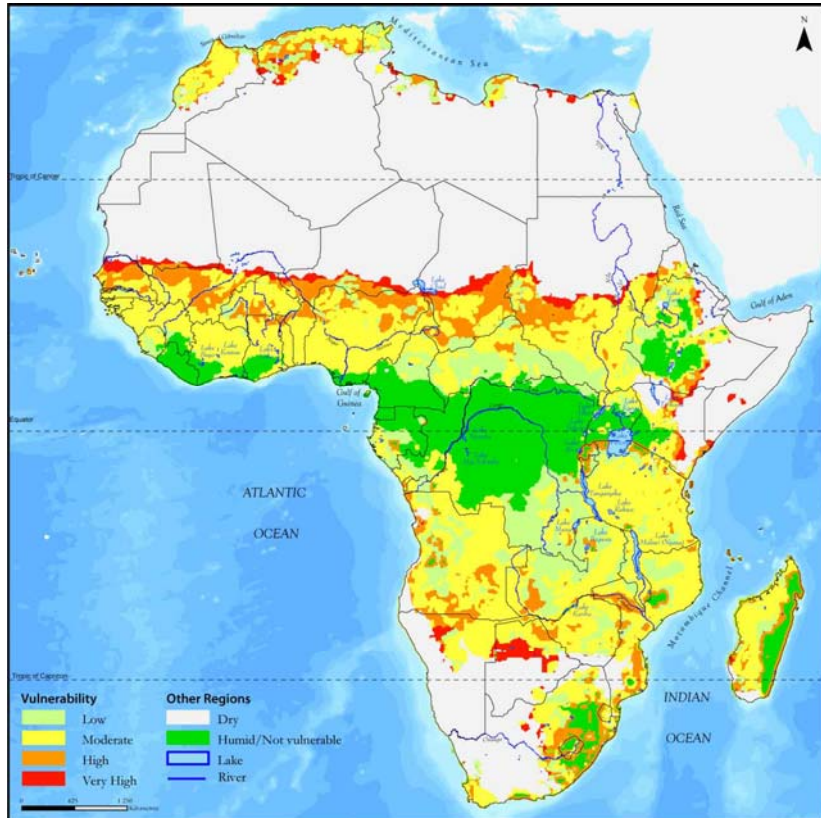




Fact Sheet Desertification

Africa



Map of desertification vulnerability in Africa (UNEP, 2008)

Area classified as drylands:

UNDP/UNSO 1997
 total: 1.293 million ha (43%)
 arid: 505 million ha (17%)
 semi-arid: 507 million ha (17%)
 dry sub-humid: 281 million ha (9%)

Area vulnerable to desertification processes:

Reich et al. 2001
 1364 million ha ≈ 46% of total African land area, of which are 16% (≈ 468 million ha) highly or very highly vulnerable

Degraded drylands in Africa including Western Asia: (Zika & Erb 2009)

| Region | Degraded area (million km ²) | Percent of dryland area |
|----------------------------------|--|-------------------------|
| Northern Africa and Western Asia | 1.207 | 33.8 |
| Sub-Saharan Africa | 2.597 | 22.8 |

Cumulative loss of productivity as a result of soil degradation (not limited to drylands): (Oldeman 1998)

| Cropland (%) | Pasture land (%) | Crops and pastures (%) |
|--------------|------------------|------------------------|
| 25 | 6.6 | 8.1-14.2 |

Type of human-induced soil degradation in drylands: (UNEP/GLASOD 1997)

| type of soil degradation | degraded (million ha) | percentage of degraded drylands |
|--------------------------|-----------------------|---------------------------------|
| water erosion | 119 | 37 |
| wind erosion | 160 | 50 |
| chemical deterioration | 14 | 5 |
| physical degradation | 27 | 8 |

Africa's land degradation hot spot (not limited to drylands):

Bai et al. 2008
 Africa south of the Equator (13% of global degrading area and 18% of lost global net primary production (NPP) between 1981 and 2003)

Area of drylands affected by human-induced soil degradation:

