



Learning about the birds & the bees in the shea parklands



Shea butter



Shea butter



Shea butter



Shea butter

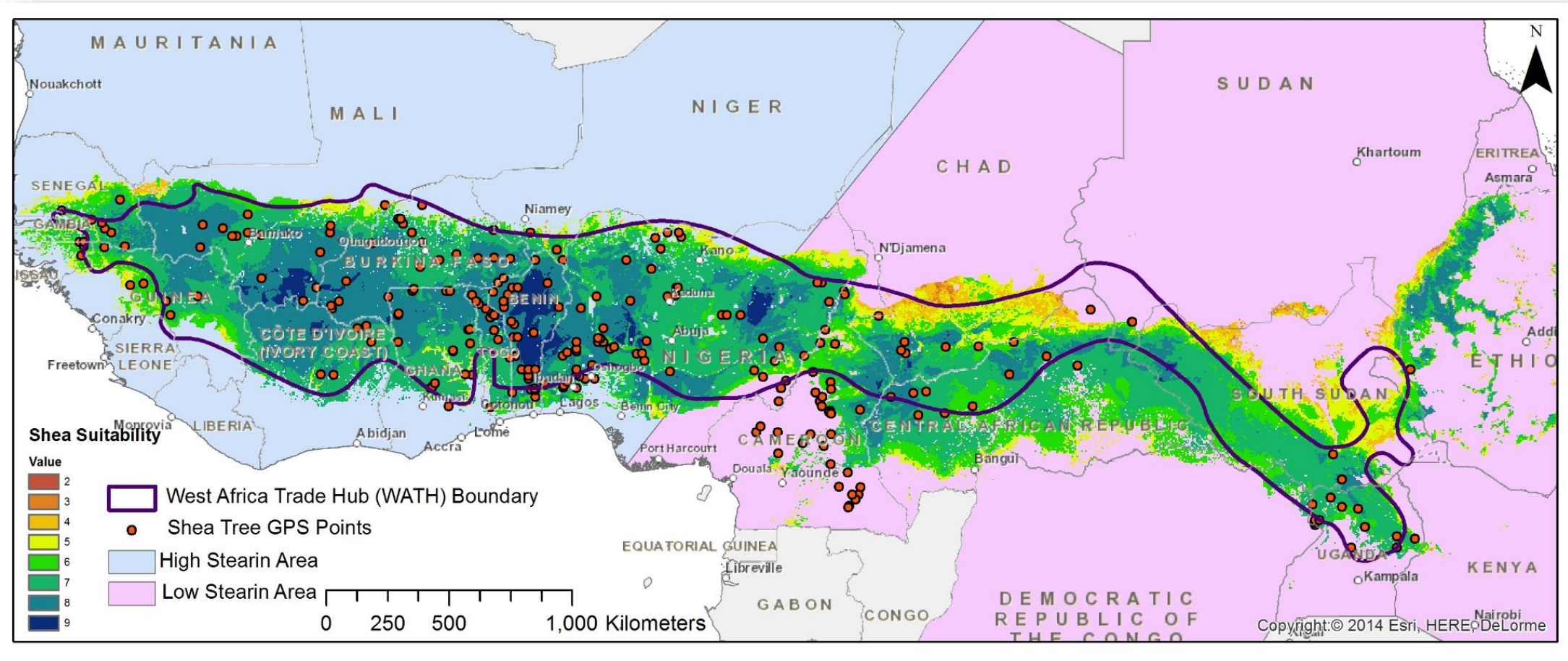
Shea butter is the primary edible oil for **80 million** people in sub-Saharan Africa

Collected by **16 million** women

Shea from flower to butter



Where does shea grow?



Naughton *et al.* 2015.

