

Famine: the Geography of Scarcity



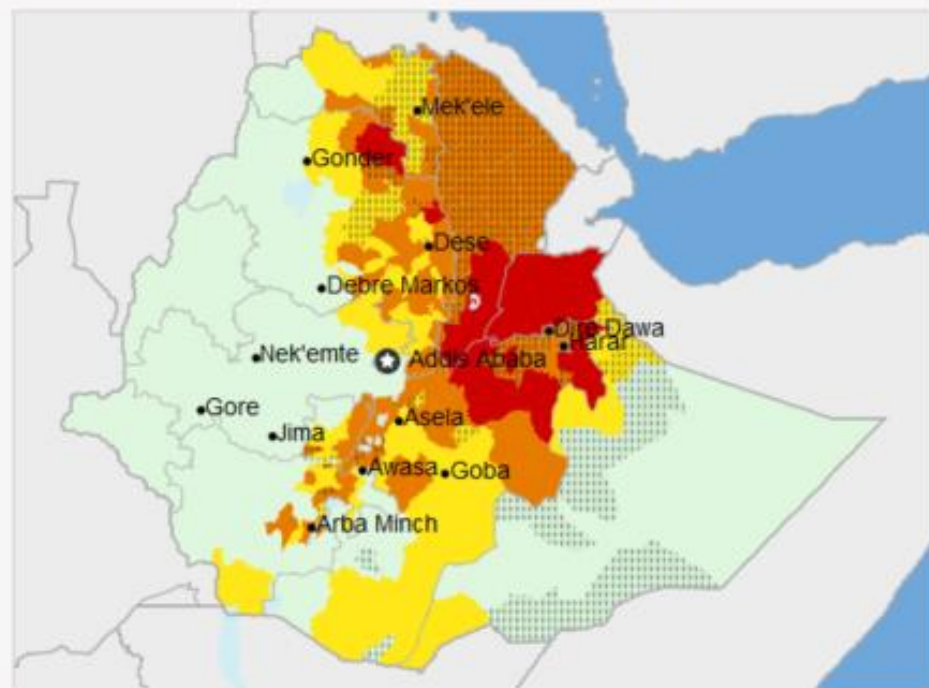
Ethiopia



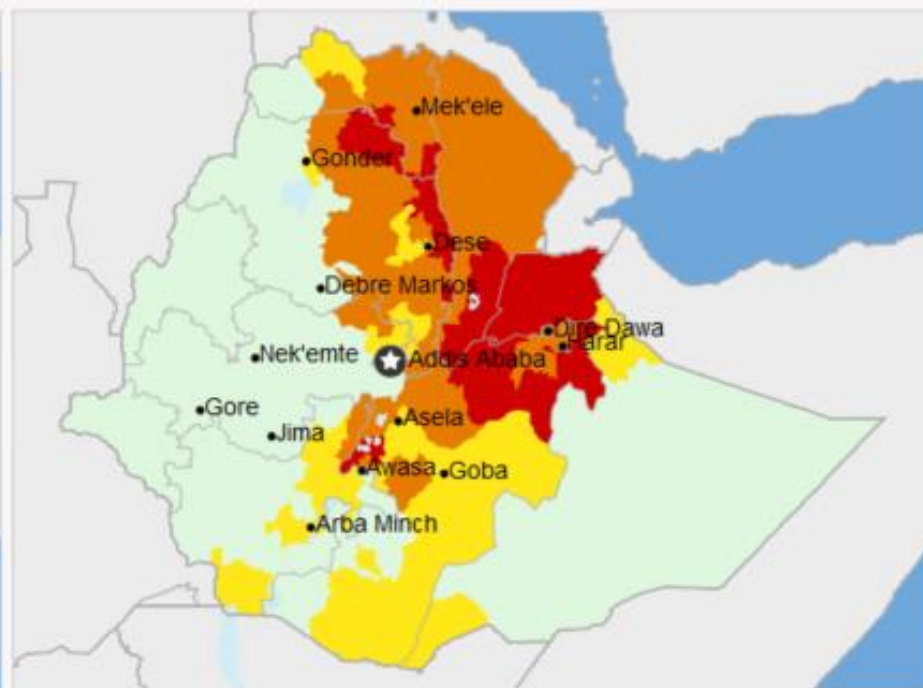
Belg prospects improve with heavy rainfall in April, but Emergency likely to continue

