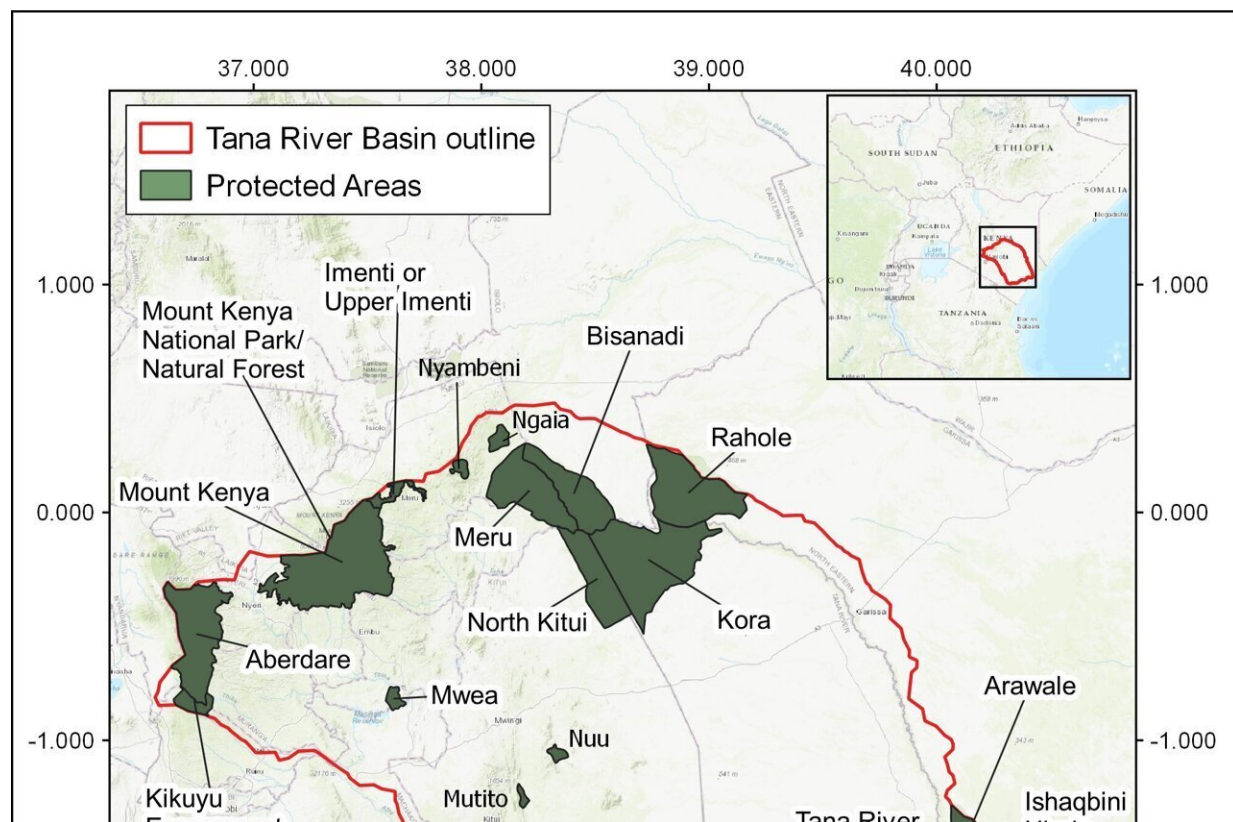


Fig 1. The Tana River Basin. This map shows the locations of protected areas considered in this study. Protected Areas data was obtained from the World Database of Protected Areas [44]. Credit: DOI: 10.1371/journal.pone.0254879

Many species within Kenya's Tana River Basin will be unable to survive if global temperatures continue to rise as they are on track to

do—according to new research from the University of East Anglia.

A new study published in the journal *PLOS ONE* today outlines how remaining within the goals of the Paris Agreement would save many [species](#).

The research also identifies places that could be restored to better protect biodiversity and contribute towards global ecosystem restoration targets.

Researcher Rhosanna Jenkins carried out the study as part of her Ph.D. at UEA's School of Environmental Sciences.

She said: "This research shows how many species within Kenya's Tana River Basin will be unable to survive if [global temperatures](#) continue to rise as they are on track to do.

"But remaining within the goals of the Paris Agreement, which aims to keep [global warming](#) well below 2°C, ideally at 1.5°C, would save many species. This is because large areas of the basin act as refugia from [climate change](#)."

"With higher warming levels, not only are the refuges lost but also the potential for restoration becomes more limited.

"The United Nations declared the 2020s as the "Decade on Ecosystem Restoration." Our results show the importance of considering climate change within these restoration efforts.

"With higher levels of warming, many of the species you are trying to restore will no longer be able to survive in the places they were originally found.

"Strong commitments from [global leaders](#) ahead of the COP climate change summit in Glasgow are needed to stand any chance of avoiding the loss of species—which for the Tana River Basin is clearly indicated by this work."

"Addressing risks to biodiversity arising from a changing climate: the need for ecosystem restoration in the Tana River Basin, Kenya" is published in the journal *PLOS ONE* on July 21, 2021.

More information: Rhosanna L. M. Jenkins et al, Addressing risks to biodiversity arising from a changing climate: The need for ecosystem restoration in the Tana River Basin, Kenya, *PLOS ONE* (2021). [DOI: 10.1371/journal.pone.0254879](#)

Provided by University of East Anglia

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