The shea parkland landscape



The shea parkland landscape



Photo C Payne

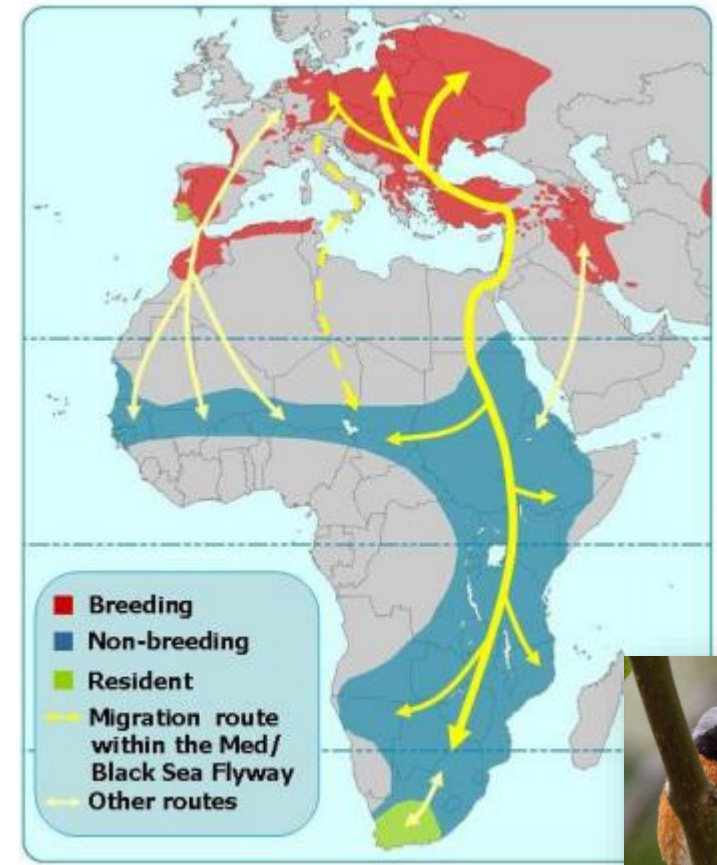
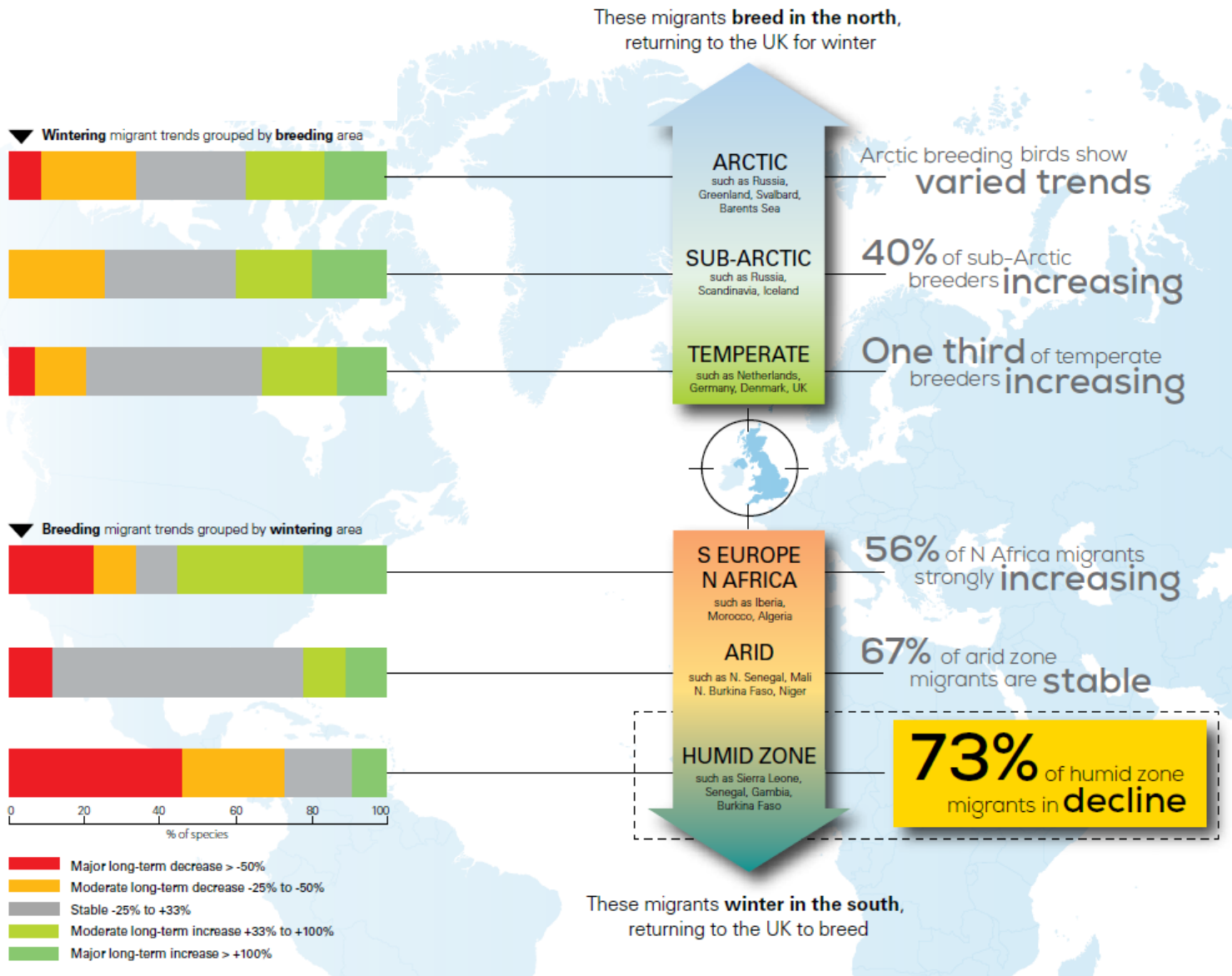
The shea parkland landscape