April 2016

Near Term: February - May 2016



Medium Term: June - September 2016



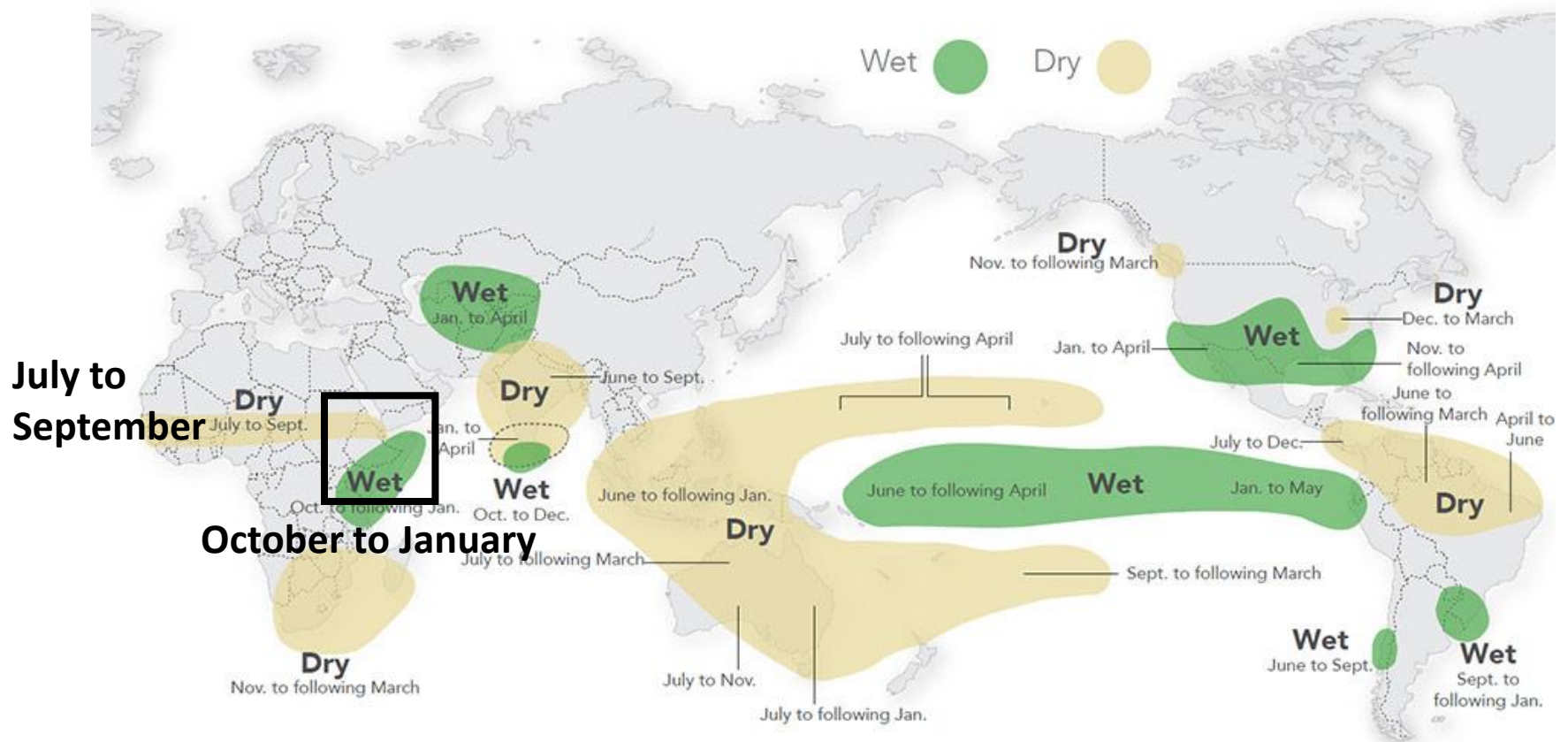
IPC 2.0 Acute Food Insecurity Phase

1: Minimal 2: Stressed 3: Crisis 4: Emergency 5: Famine



Would likely be at least one phase worse without current or programmed humanitarian assistance

