

African Economic History (I)

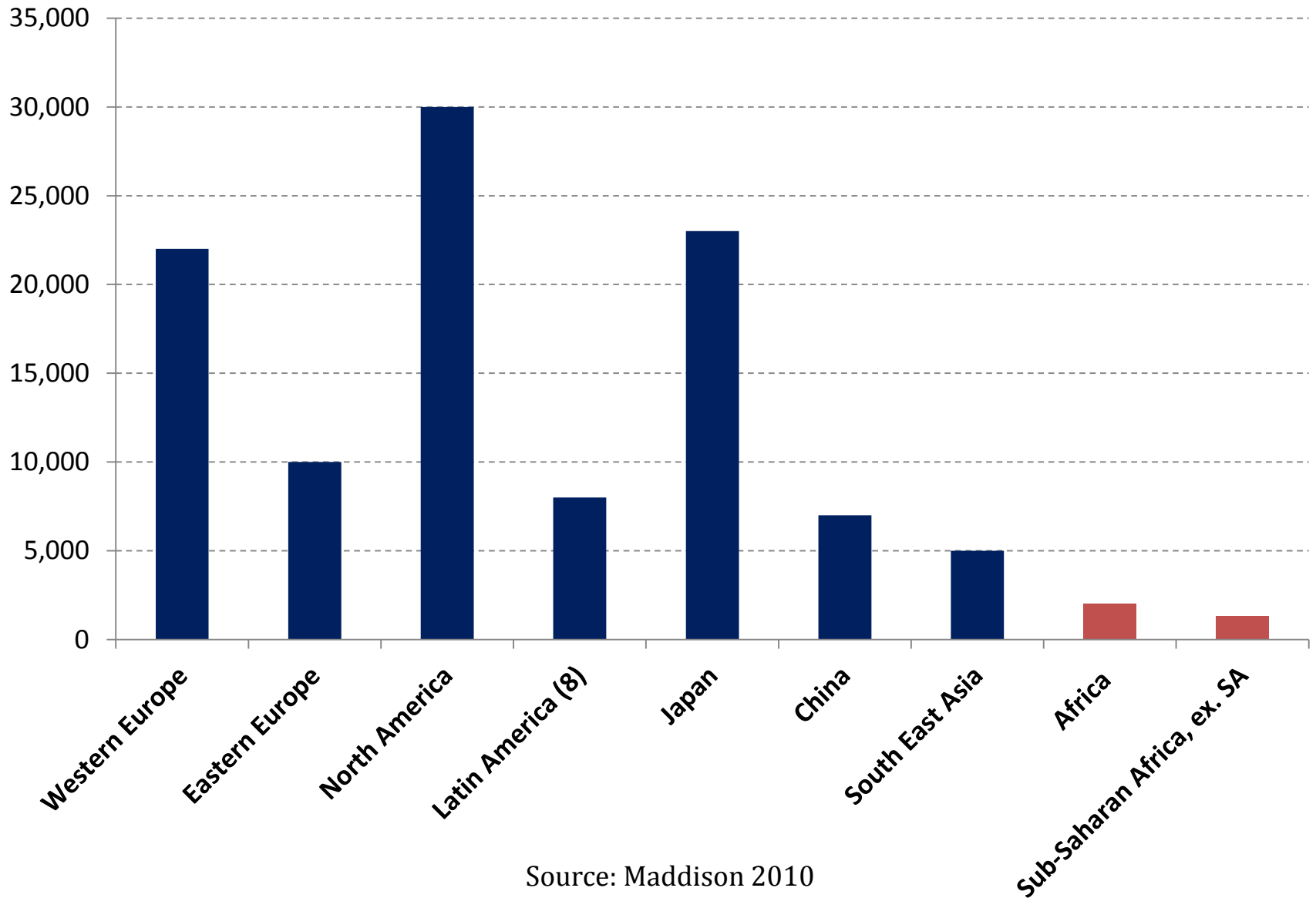


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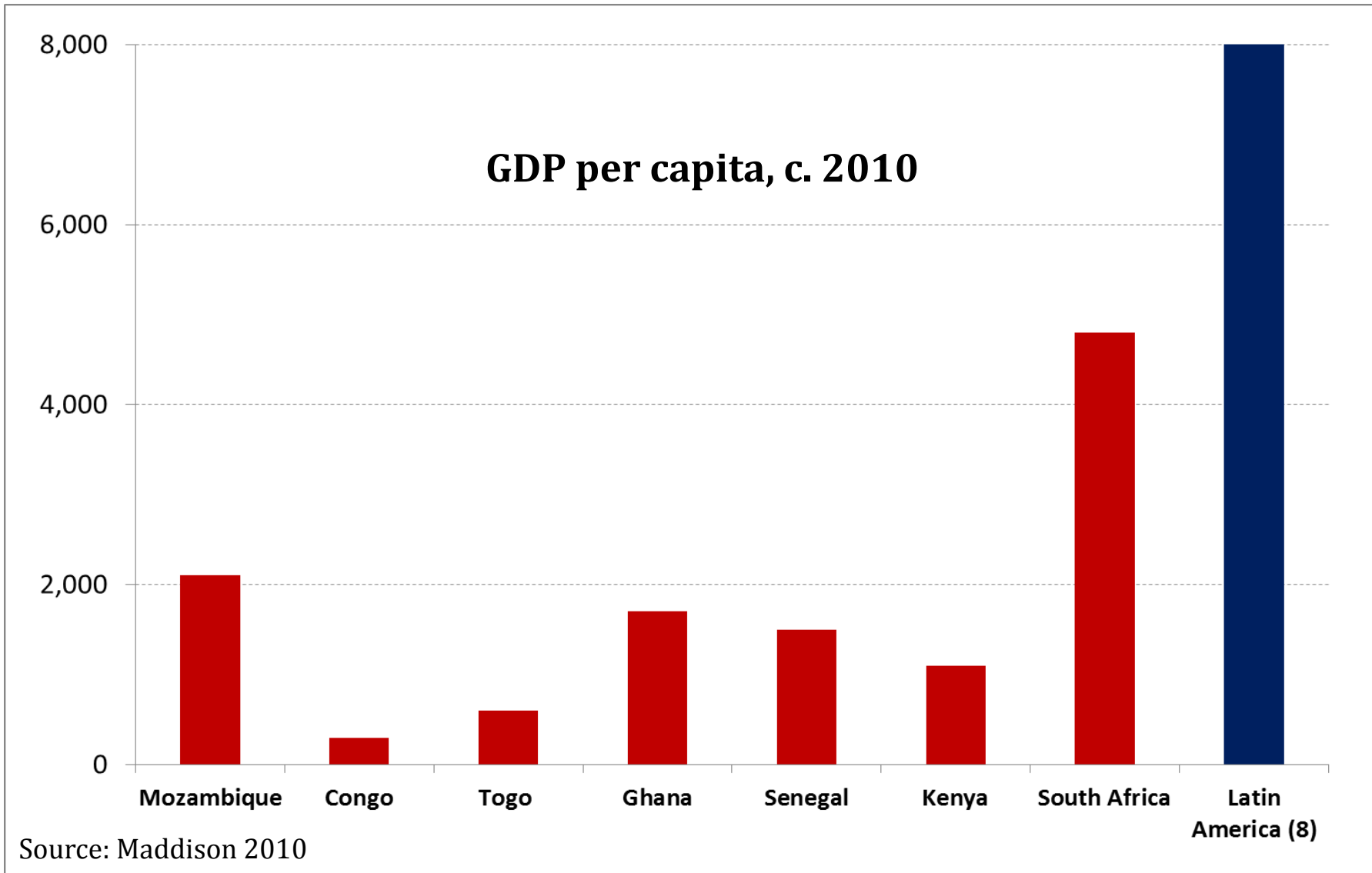
Montevideo, 09 March 2015

