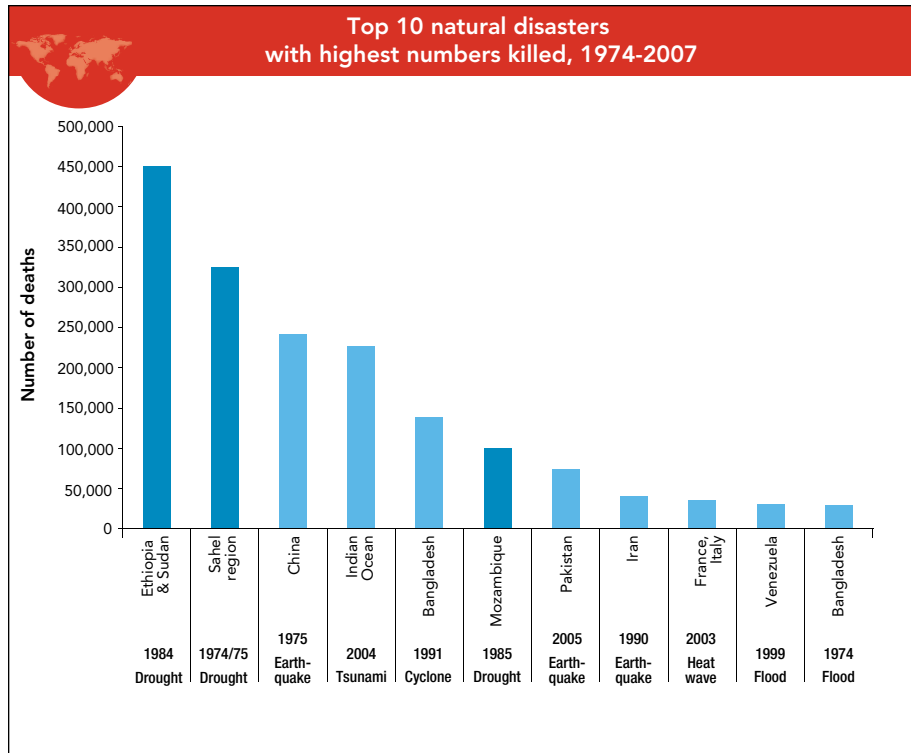
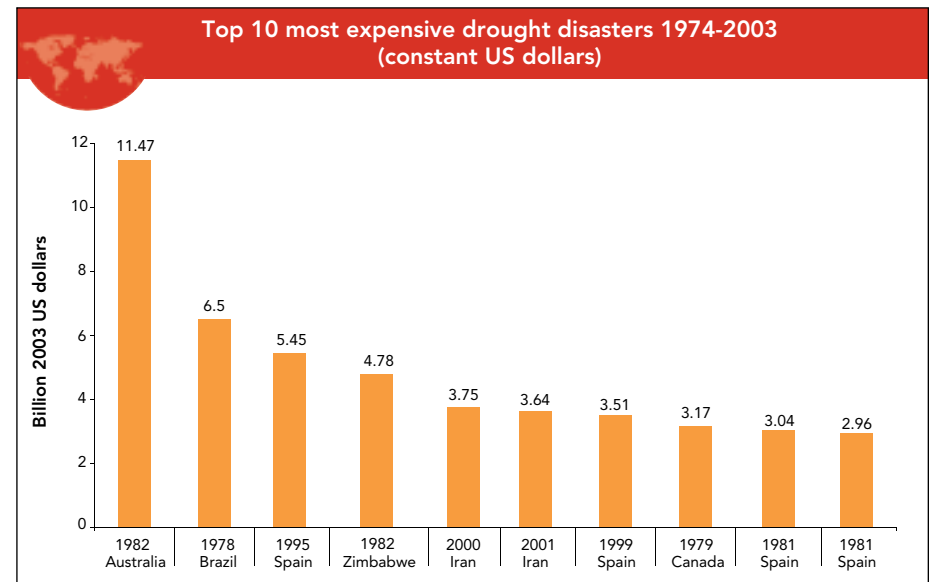


