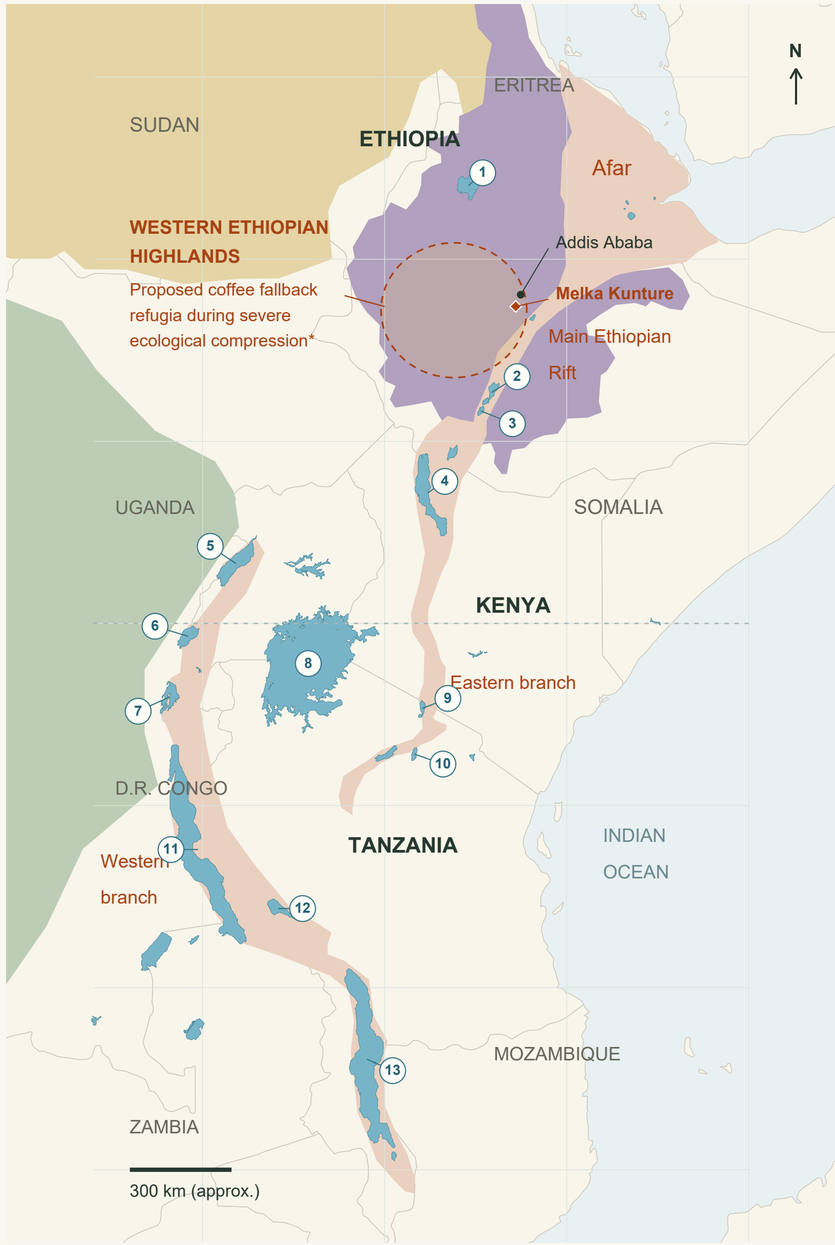
Locating the evolutionary story

Africa overview and East Africa enlargement • Modern geographic reference, with the paper's conceptual connection shown separately.

A AFRICA OVERVIEW



B EAST AFRICAN LAKE SYSTEMS



LAKE KEY

01 Tana
02 Abaya
03 Chamo
04 Turkana
05 Albert
06 Edward
07 Kivu
08 Victoria
09 Natron
10 Manyara
11 Tanganyika
12 Rukwa
13 Malawi / Nyasa

Victoria lies between the two main Rift branches; it is not on the western lake chain.

Selected natural lakes are numbered. Small Ethiopian Rift lakes require a finer-scale inset; they are not invented or enlarged here.

Blue shapes are modern reference outlines, not reconstructed ancient shorelines.

REGIONS & INTERPRETATION

Sahel · Congo Basin · Ethiopian highlands · Generalized Rift regions

– – – – Sahel–Rift connection in the paper: schematic, not a fixed boundary or a migration route.

Physical-region shading follows Natural Earth's approximate label areas. The Congo Basin shading is not a rainforest-extent map; the highland shading is not an elevation contour. *Amber shading with dashed outline: broad schematic focus of the western-highland scenario, not a measured regional boundary or mapped coffee distribution. The diamond marks Melka Kunture; the dot marks Addis Ababa.

COFFEE IN THE MODEL • ANCESTRAL POPULATIONS & MODERN ARABICA

The manuscript proposes ancestral caffeine-bearing Coffea populations in western Ethiopian highland refugia during early hominin fallback episodes. No exact species identification or local origin of caffeine biosynthesis is required by that proposal. Modern wild C. arabica is a separate botanical reference: its founding polyploid event is estimated at 350,000–610,000 years ago (Salojärvi et al., 2024). The shaded focus marks the proposed setting, not a reconstructed ancestral range. Melka Kunture provides archaeological context; its marker does not establish coffee consumption at the site.

SOURCES • Natural Earth: 1:50m countries; 1:10m lakes and physical label areas. Rift interpretation: Glerum et al. (2020), Nature Communications 11:2881; Geological Society of London. Site point: UNESCO component 13rev-001; Addis Ababa: UNGEGN. Botanical note: Hamon et al. (2017); Salojärvi et al. (2024). Projection: equidistant cylindrical, standard parallel 0°. Conceptual annotations distinguish the model from geographic reference data.