

Soils in the international arena: Why do we do so little?



Hans Hurni
University of Bern, Switzerland
9 March 2006

1. Soils and global sustainable development

1. Climate change
2. Demands on agriculture
3. Soil and land degradation

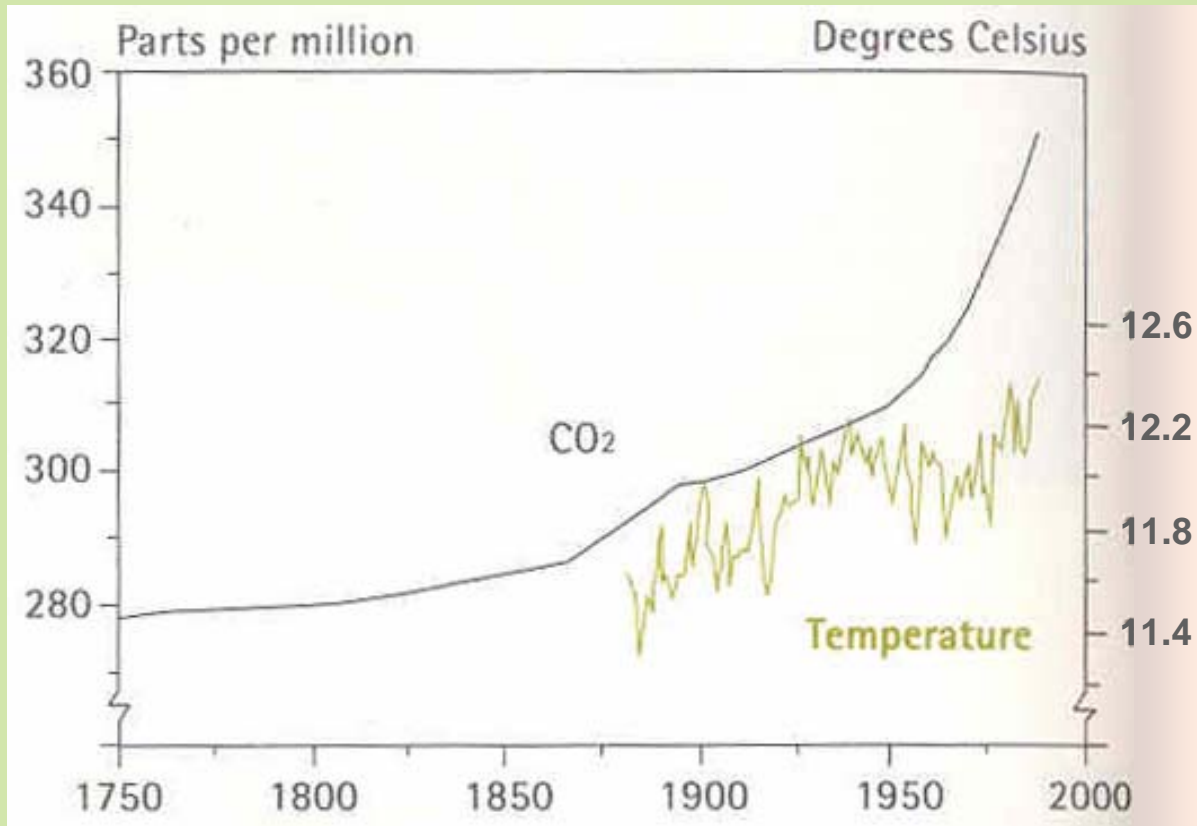
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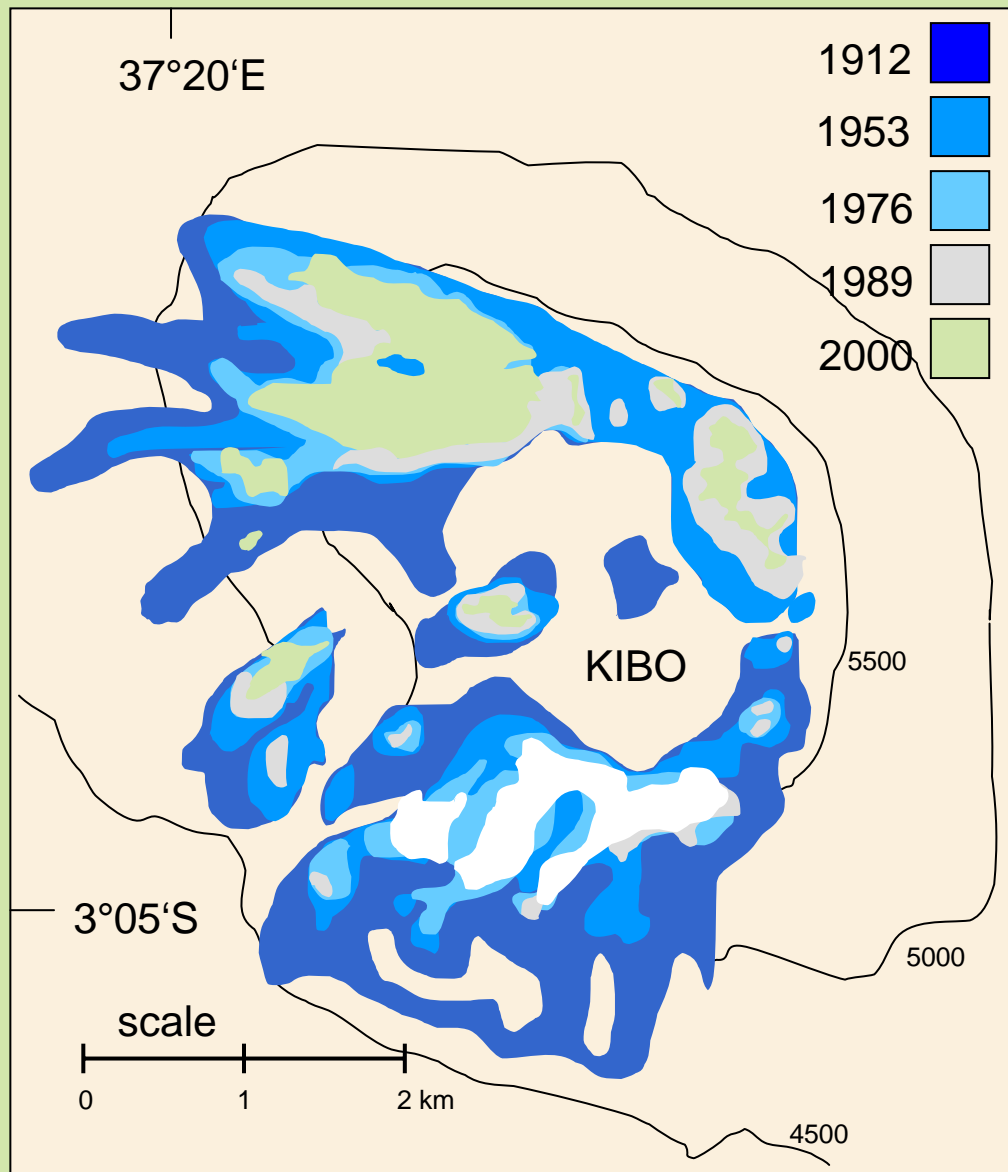
3. Soil and land degradation