El Niño's global effects

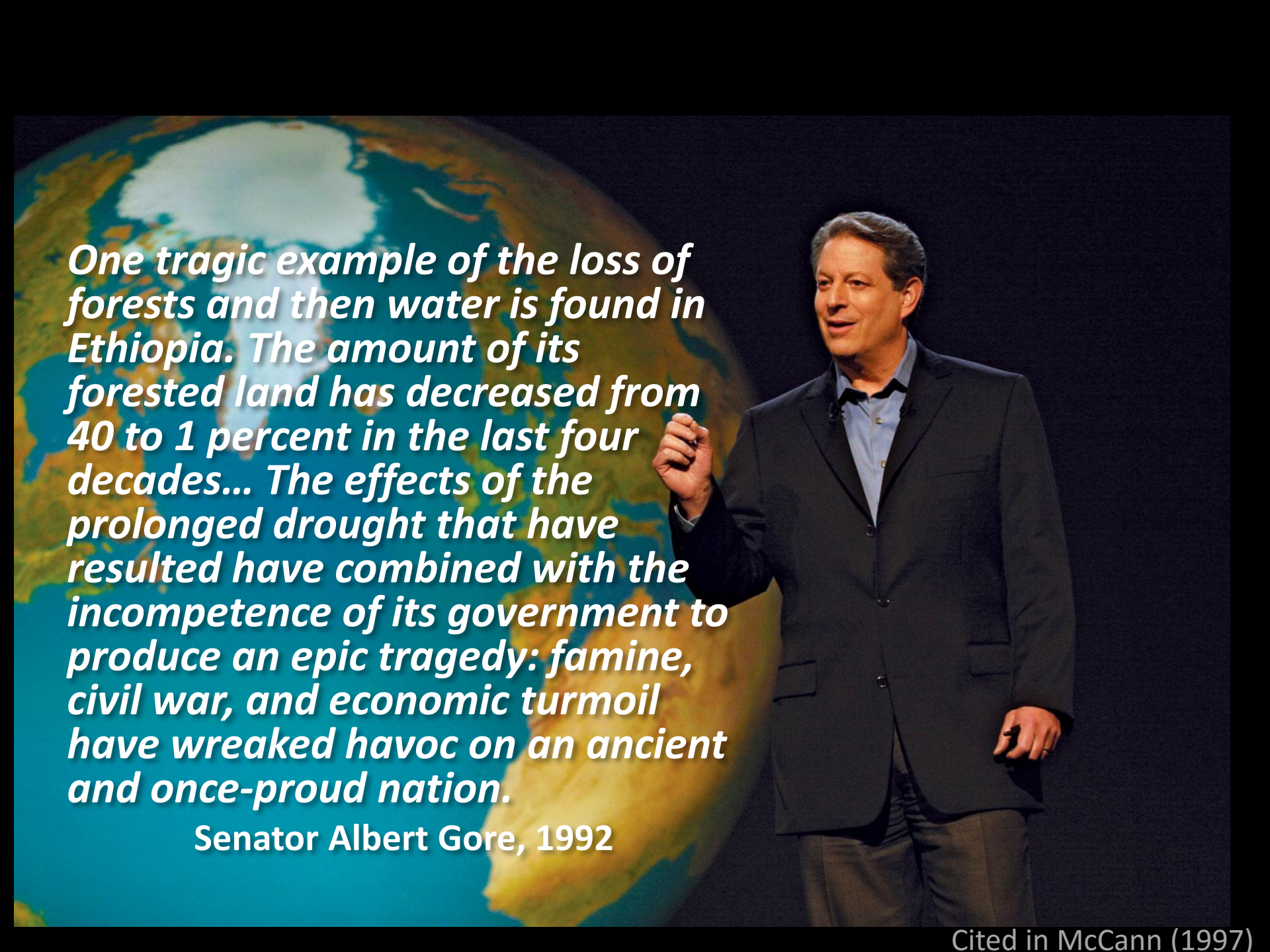


Famine in 1983-1985

- [Michael Buerk's news stories](#) sparked a global aid movement, including the landmark [Live Aid concert](#)
- The [happy ending 30 years later](#)
- But how did people get to this point?



1985 Winner in Feature Photography: Stan Grossfeld, The Boston Globe, for his series of photographs of the famine in Ethiopia and for his pictures of illegal aliens on the Mexican border.



One tragic example of the loss of forests and then water is found in Ethiopia. The amount of its forested land has decreased from 40 to 1 percent in the last four decades... The effects of the prolonged drought that have resulted have combined with the incompetence of its government to produce an epic tragedy: famine, civil war, and economic turmoil have wreaked havoc on an ancient and once-proud nation.