DROUGHT

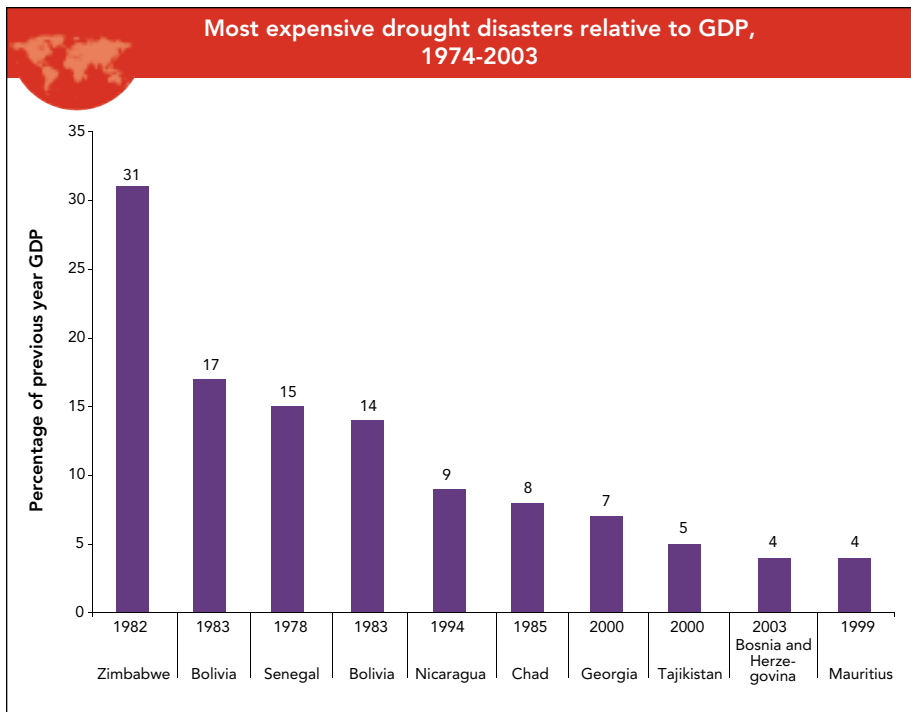
Droughts often result in heavy crop damage and livestock losses, disrupt energy production and hurt ecosystems. They cover wide areas of land and often affect several neighbouring regions or countries simultaneously. Droughts can lead to famines, loss of life, mass migration and conflict. Hence, droughts can wipe out development gains and accumulated wealth in developing countries, especially for the poorest.⁵⁶



Source: Guha-Sapir, Hargitt and Hoyois (2004) and EM-DAT, the OFDA/CRED International Disaster Database.



Source: Guha-Sapir, Hargitt and Hoyois (2004).

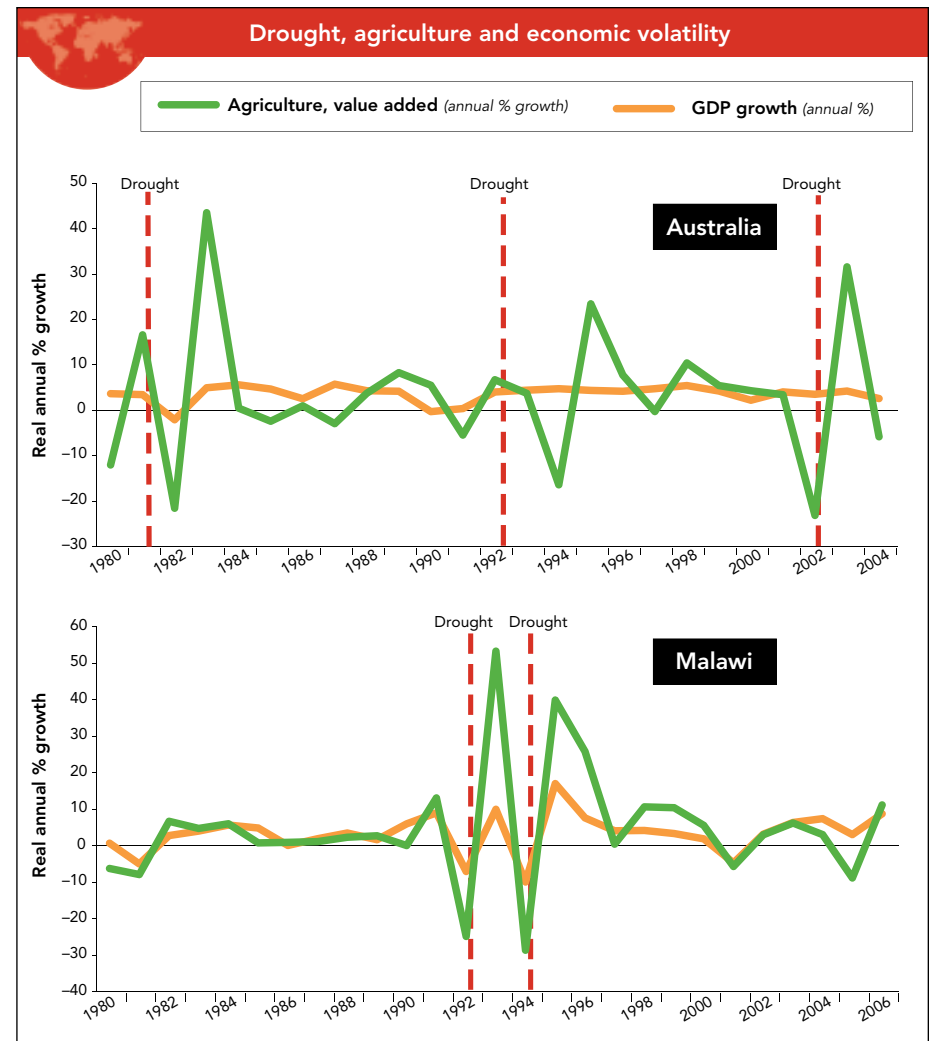


Source: Guha-Sapir, Hargitt and Hoyois (2004).