Atmospheric concentration of CO₂ 1750 – 1988 and average global temperatures 1880 – 1998



Kilimanjaro

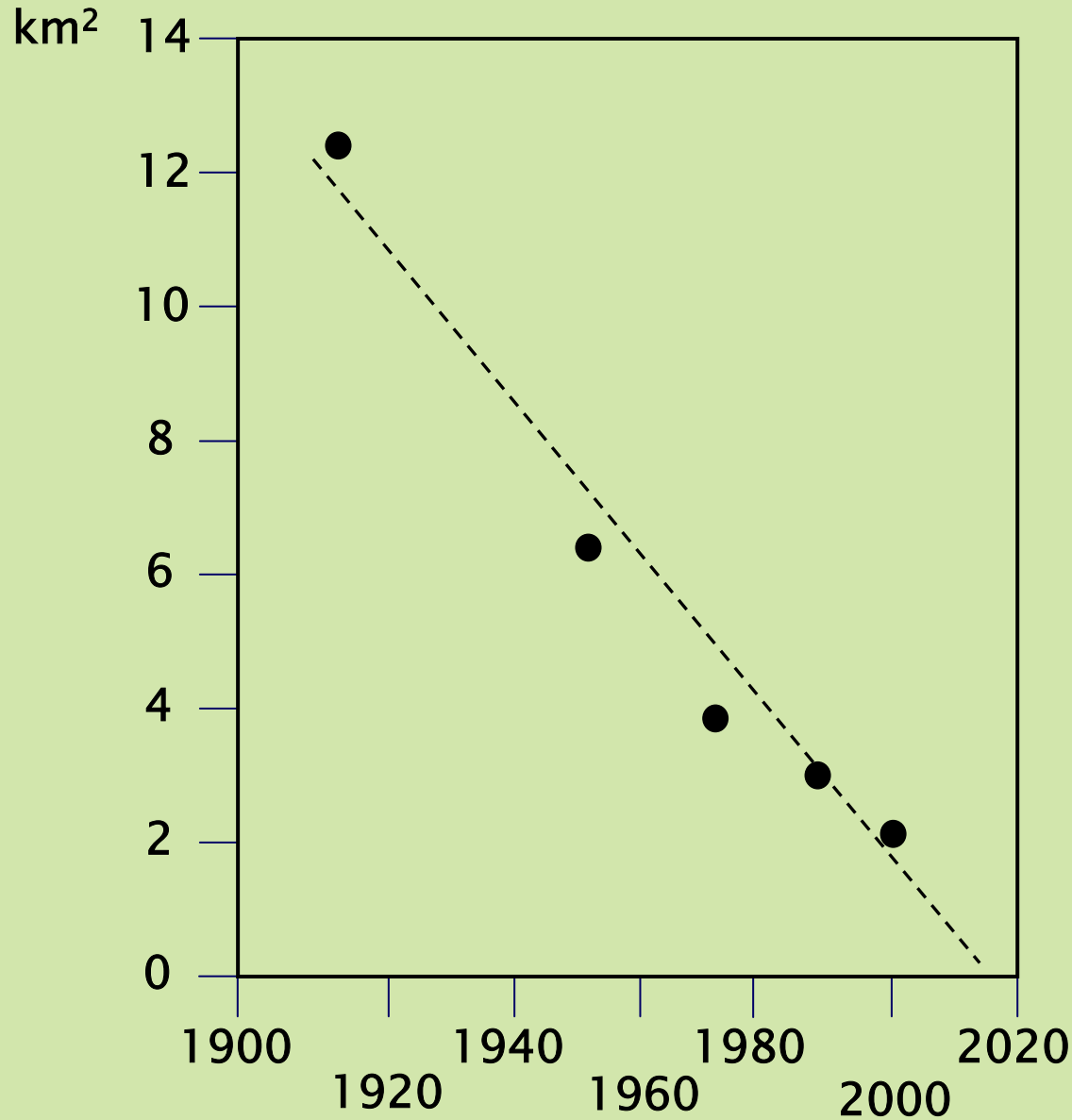




Reduction of ice surface
on Mount Kilimanjaro
from 1912 to 2000

(Hastenrath and Greischar, 1997)