GDP per capita, c. 2010



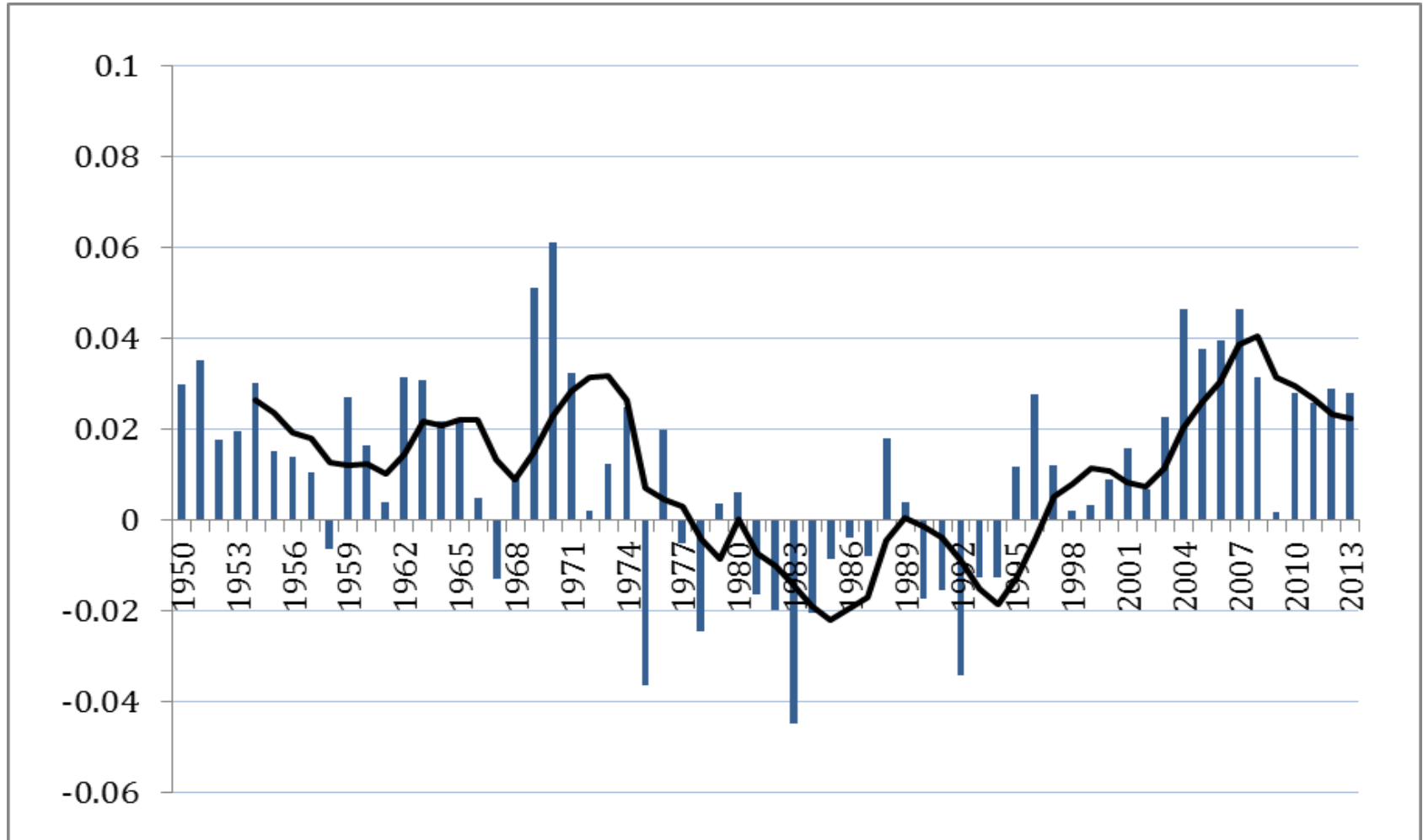
Source: Maddison 2010

Variation *within* Africa



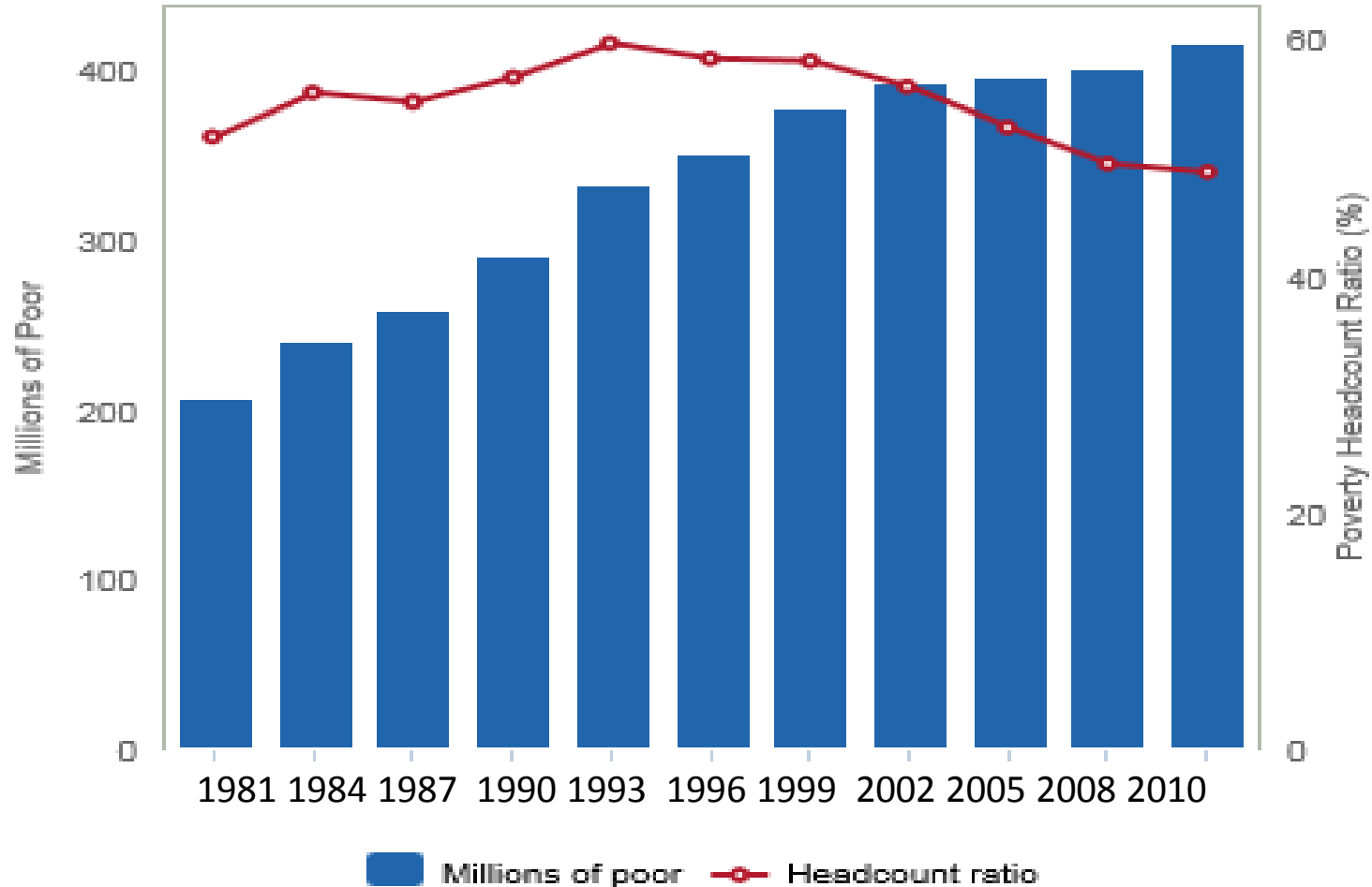
Sub-Saharan Africa, 1950-2013

Average annual GDP per capita growth



Source: Maddison 2010; IMF 2012

African poverty, 1981-2010

