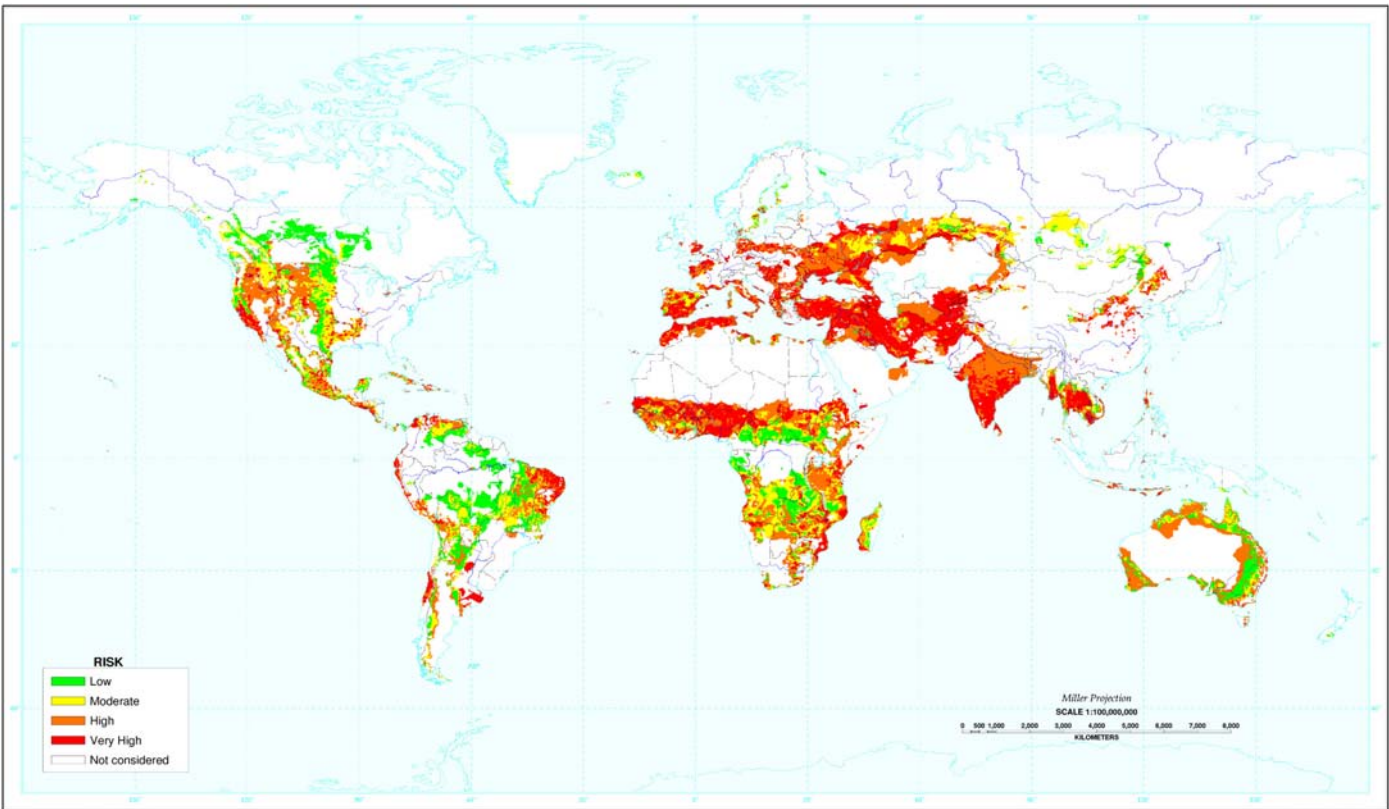




CCD Projekt

# Fact Sheet Desertification

## Global



**Risk of Human-Induced Desertification**

Source: US Dept. of Agriculture 1999

### Area vulnerable to desertification:

Eswaran et al. 2001 4.2 billion ha  $\approx$  33% of the global land area, of which 1.5 billion (12%) ha are high and very high vulnerable

### Area affected by desertification (soil and vegetation degradation):

Dregne 1991 3.6 billion ha  $\approx$  70% of all drylands and 28% of the global land area

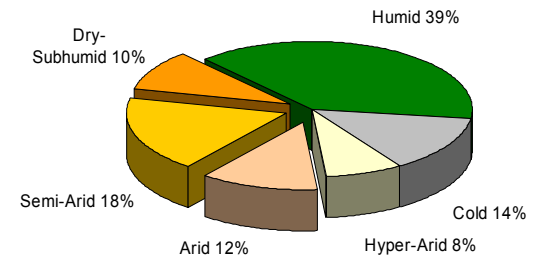
### Area of drylands affected by human-induced soil degradation:

UNEP/GLASOD 1997 1 billion ha  $\approx$  20% of all drylands and 8% of the global land area

### Area classified as drylands:

UNEP 1997 total: 5.2 billion ha  
arid: 1.6 billion ha  
semi-arid: 2.3 billion ha  
trocken sub-humid: 1.3 billion ha

### Global Distribution of Aridity Zones



Source: UNEP 1997



# Fact Sheet Desertification

## Global

### Worldwide economic costs:

Gross annual income loss due to desertification (US\$ billion)	42.3 <i>(Dregne 1991)</i>
Gross annual income loss due to salinization (US\$ billion)	11 <i>(WRI 2000)</i>

### Area of cropland affected by any kind of soil degradation:

*Wood et al. (PAGE) 2000* 1.5 billion ha ≈ 65% of the cropland worldwide

### Annual global loss of soil due to wind and water erosion:

*Pimentel et al. 1995* 75 billion tons, thus 12 mill. ha of fertile land are annually destroyed or abandoned

### Area permanently lost to agriculture through human-induced soil degradation:

*GLASOD/UNEP 1997* 5-6 million ha per year

### Change of arable land per capita in developing countries: *(FAO 2003)*

Early 1960's to late 1990's:  
decline of 40% (0.43 ha to 0.26 ha)

### Status of desertification in agriculturally used drylands:

type of land use in drylands	total (mill. ha)	degraded (mill. ha)	degraded (%)
Irrigated lands	146	43	30
Rainfed cropland	458	216	47
Rangeland	4556	3333	73

Source: Dregne 1991

### People living in drylands:

*UNEP/GRID Geneva 2003/ Geo Data Portal* 1.7 billion ≈ 38% of the global population

### Population affected by desertification processes:

*Eswaran et al. 2003* 2.6 billion ≈ 44% of the global population, of which 1.4 billion live in areas that belong to the very high-risk class

### Cumulative loss of productivity as a result of soil degradation: *(Oldeman 1998)*

Cropland (%)	Pasture land (%)	Crops and pastures (%)
12.7	3.8	4.8 - 8.9



**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.