Trend of ice decrease on Mount Kilimanjaro 1912–2020



After Hastenrath and Greischar, 1997



Google Earth

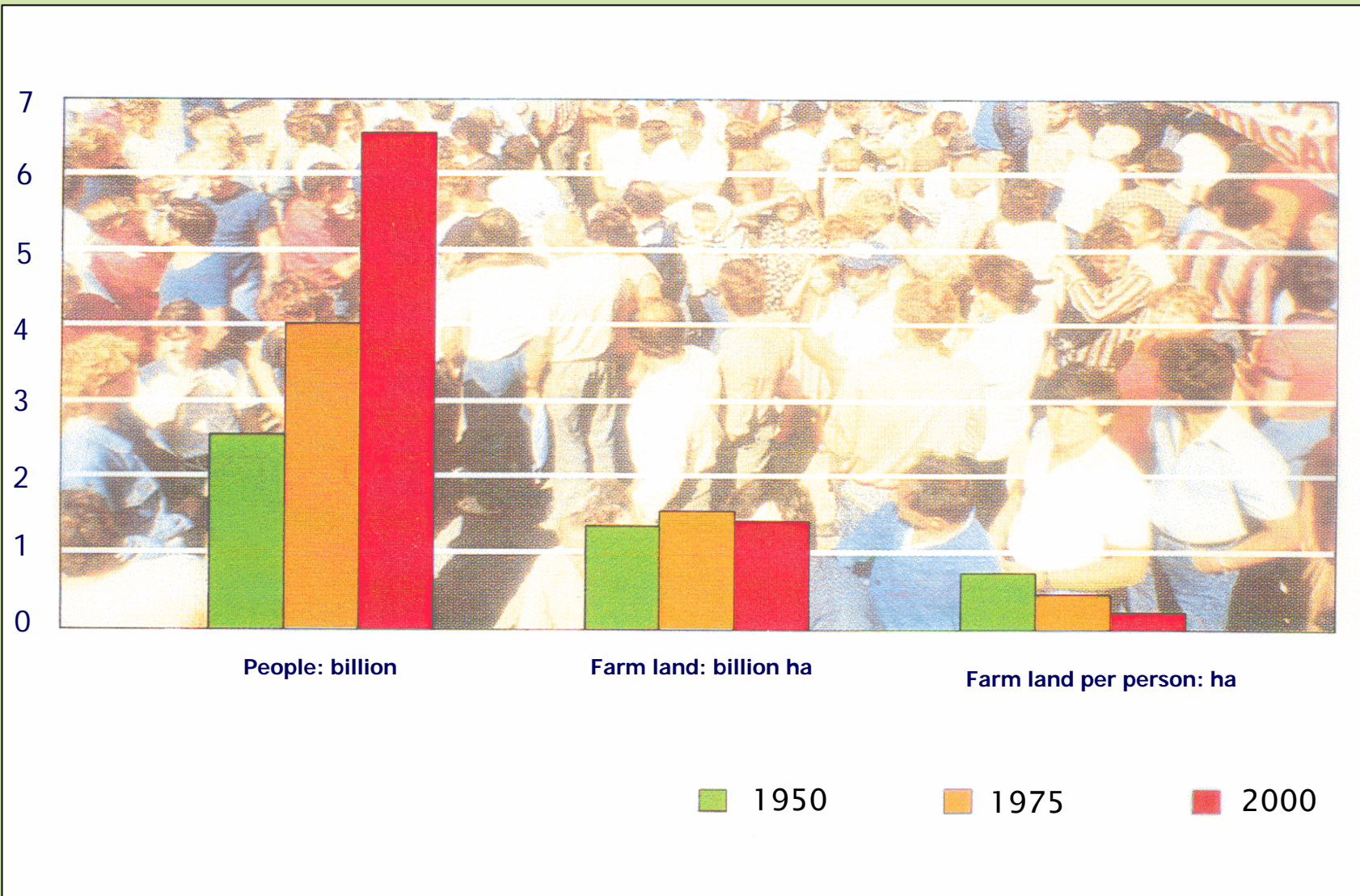
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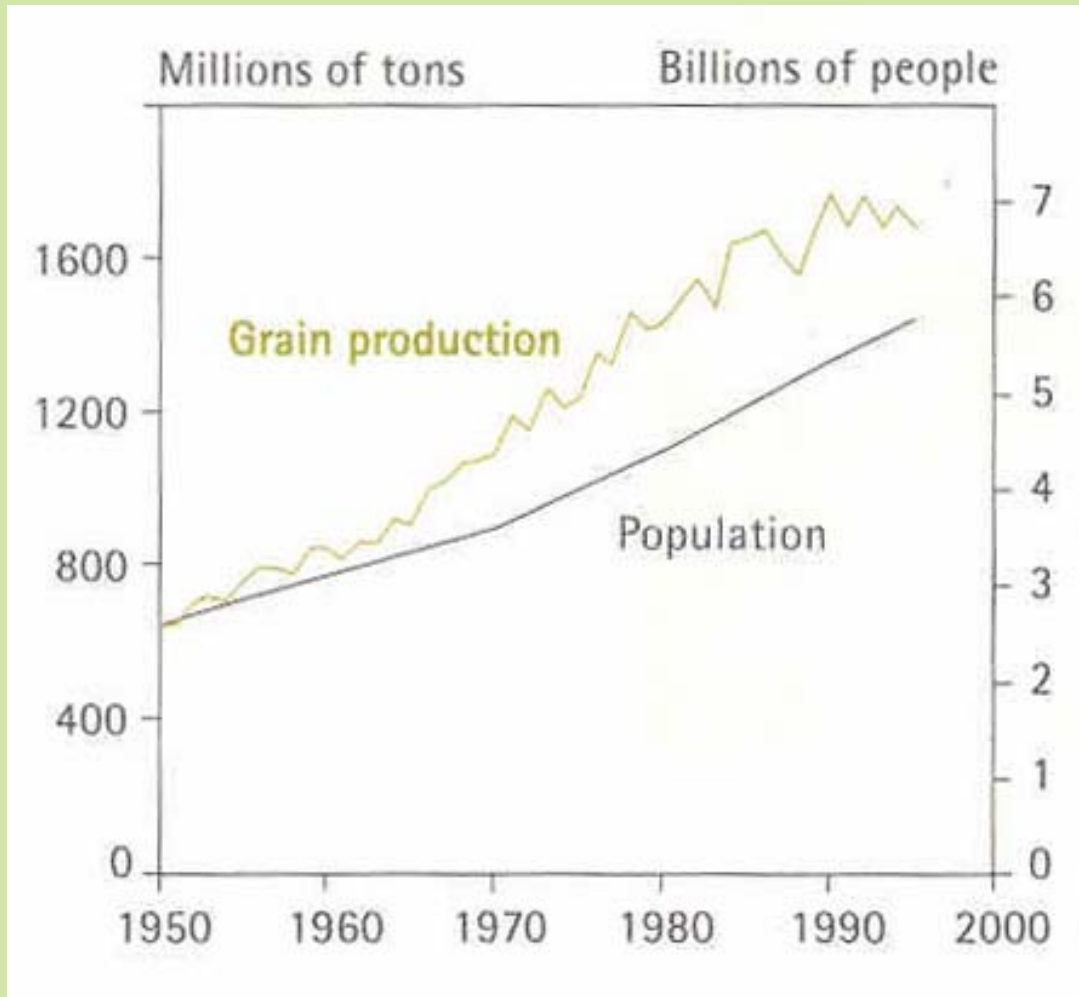
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More people means less land per person for food, feed, fibre and fuel production