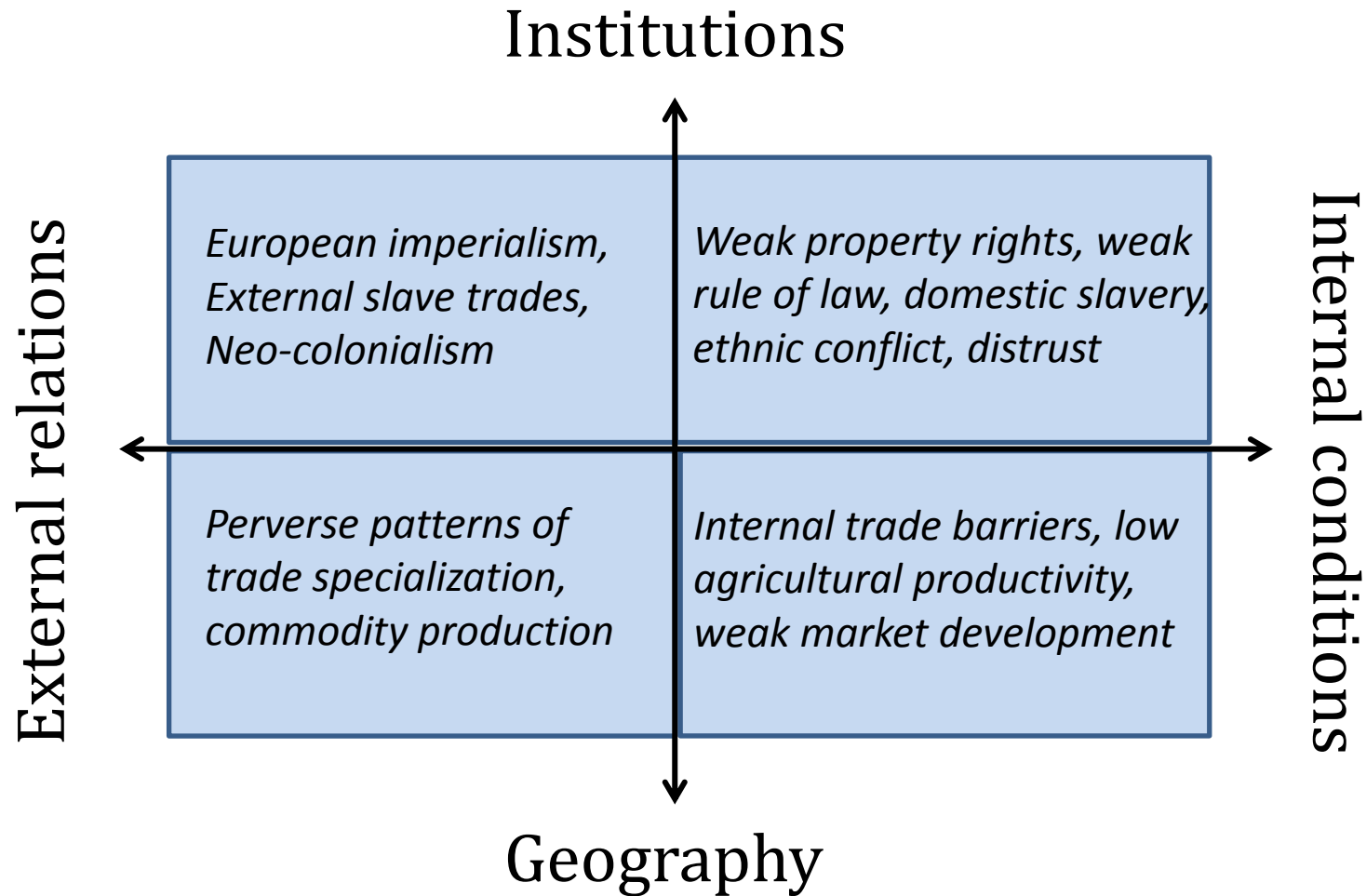


Source: United Nations

Outline

- 1. Explanatory narratives of African poverty**
2. A bio-geographical perspective
3. Factor endowments <> systems of rural production
4. Factor endowments > institutions and trade
5. Conclusion