90-100% of in-field
trees are shea



Photo C Payne

Parkland biodiversity: birds



Parkland biodiversity: birds

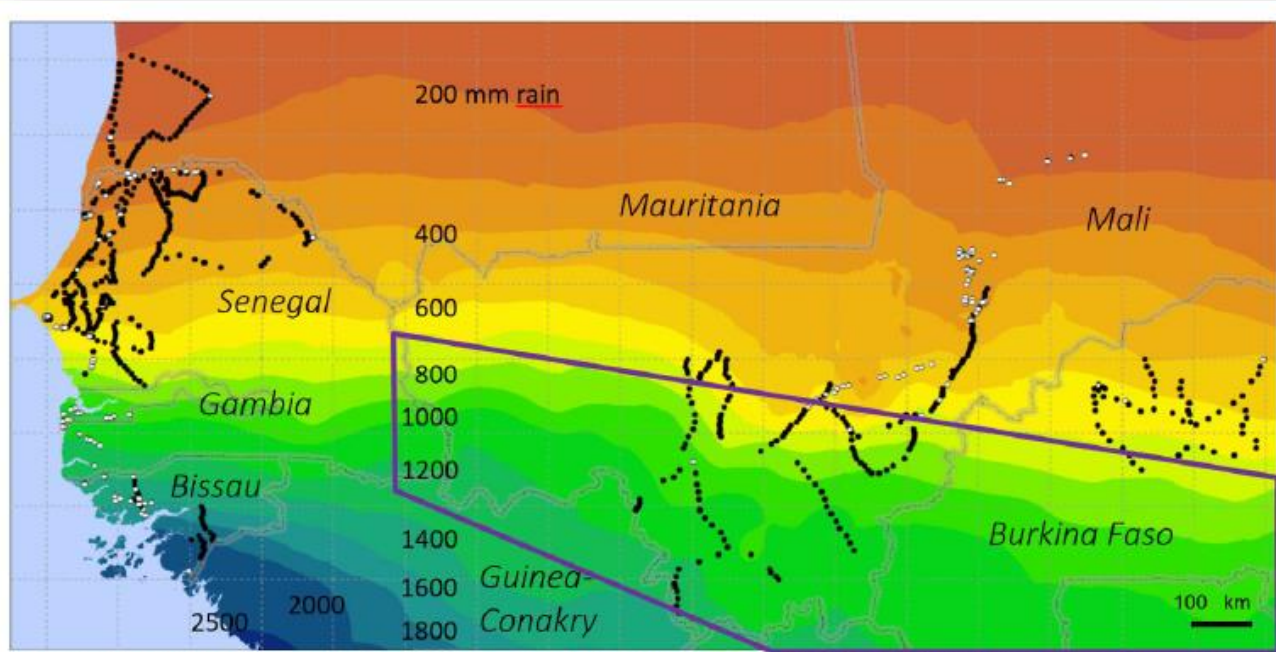
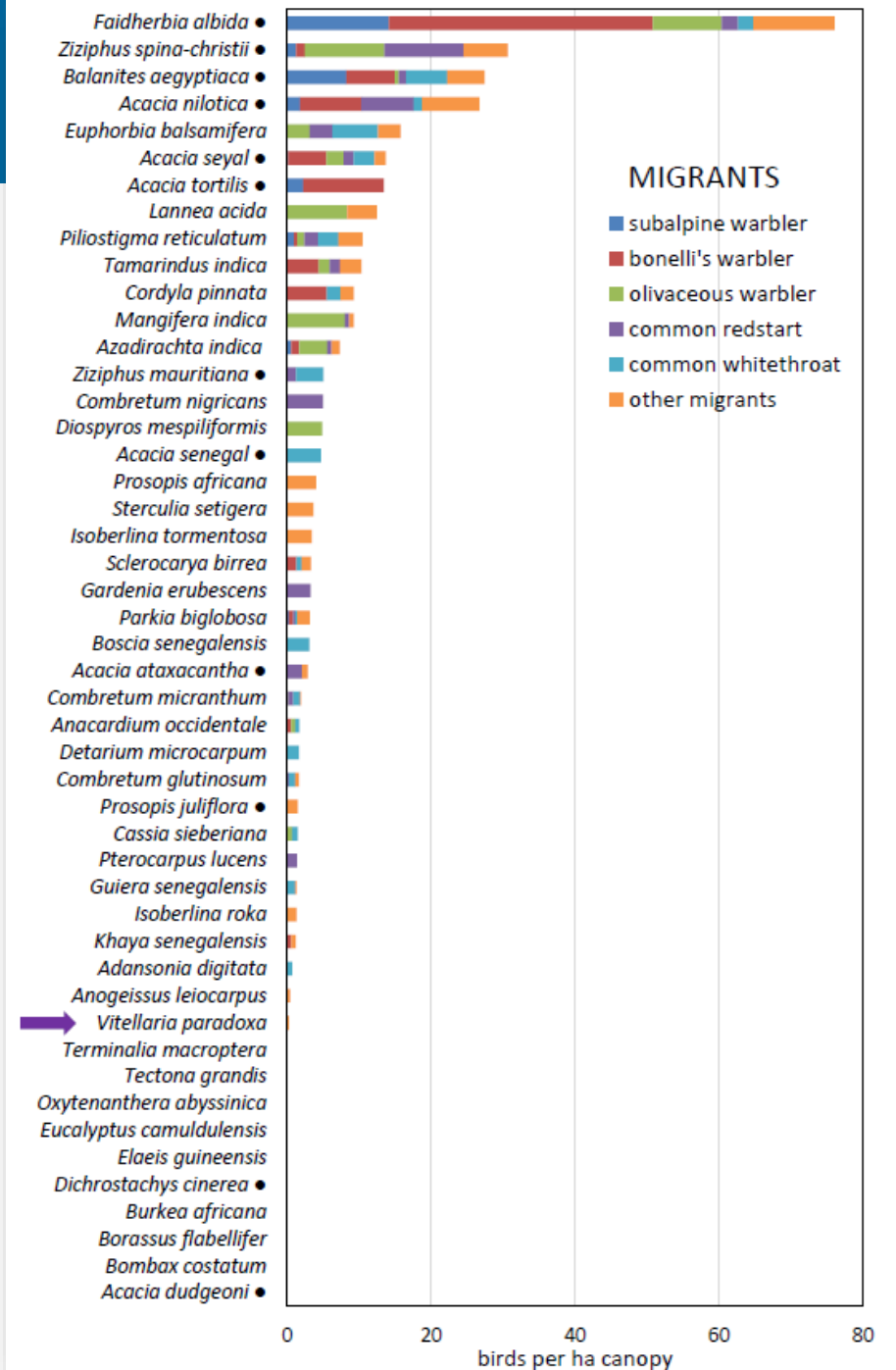


Fig. 1. The stratified random (black dot) and non-random (white dot) sampling sites in West Africa, with average annual rainfall (in mm) as background. The purple pentagon shows the outer limits of the distribution area of *Vitellaria*.



Parkland biodiversity: pollinators



Parkland biodiversity: caterpillars



Cirina butryospermi
Shea caterpillar ('chitoumou')

PhD project – Charlotte Payne,
Cambridge University

What are the impacts of caterpillar abundance/harvesting on shea yields,
biodiversity and human health?



