



# **Drought aspects**

## **Fostering resilience by insurance**

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# 1. What constitutes a drought?

- Drought must always be seen in the context of normally prevailing local and regional conditions
- Droughts unfold slowly – problems arise gradually and depend on how water resources are managed
- Droughts have large-scale impact and affect many, if not all, sectors of society.

## 2. Droughts do not come alone

- Main impact: lack of water
- Linked phenomena: excessive temperatures - intense sunshine - low humidity - high winds  
→ higher evaporation rates
- Increased wildfire hazard
- Dust storms
- Subsidence (shrinking soils)
- Famines

Affected parts of society:

- agriculture, horticulture, animal breeding
- private people's consumption habits
- industrial processes
- Hydropower, thermal power plants
- Inland navigation
- Food production, restaurants, hotels
- ...
- Heavy metal industry
- Business interruption losses

### 3. Drought loss statistics and related problems

- Global statistics on drought losses
- Problem: When does a drought start and when does it end?
- Estimation of losses difficult

## 4. Insurance of drought

Most important sectors are:

- Agriculture
- Property insurance (mainly wildfires)
- Subsidence

Additionally (business interruption/reduced profits):

- Energy and transportation sectors
- Tourist/hotel/restaurant sectors

Extreme summer weather situations are expected to increase in frequency and intensity with global warming

## 5. Case studies of drought insurance schemes

### ***United States***

- Multi-peril crop insurance involving farmers, the Federal government and the private insurance industry; 80% of farmland in the US is insured; works well

### ***African Risk Capacity (ARC)***

- Sovereign-level mutual insurance company established by 49 African States in 2013; provides coverage to the member countries against impacts of natural hazards; first time for many countries to get access to financial risk management with regard to natural disasters; drought has been chosen the first hazard to be tackled

### ***Europe (UK, France)***

- Agricultural losses not a major issue in Europe
- Property insurance (UK, France) suffer huge losses in dry periods due to subsidence; high insurance penetration in both countries
- ART (Alternative Risk Transfer) solutions for BI/CBI ((contingent) business interruption) and LOP (Loss of profit)

***Optional: Australia – China – India – LAC (agricultural insurance)***

## 6. Drought is not only a natural hazard

- Drought is almost never a purely natural hazard
- Overuse/overexploitation/improper management of existing water resources
- Role of societal and governmental structures and responsibilities
- Many countries, regions, cities must take the blame for water-related problems themselves.
- Distinct drought patterns during El Niño/La Niña
- Climate change will intensify extreme drought situations

## 7. Conclusion

**Thank you**