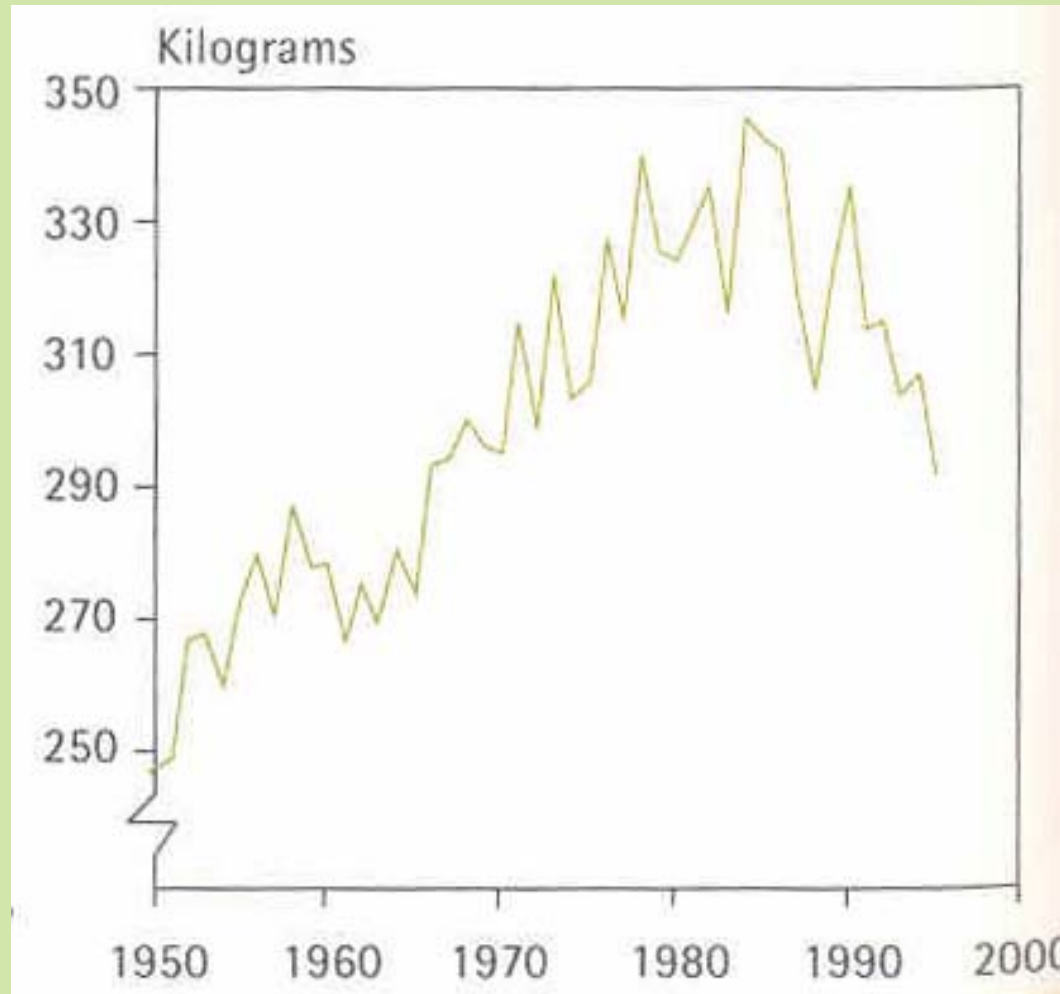


World grain production and world population 1950 – 1995



Source: Worldwatch

World grain production per person 1950 – 1995



Source: Worldwatch



SOWAP





Liniger



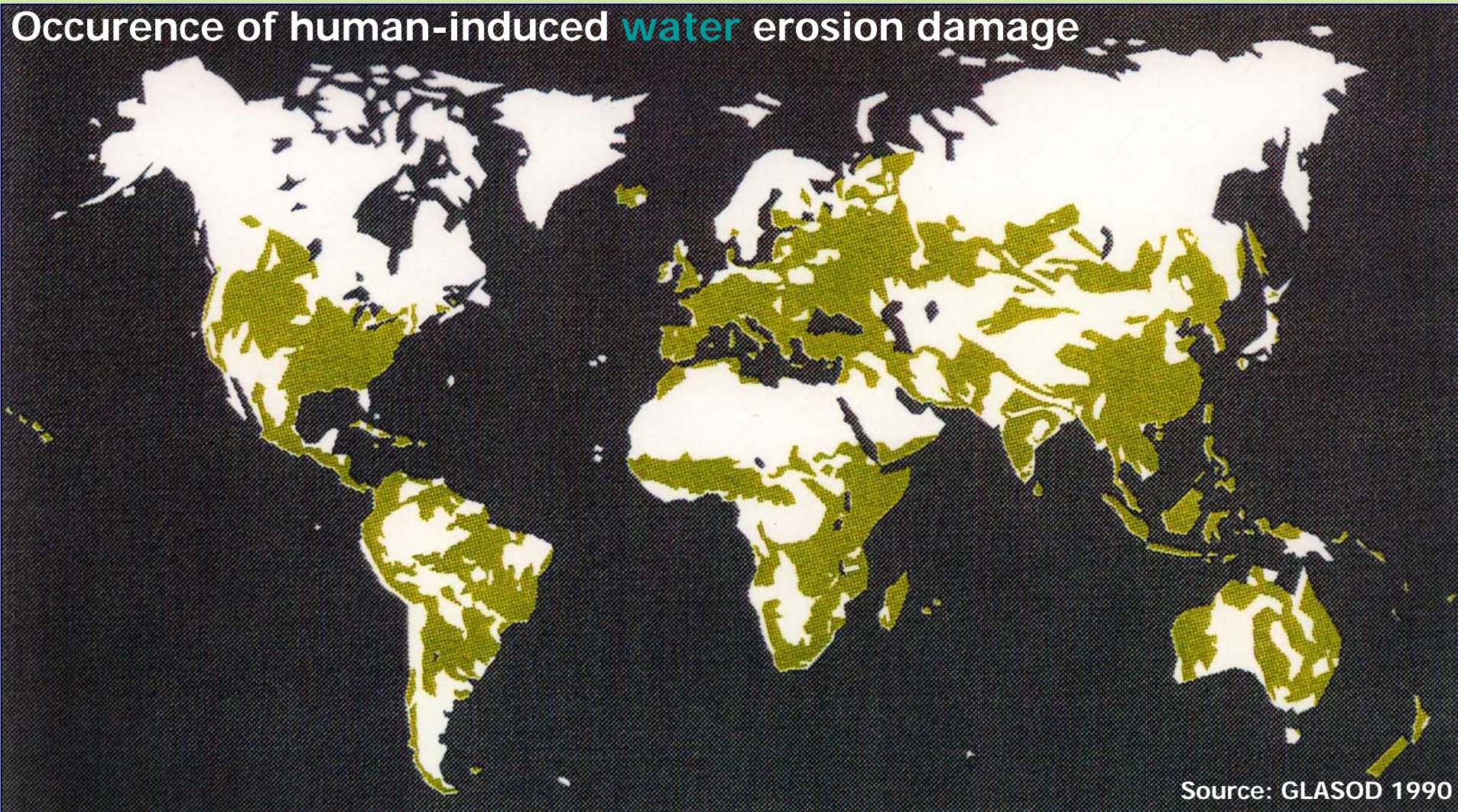