Resilient landscapes



- Develop a 'Trees, bees and birds' parkland management strategy



- Work with 10 communities in southern Burkina Faso
- Build awareness of the role of biodiversity in healthy parklands.
- Work with government, industry and other NGOs to scale-up



Trees, bees and birds



Trees, bees and birds

Flowering crop varieties

Pollinator exclusion plots for demos

Fallows

Reduce chemical use underneath trees

Bee "hotels"



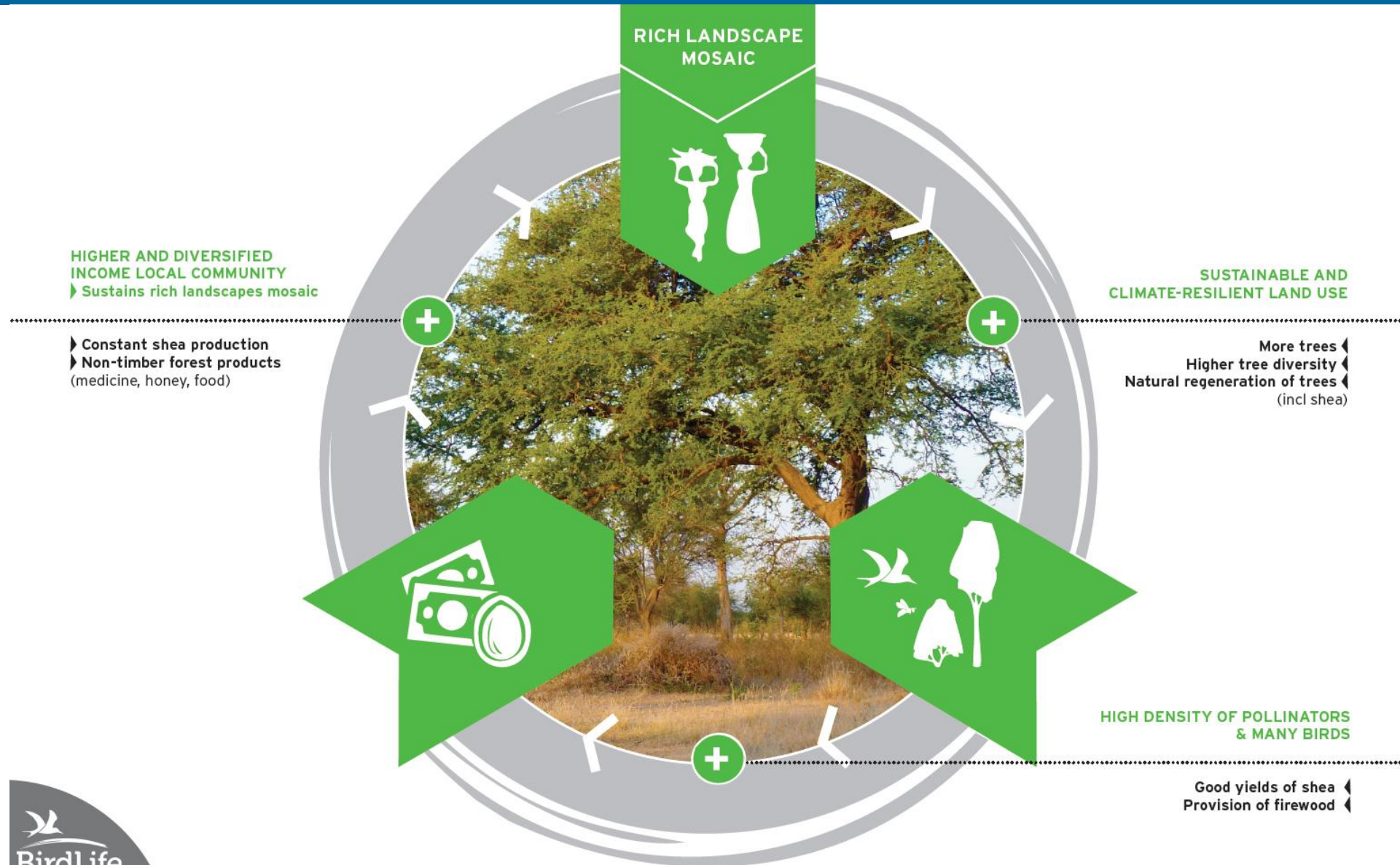
Tree planting

Strips of undisturbed land

Bee-keeping

Farmer-managed natural regeneration

Resilient landscapes



Acknowledgements



The University of Dublin



Global Shea Alliance



Altenburg & Wymenga