Explanations of African poverty

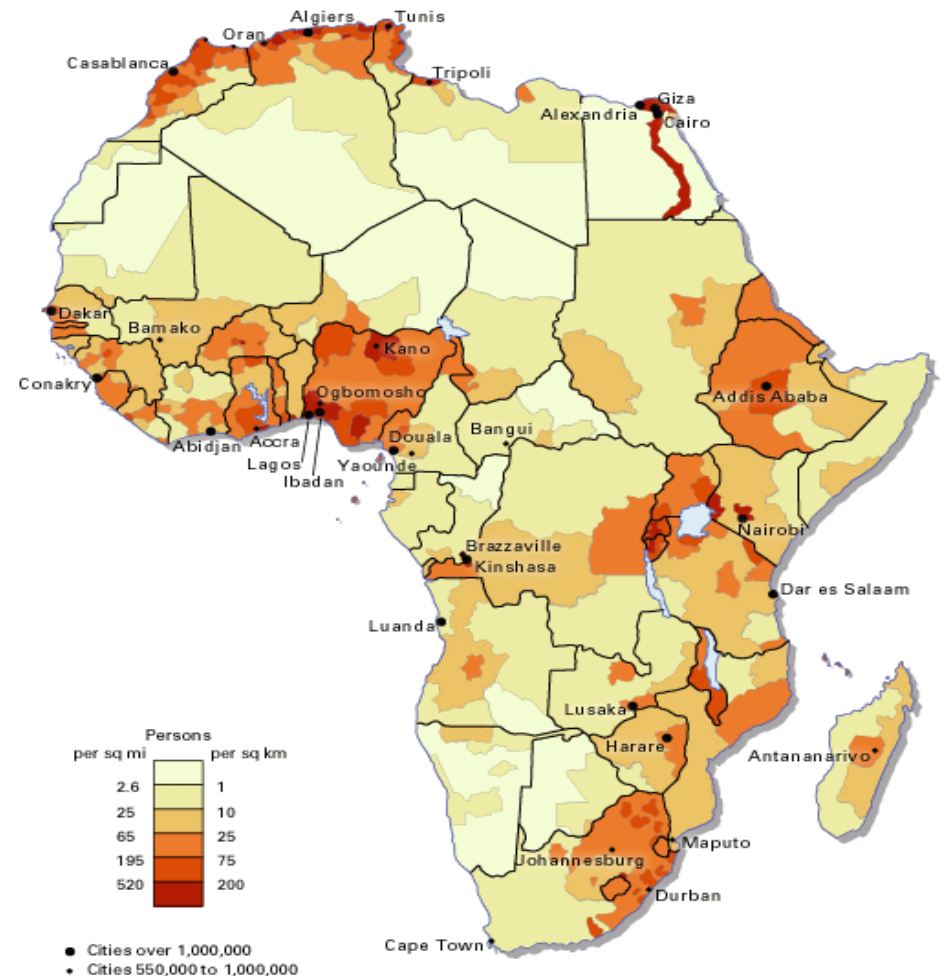


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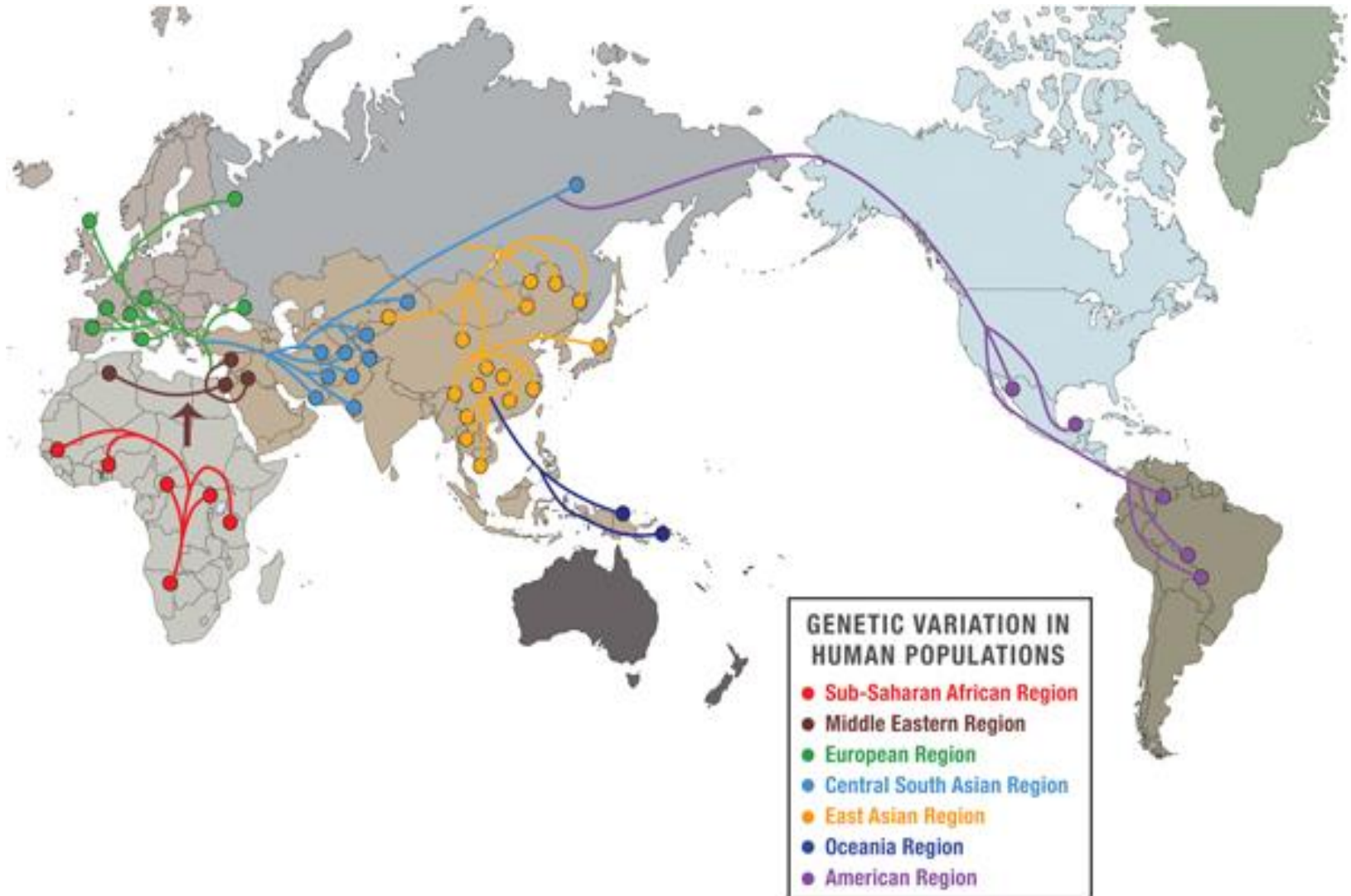
The African paradox