Senator Albert Gore, 1992



Deforestation and degradation

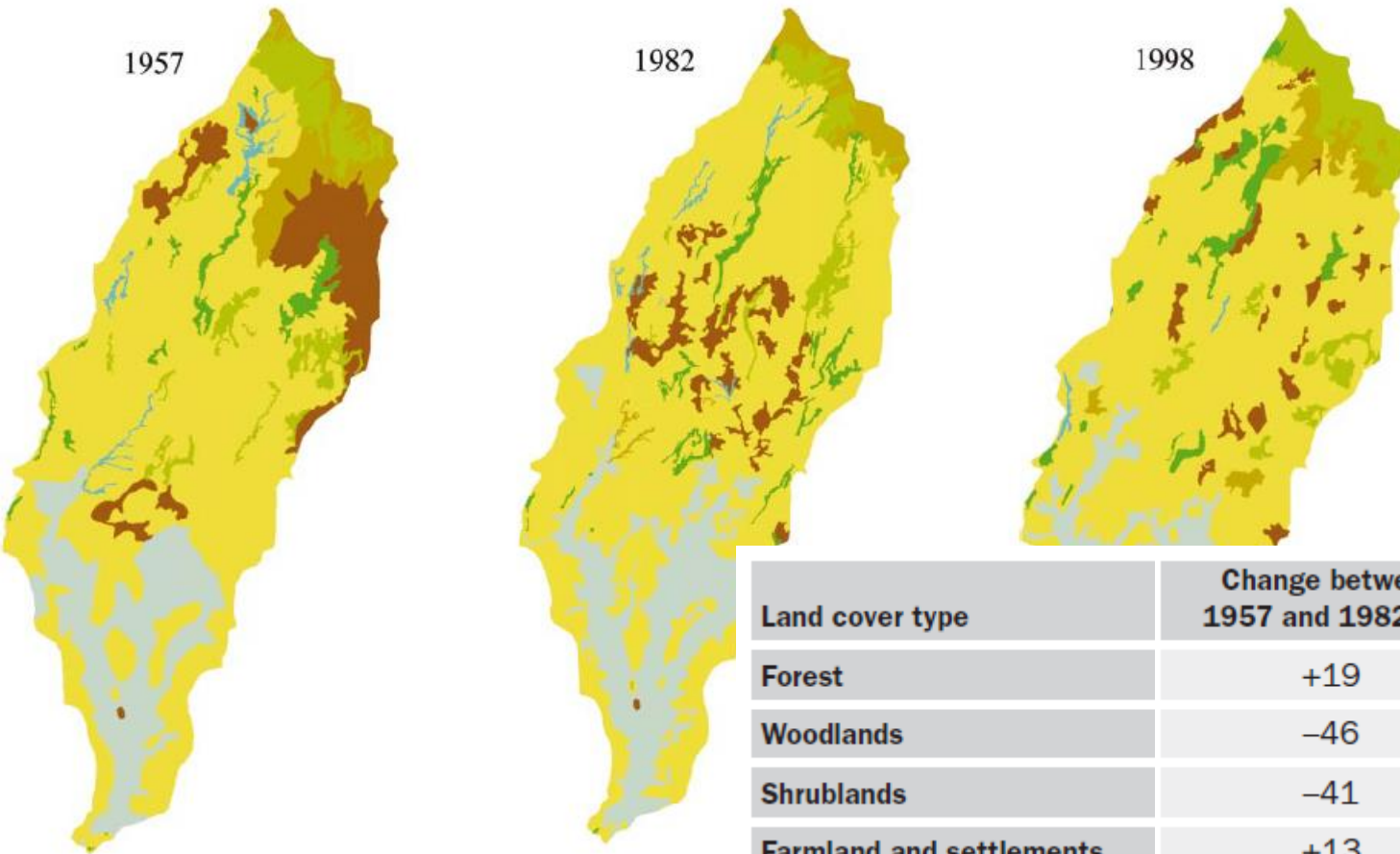
- **40%** = Ethiopia's pre-20thC. forest cover estimate
- **<3%** = forest cover at the time of the 1983-5 famine
- Frequently cited as a key contributor to famine
- Part of a discourse of overpopulation and overexploitation of natural resources

Table 1. Decline in forest cover

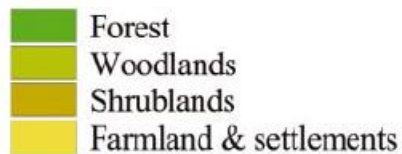
	Original extent of forest	1950s	1990	2000
Ethiopia	65%	16%	2.7%	2.2%
Highlands	90%	20%	n.a.	5.6%

Berry (2003) *Land Degradation in Ethiopia: its extent and impact* (World Bank report)

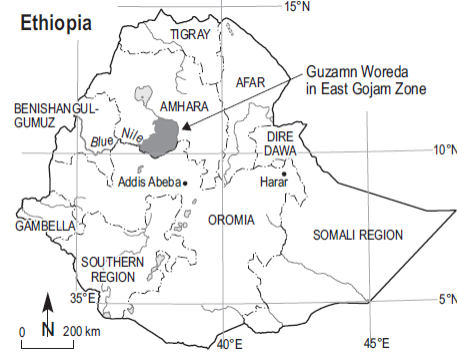
Evidence for deforestation?