Foto: T. Wiesmann
Wiesmann

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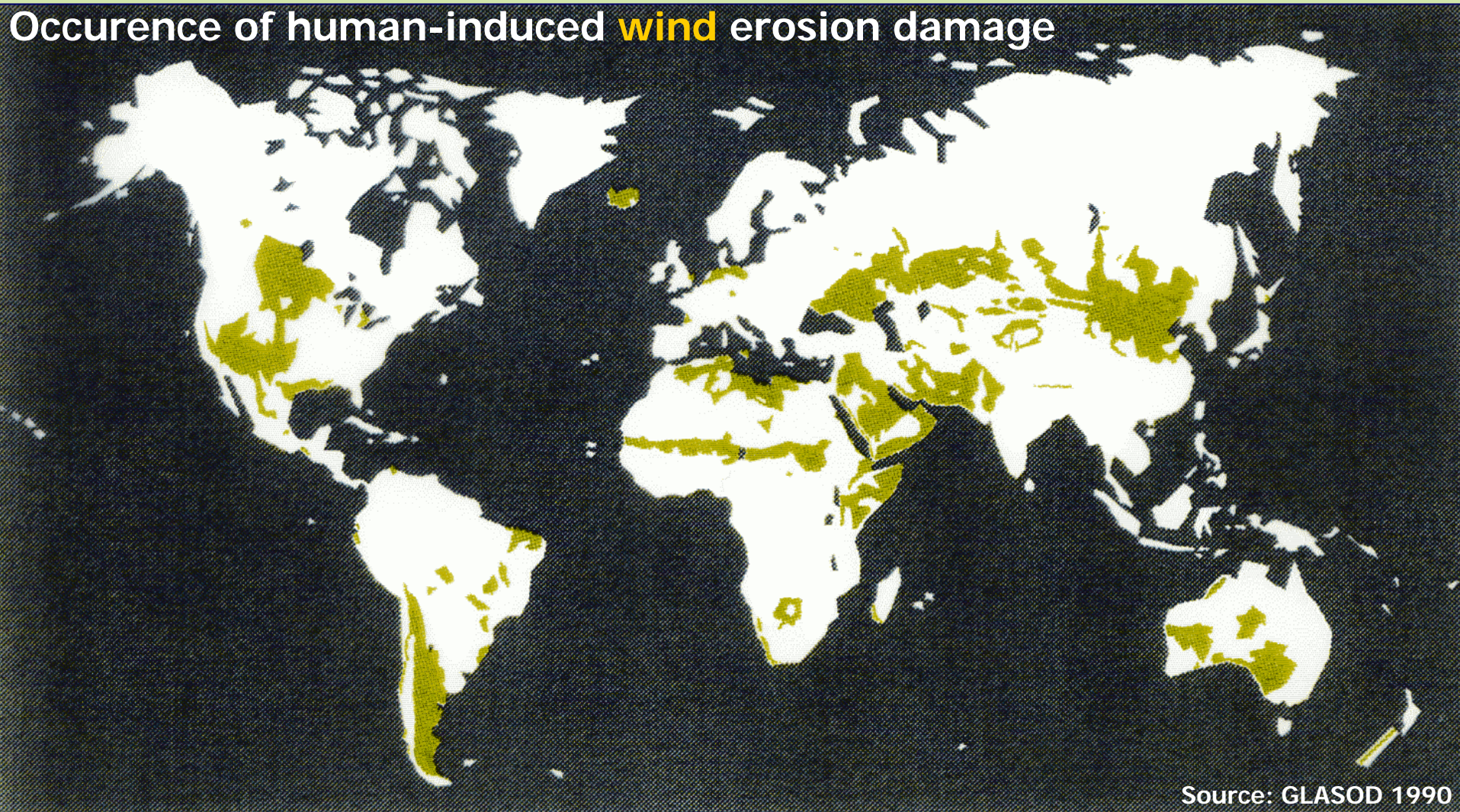
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Occurrence of human-induced **water** erosion damage