Louis Leakey and one of the skulls excavated at Olduvai (Tanzania)



Africa, the 'cradle of mankind'



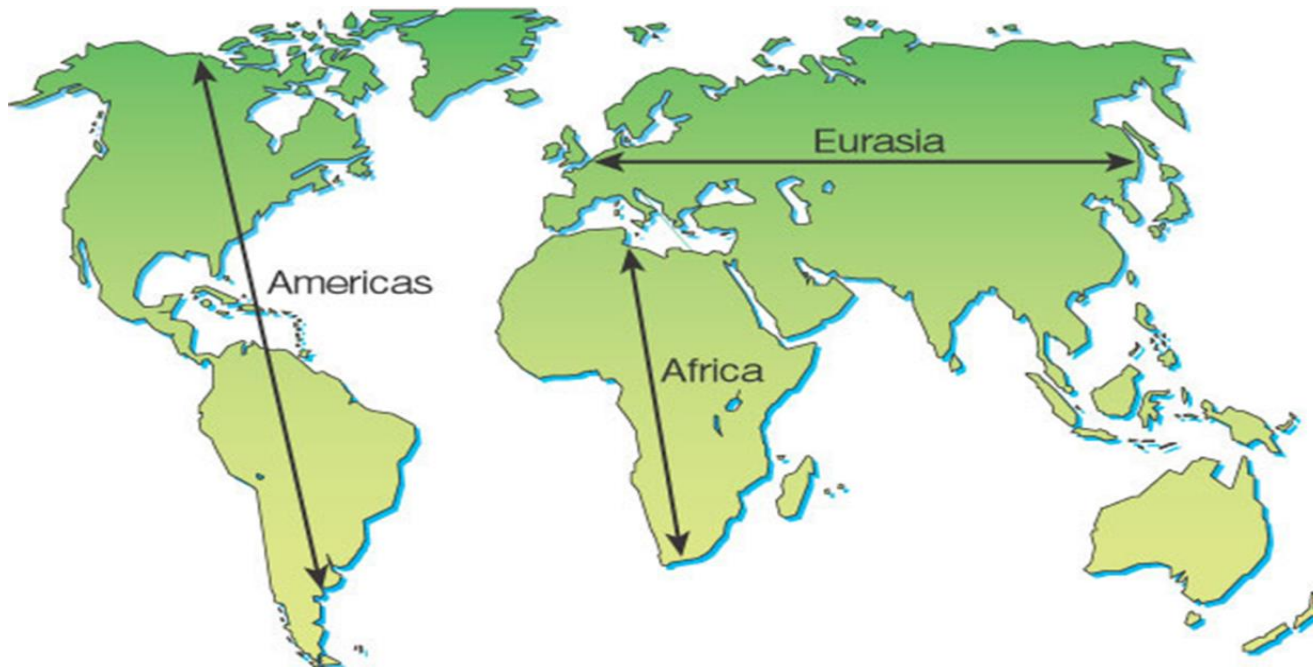
Population of Africa, Americas and Eurasia, c. 1500AD

	Population	Land area	Density
	(millions)	(millions of km ²)	people/km ²
Africa total (incl. Sahara desert)	50-100	29.5	1.7-3.4
Sub-Saharan Africa (excl. Sahara desert)	40-80	20.7	1.9-3.8
Central & South America	15-70	19.2	0.8-3.6
North America	5-30	24.7	0.2-1.2
Eurasia total	350	53.0	6.6
India	110	3.0	36.7
China	100	9.3	10.8
Japan	15	0.4	37.5
Western Europe	57	3.5	16.3
Eastern Europe	14	1.1	12.7
Average of three continents	716-846	164	4.4-5.1

Frankema, "The Biogeographic Roots of World Inequality" *World Development* (forthcoming 2015)

Jared Diamond's thesis (1997)

- Eurasia: largest pool of **domesticable plants & animals**
- **It's horizontal axis** facilitates diffusion of agriculture
- Peasant based societies enhance **state centralization**
- Proximity humans-livestock > **disease** environment



The Americas: a demographic miracle!

				1500 AD (millions)	Annual average growth (%)	
	200.000 BP	100.000 BP	25.000 BP		min	max
Africa*	1,000			50 - 100	0.005	0.006
Eurasia	0	1,000		350 - 450	0.013	0.013
Americas	0	0	1,000	20 - 100	0.040	0.046