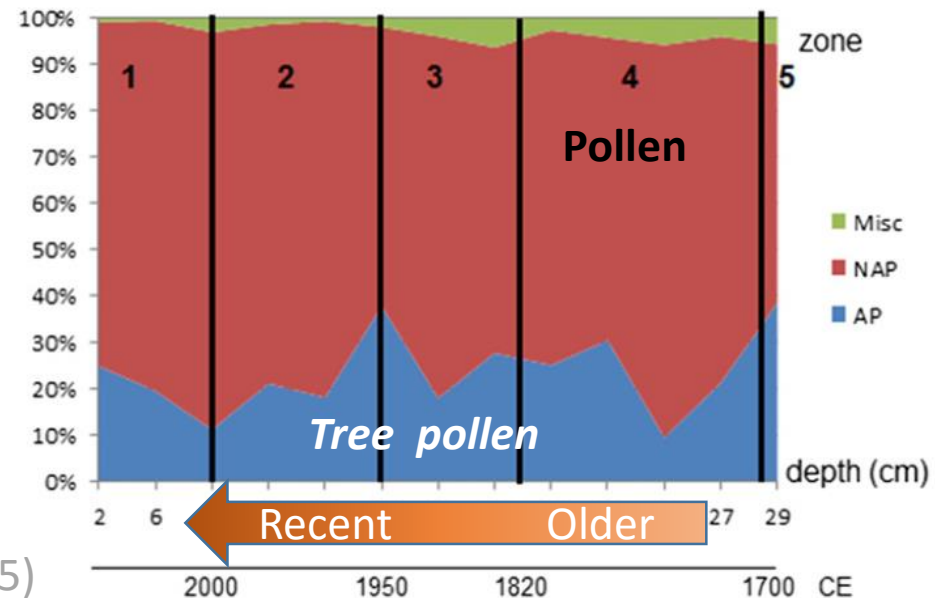
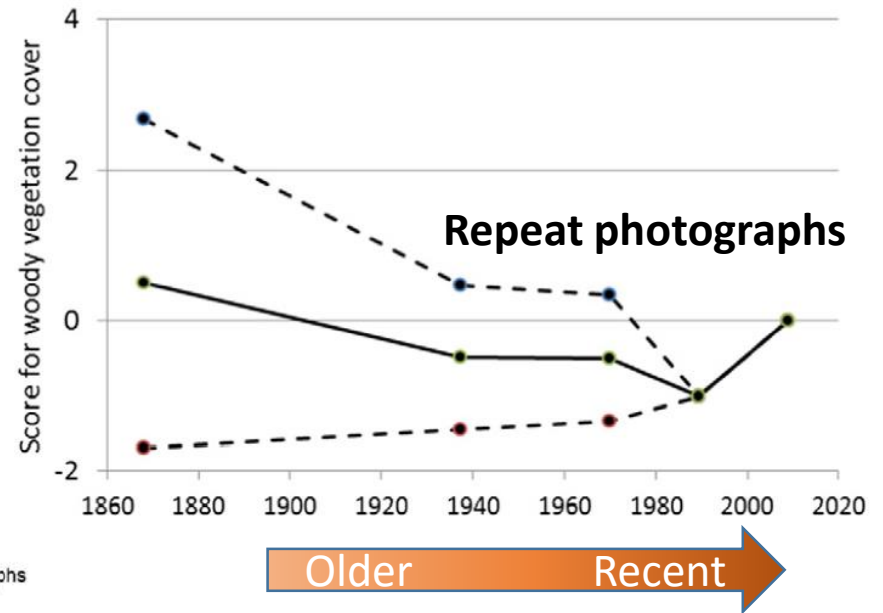
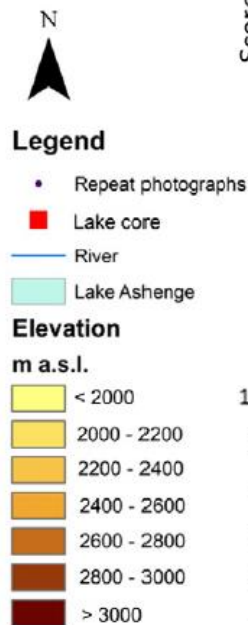
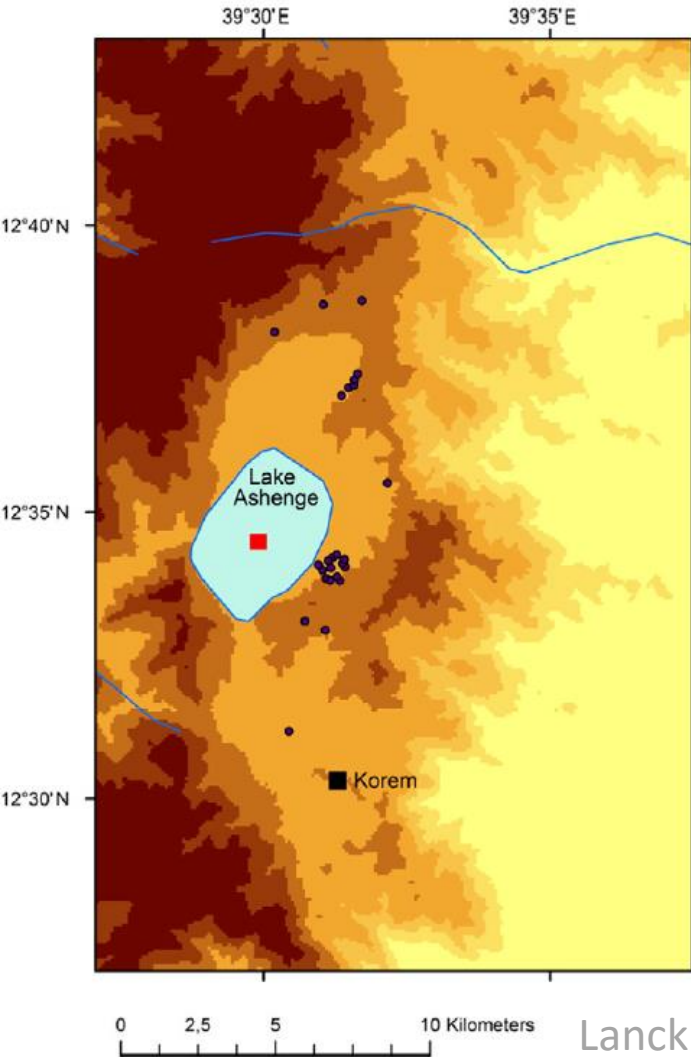
Legend