Source: GLASOD 1990

Occurrence of human-induced **wind** erosion damage



Source: GLASOD 1990

Google Earth



Ethiopia

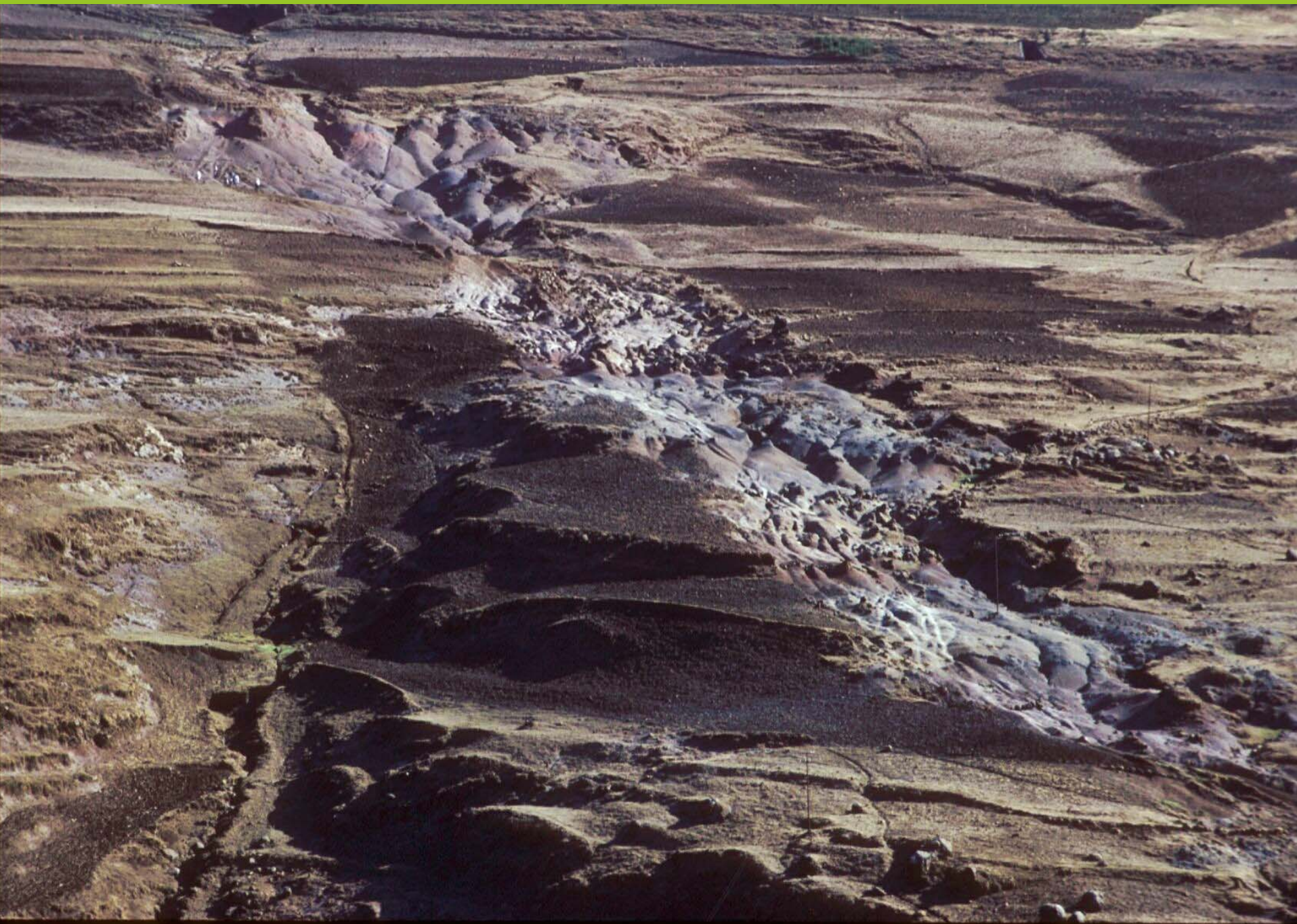




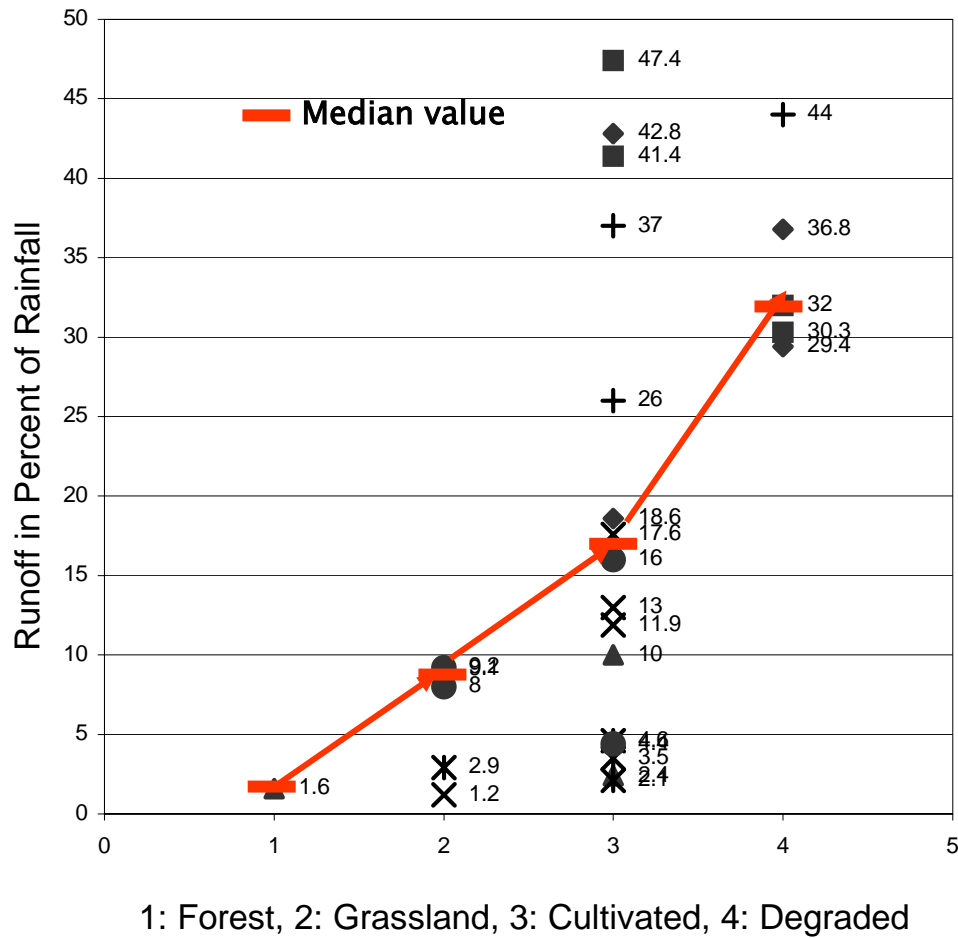
Debark



ISRIC 40 Years on: World Soil Issues and Sustainable Development – an Agenda for Action (Hurni Part I)