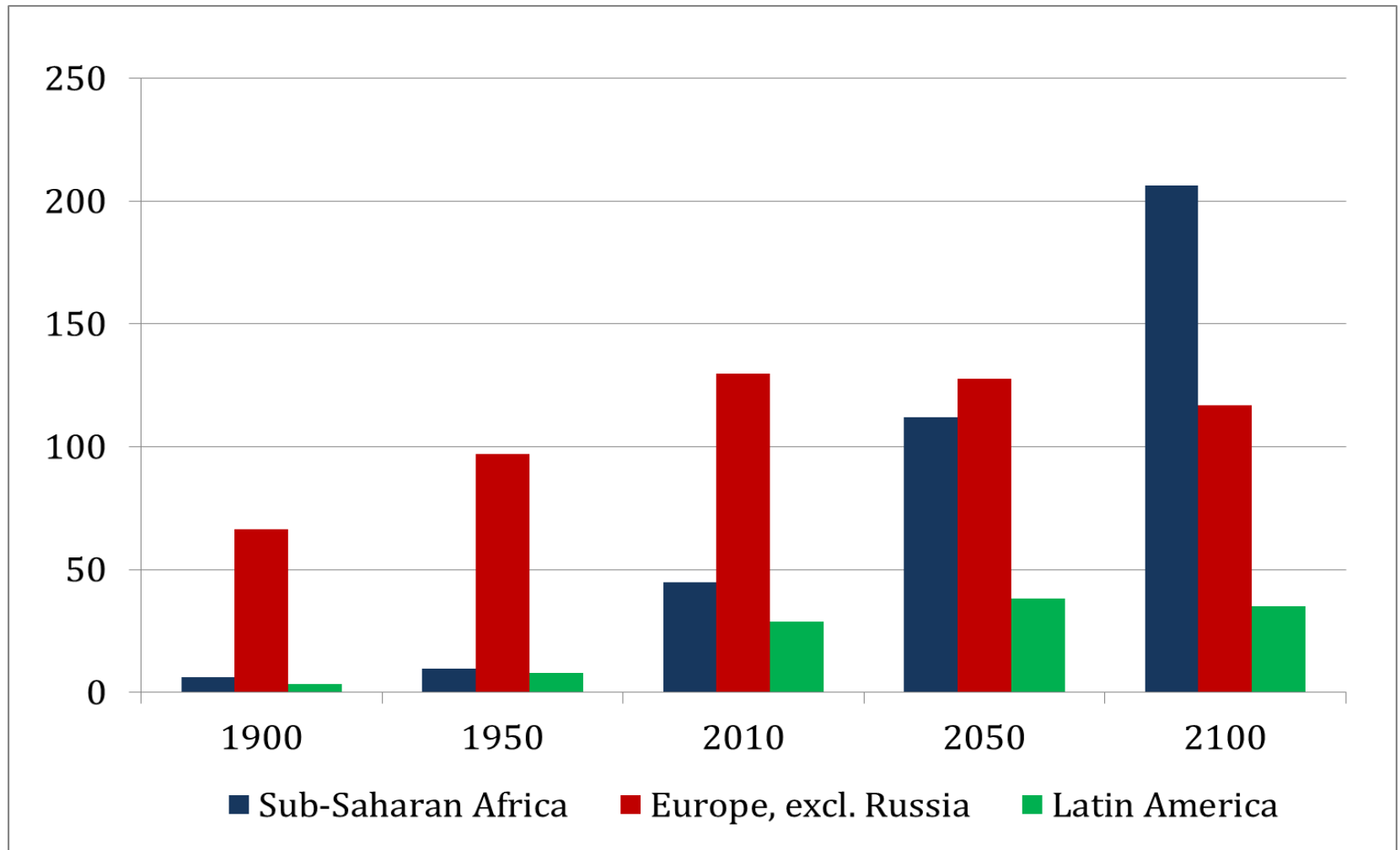
Were conditions for agricultural intensification really worse in the Americas?



Causes of low African density levels?

- Endemic tropical diseases (e.g. Malaria, Yellow Fever)
- Extended lactation periods (to raise survival rates)
- Low agricultural productivity due to lack of animals in tsetse areas
- Climatic variability, especially droughts
- Nomadic pastoralism
- Soil heterogeneity
- Tropical soils invite slash and burn cultivation
- There are only few areas in the continent free of one or more of such 'serious constraints'

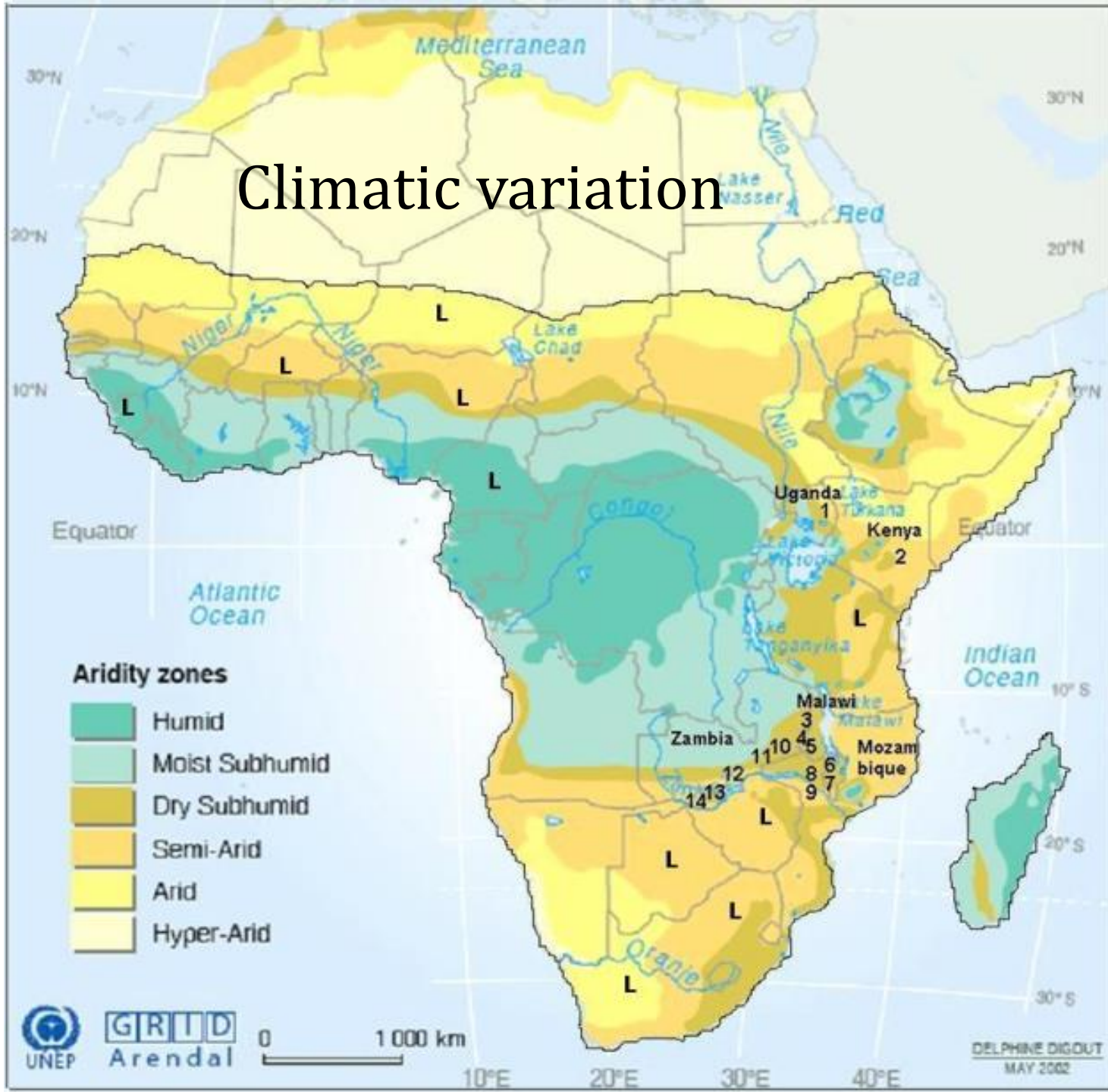
Densities in Sub-Saharan Africa, Europe and Latin America, 1900-2100 (pp/km²)