Land cover type	Change between 1957 and 1982 (%)	Change between 1982 and 1998 (%)
Forest	+19	+27
Woodlands	-46	+86
Shrublands	-41	+8
Farmland and settlements	+13	-2
Grassland/degraded land	-50	-28
Riverine trees	-40	-66
Marshland	+15	-5
Pond	—	+100



Lake Ashenge



Lanckriet *et al.* (2015)

Spot the trees!

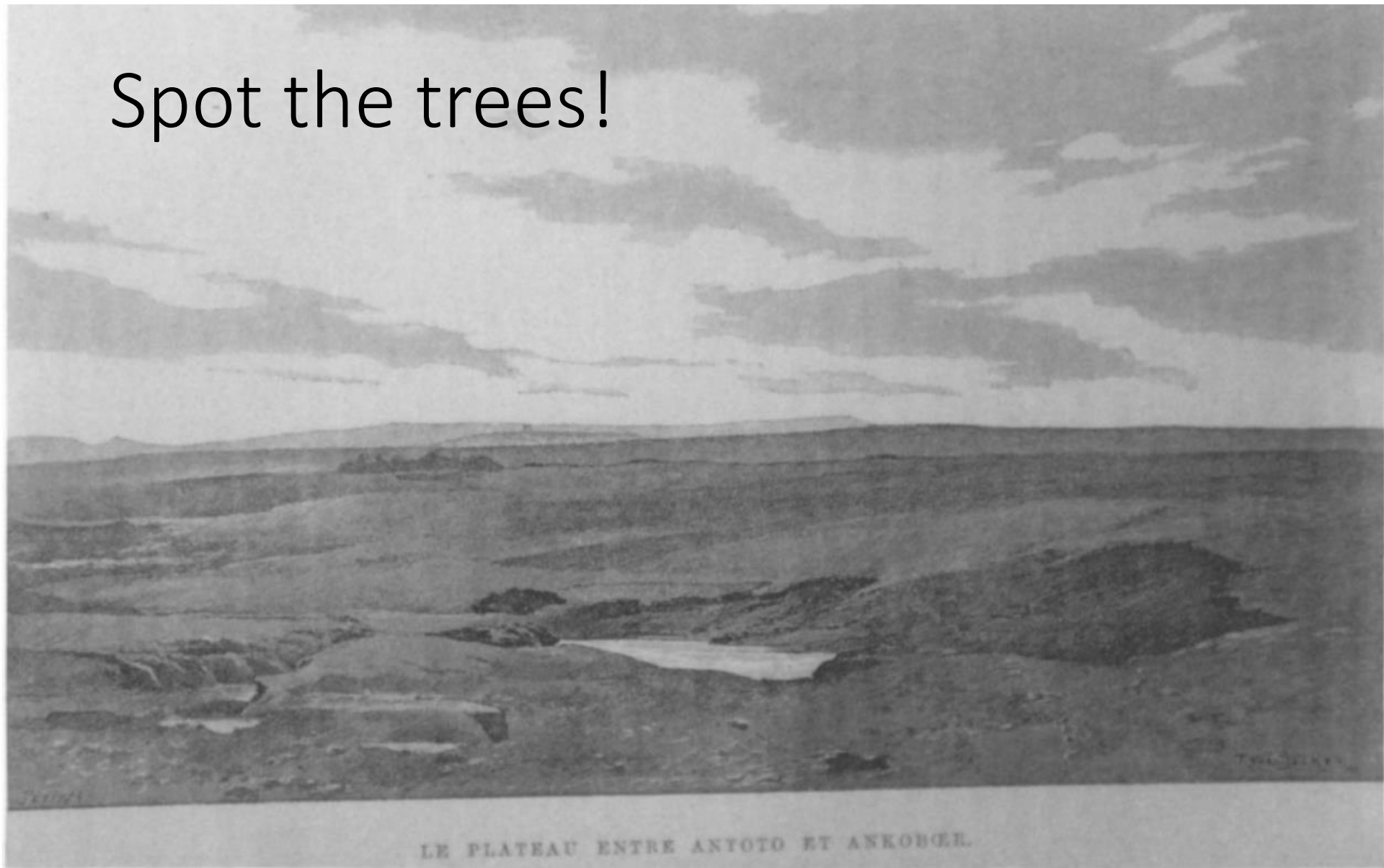


Figure 1. View of the Shawan Highlands, 1888.



Photo by Kathleen Colverson ([2014](#))

Cultivation of an eco-myth

- Placed responsibility in the hands of those who were starving, rather than those in power
- Shifted blame away from governments who had supplied arms to and bought food from Ethiopia
- Linked neatly into the environmental movement, which had been growing since the 1960s