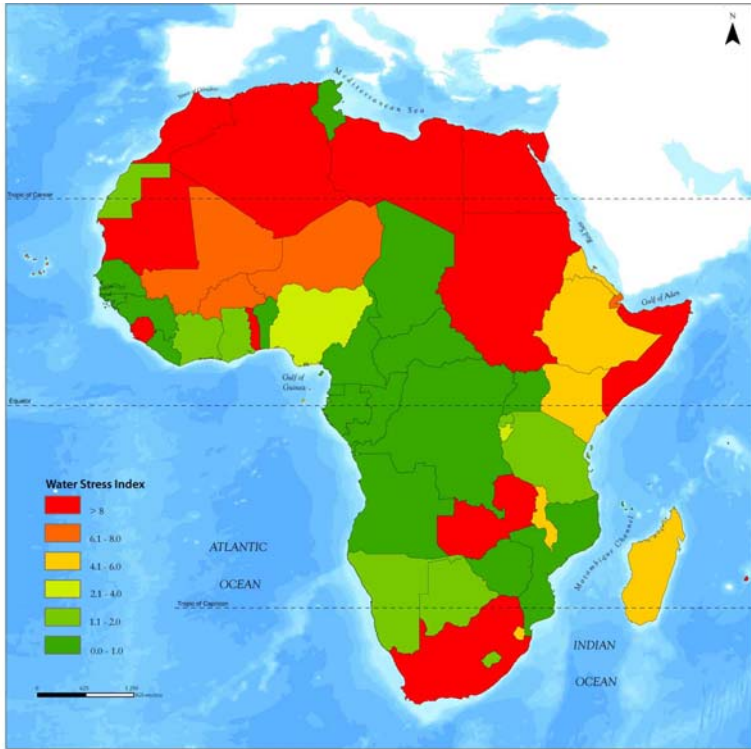
UNEP/GLASOD 1997
 332 million ha ≈ 11% of total African land area ≈ 25% of all susceptible drylands

Note: Reliability, validity and accuracy of the presented data are subject to debate. Objective of this data compilation is to provide a brief overview of the most significant facts on the magnitude and dimension of desertification-related problems. For more detailed information see the referenced literature.

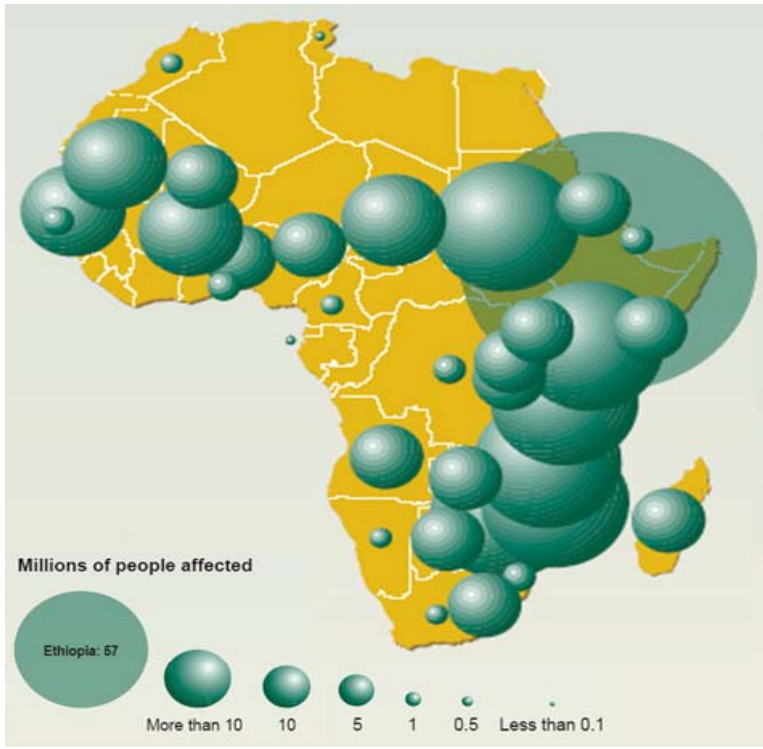


Fact Sheet Desertification

Africa



Map of water stress in Africa by country (UNEP, 2008)



People affected by drought from 1971 to 2000 (UNEP/GRID Arendal 2002)

Status of desertification in agriculturally used drylands: (Dregne, 1991)

| type of land use in drylands | total (million ha) | degraded (million ha) | degraded (%) |
|------------------------------|--------------------|-----------------------|--------------|
| irrigated lands | 10.4 | 1.9 | 18 |
| rainfed croplands | 80 | 49 | 61 |
| rangeland | 1,342 | 995 | 74 |

People affected by desertification processes: Reich et al. 2001

485 million \approx 65% of the entire African population

People living in African drylands:
 UNDP/UNSO 1997 325 million \approx 45% of the entire African population

Economic costs of desertification: *AGDP = Agricultural Gross Domestic Product

| Selected region/ country | Gross annual income loss (US\$ million)(% of AGDP*) | Gross discounted future loss in US\$ million (% of AGDP*) |
|--------------------------|---|---|
| Africa (total) | 9,296 (direct costs) Dregne 1991 | |
| Ethiopia | 332- 355 (10 -11) Drechsel & Gyiele 1999 | 2,431(36) Boj6 & Cassels 1995 |
| Malawi | 67-78 (9.5 - 11) Drechsel & Gyiele 1999 | 48-136 (18) World Bank 1992 |
| Mali | 58 - 68 (5.5 - 6.5) Drechsel & Gyiele 1999 | 19.3-76.6 (4) Bishop & Allen 1989 |