Source: Frankema and Jerven 2014; United Nations

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Climatic variation

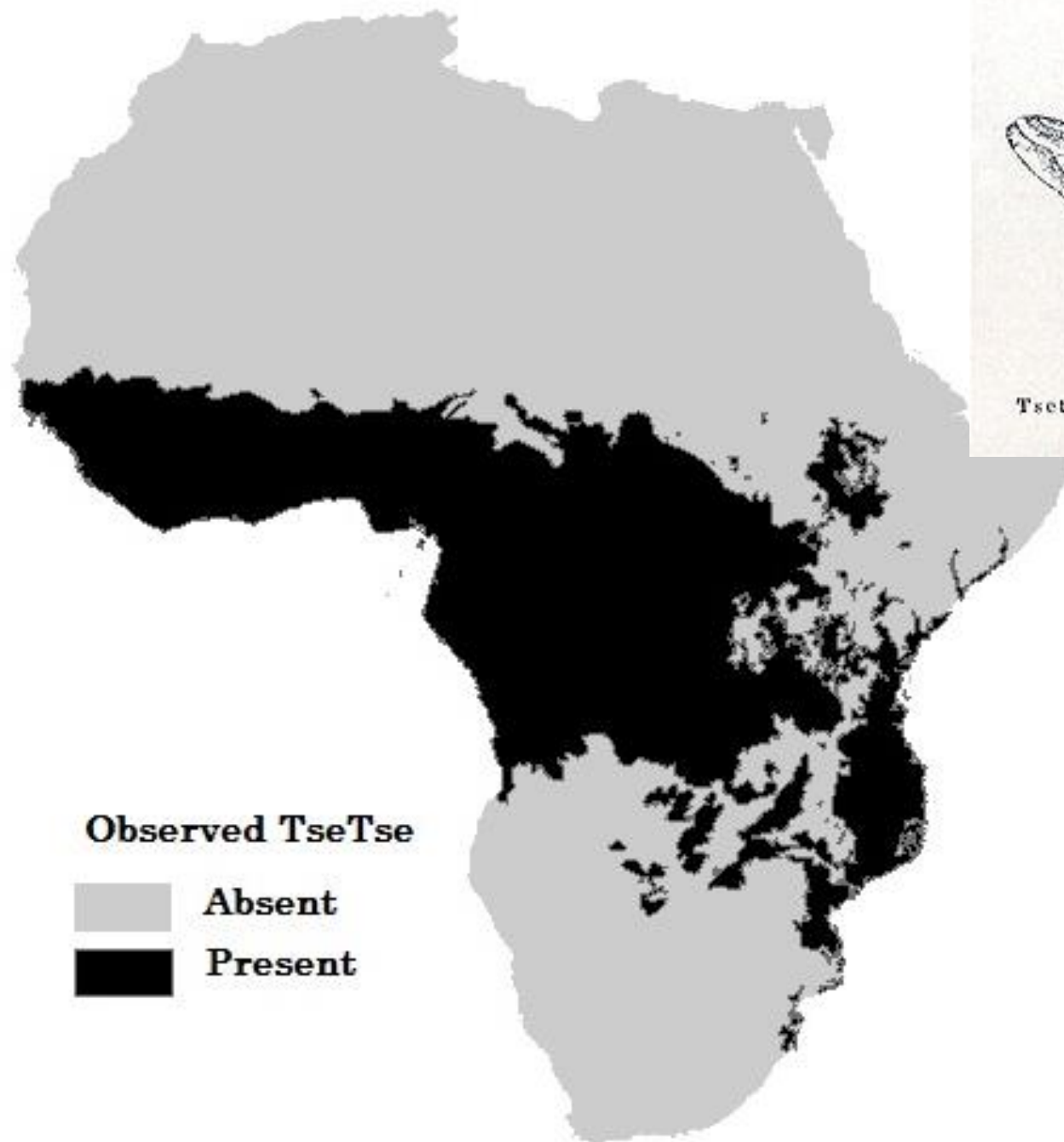


Systems of rural production

Tropical rainforest	Slash and burn agriculture
Rainforest corridors	Settled farming
Fertile (wet) highland areas	Settled farming, mixed husbandry, cattle herding, (ploughs?)
Wet savanna	Agro-pastoralism
Dry savanna	Nomadic pastoralism
Thornbush savanna	Nomadic pastoralism
Desert	Hunting, Foraging

Agro-pastoralism





Observed TseTse

-  **Absent**
-  **Present**



Tsetsefliege (*Glossina morsitans*). ♀.
(Art. Tsetsefliege.)

