Effects of Prosopis on livelihoods in Afar and sustainable land management to mitigate those effects

Prosopis was introduced in the late 1970s in arid areas of East Africa to curb soil degradation and to alleviate fuel wood shortage. It can provide fodder, shade, fuel wood, and income from charcoal production. It is also used for fencing. In Afar, Prosopis has spread to areas where it is now causing damage: its thorns cause injury to humans and animals; it degrades the quality of pastures, reduces water availability and access to fodder, reduces biodiversity, and increases costs of land management.

We map the current distribution of Prosopis in Eastern Africa and the areas that are threatened by future invasion. We investigate the impacts of this plant on the environment, people, and the economy. We assess how these impacts change when Prosopis abundance increases.

In Afar, we assess how the spread of Prosopis is affected by human and animal movement. We also investigate the plant’s water consumption, which is important for understanding its effects on grassland, livestock keeping, and biodiversity.

Our project will help local communities, NGOs, and authorities, to choose the best management options to reduce the negative impacts and maximise the benefits of Prosopis. For this purpose, we will establish plots to demonstrate Prosopis management and grassland restoration.

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