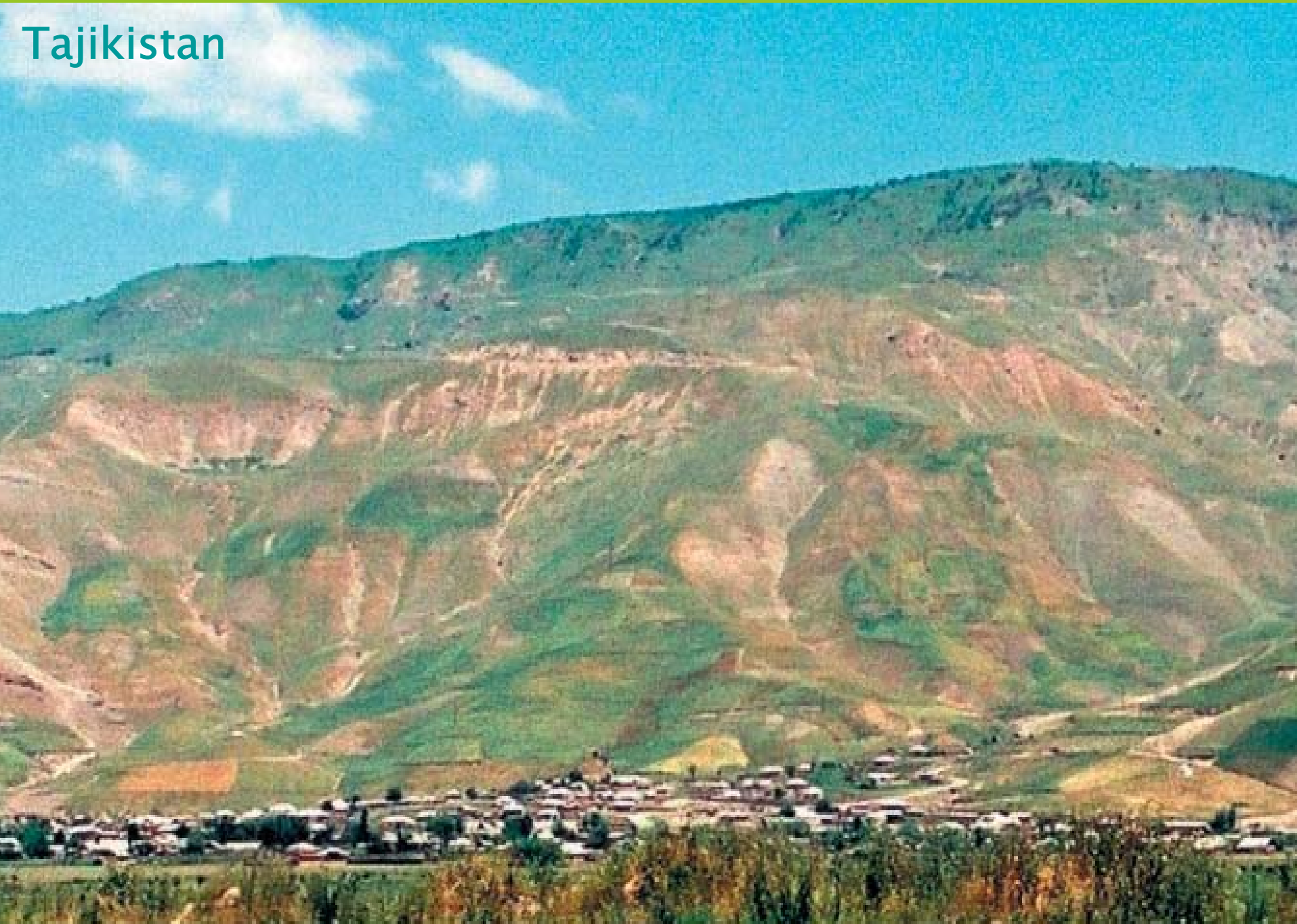


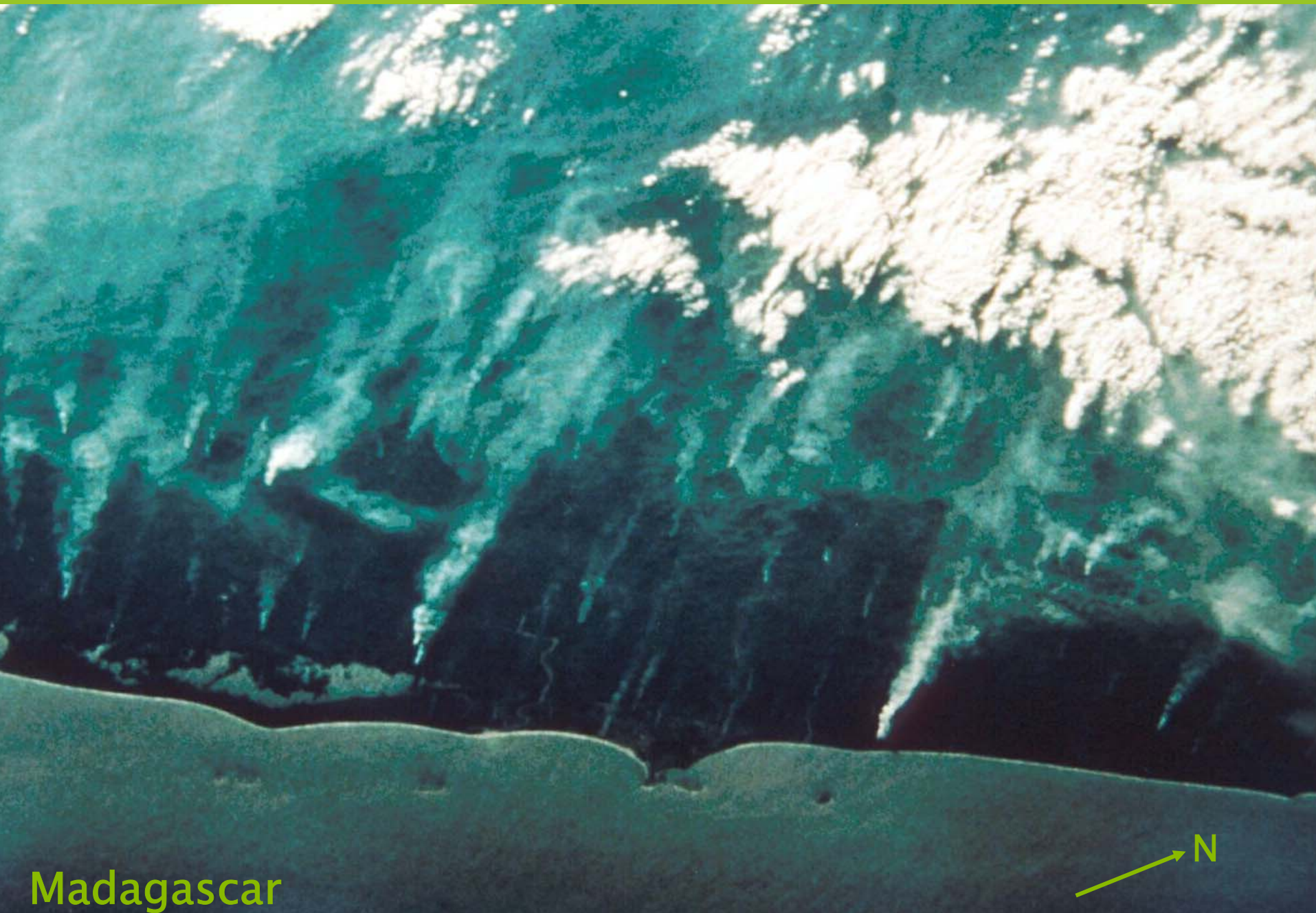
Runoff in Percent of Rainfall on Different Land Cover and Use Types



- ◆ Andit Tid
- Anjeni
- ▲ Dizi
- × Gununo
- * Hunde Lafto
- Maybar
- + Afdeyu

Tajikistan





Madagascar





U. Wiesmann