Climate, soil erosion and famine

Land dynamics



Recorded famines

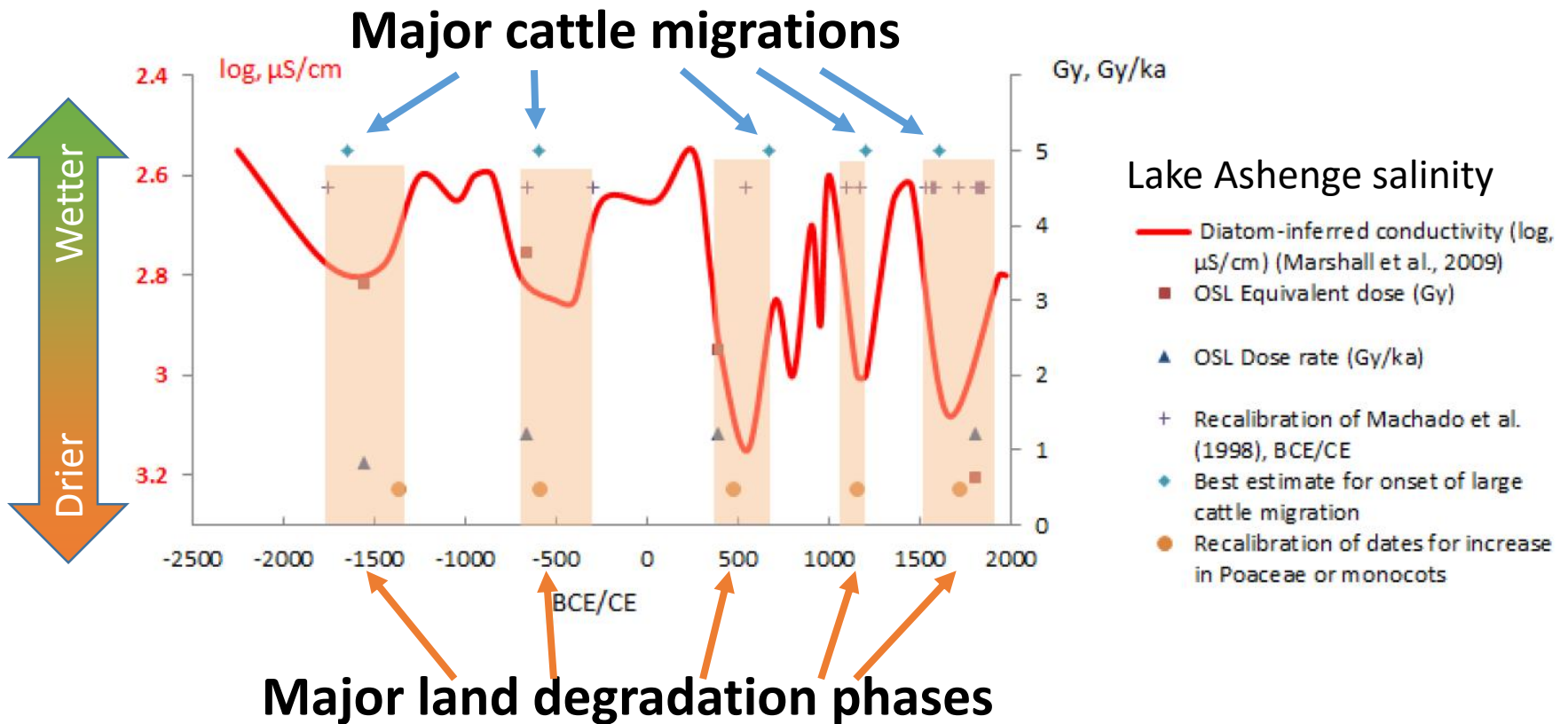


Climate phases





Cattle and land degradation



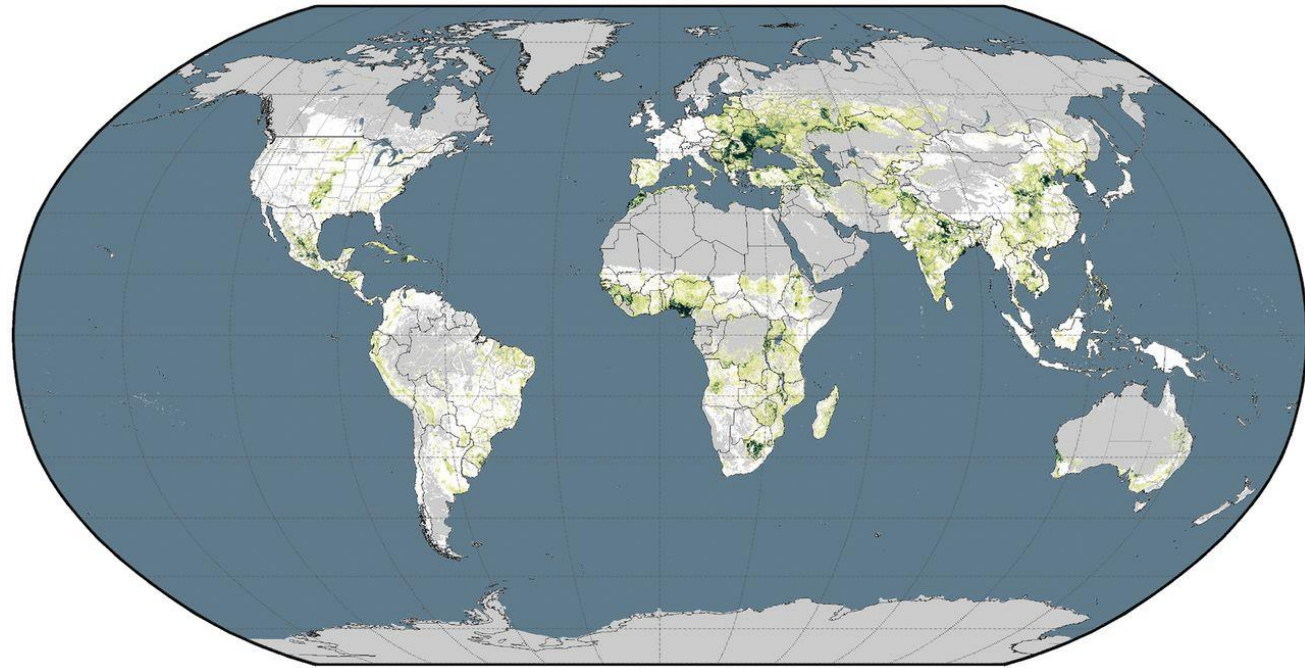
What we've learned so far...

- Theorising famine and scarcity (Sangeetha)
- The role of climatic variability in food shortage
- What makes societies resilient or vulnerable
- Crop choices and agricultural systems
- Climate change and societal collapse
- Environmental determinism and eco-myths
- Critical thinking about humans and environments

Future challenges

- Developing crops for the poorest people under an economic model that prioritises profitability
- Boosting food availability while avoiding monocultures, biodiversity losses and pollution
- Dealing with uncertainties in climate predictions
- Promoting equality, respect and fairness
- Reducing corruption
- Early warning systems and effective food distribution systems that prevent famines

Areas where crop yields can potentially be increased across the globe



increase in million kcal / ha / yr



Areas where food production's environmental impacts can be reduced