Soil heterogeneity



Ester Boserup's thesis

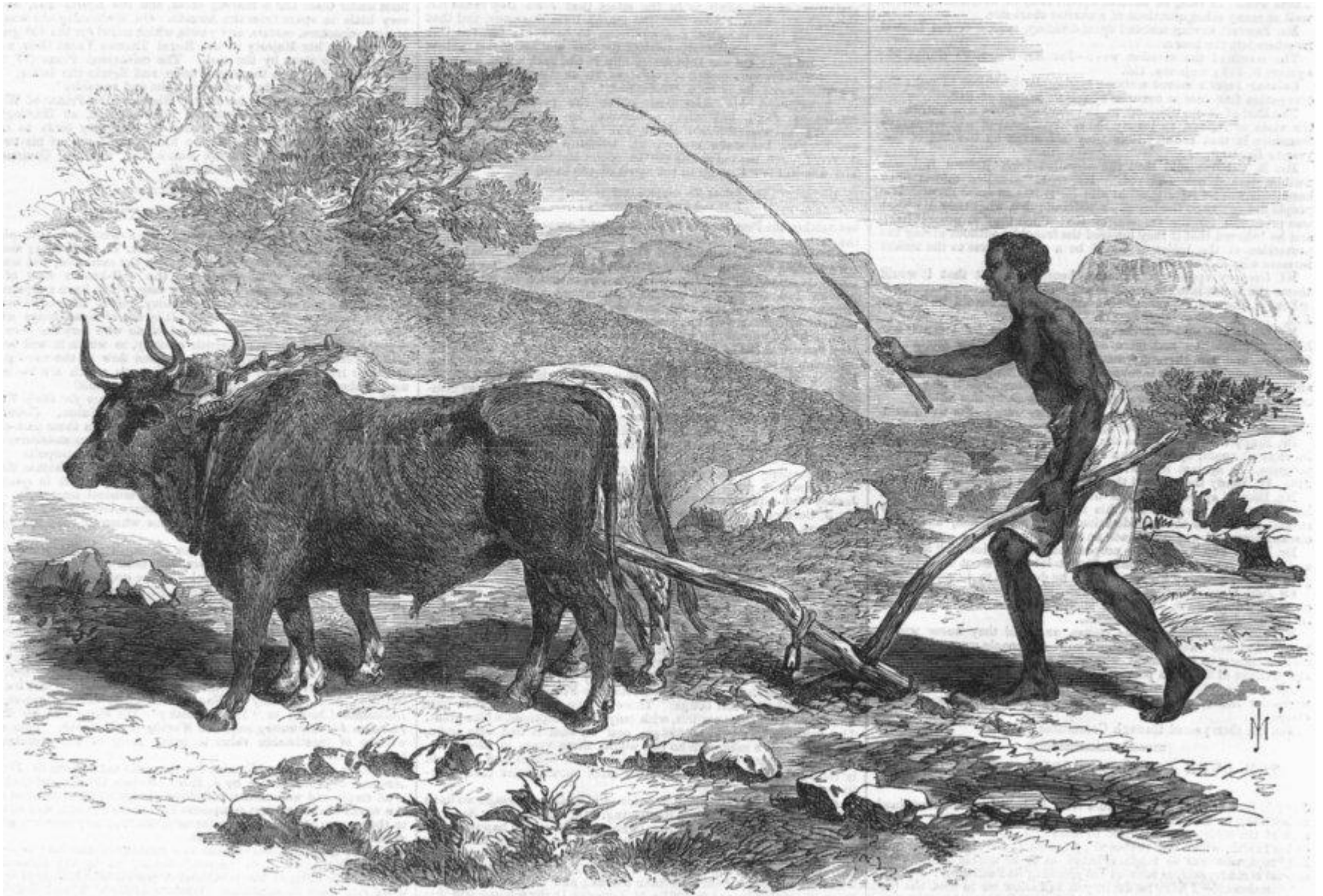
Population pressure

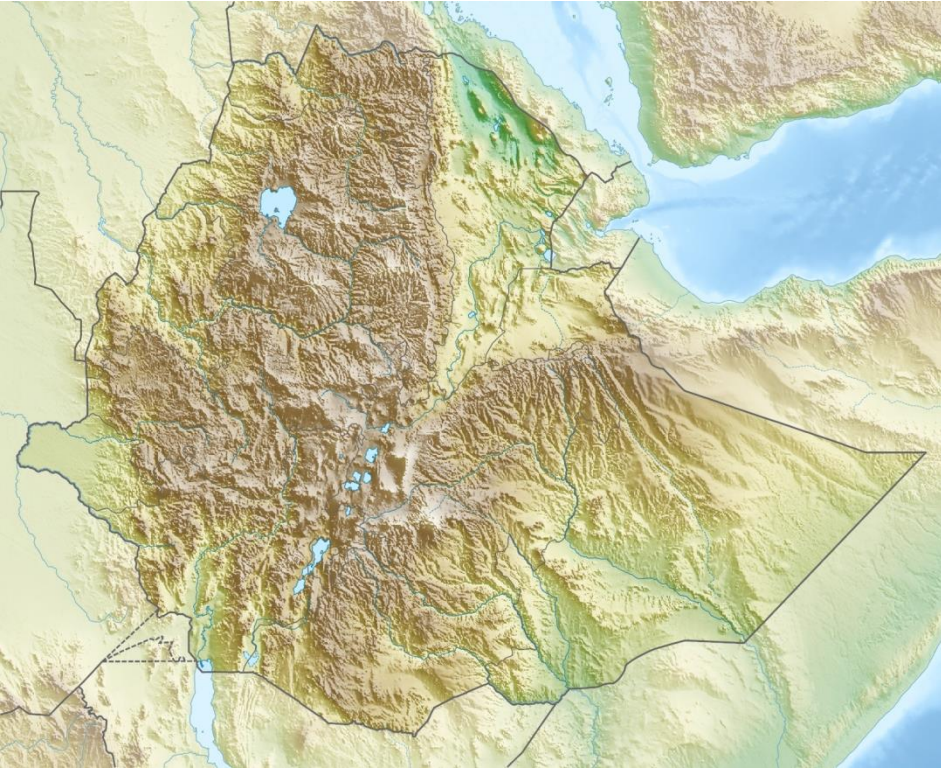


- Shifting cultivation; slash and burn (fallow 10-20 years)
- Short fallow cropping (2-3 years)
- Annual cropping (rotating fallows)
- Annual cropping (crop rotation)
- Multi-cropping



Ethiopia: the exception South of the Sahara





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Smithian growth theory

- Disperse human settlement > diseconomies of scale
- High internal transportation barriers (especially in tsetse zones) hamper market development (Smithian growth)
- Trade specialization > extensive agricultural commodities
- But why would you export the scarce factor: people? (external slave trades)
- Weak incentives for capital accumulation (infrastructure, urban constrictions, land investment).

Domar-Nieboer thesis

- High land-labour ratio's > ***either*** a free peasantry, ***or*** labour coercion (slavery, serfdom).
- Control over people more important than control over land (the latter can help the former).
- Africa has long tradition of indigenous slavery, human pawning, polygamy.
- Unfree labour constrains factor market development.

Jeffrey Herbst's thesis

- Vast rural hinterland, low population densities > raises barriers to state formation.
- marginal cost of taxation exceed marginal revenues.
- Flexible and permeable territorial borders, defence is too costly.
- Raiding instead of campaigning (compare strategy of Roman expansion).

Conclusion

- Explanatory narratives regarding the roots of African poverty are interconnected.
- Historians need to explore these causal interactions, some economist stare blind on mono-causal stories of African poverty.
- Whatever 'dependency' thinkers or neo-institutional economists have to say, Africa's bio-geography is unique and it shaped the African development path long before external forces started to have an impact.
- Tomorrow we will further elaborate the factor endowments perspective on the history of African state formation.