Drought mortality is concentrated in developing countries, while absolute economic losses are largest in developed regions

In relative terms, developing countries are those suffering the biggest economic losses. In a number of countries, drought wiped out significantly more than 5 per cent of the previous year's GDP.

Unlike earthquakes, droughts can be predictable, usually developing over several years. This makes it possible to respond to droughts as they occur. Several regional early warning systems, such as the Famine Early Warning System that covers Africa, have been set up around the world for this purpose.⁵⁷

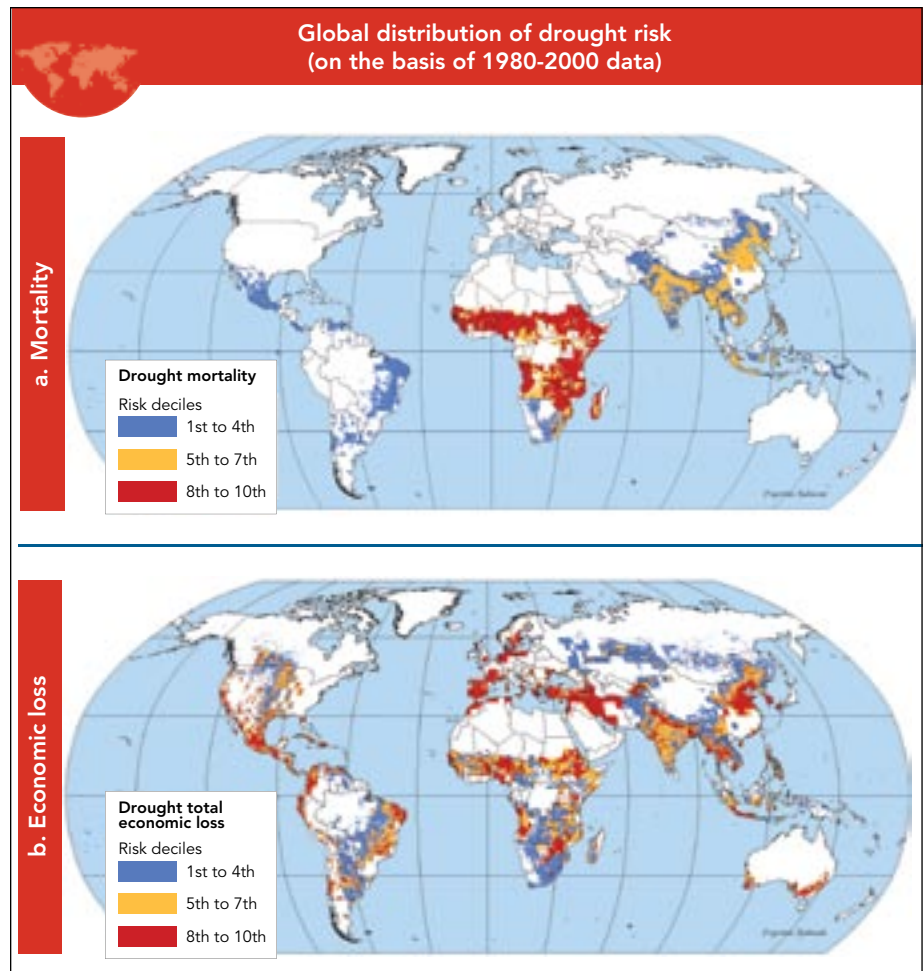


Source: Based on data from the World Development Indicators online database for GDP and agricultural value added real annual growth rates and from EM-DAT, the OFDA/CRED International Disaster Database, for years of drought.

Developing country economies are especially vulnerable to droughts

Periodic droughts affect both developing and developed countries, with direct impacts on agriculture and on other productive sectors reliant on water, such as hydroelectricity. It is in developing countries, however, where

drought is highly correlated with the performance of the overall economy, as a result of heavy reliance on agriculture. Not only does water variability significantly reduce projected rates of economic growth in vulnerable countries, but it has a dramatic effect on poverty rates. At the same time, poor transport infrastructure exacerbates the inability of local economies to adjust to localized crop failures, as it hinders food surpluses from reaching areas in food deficit.⁵⁸



Source: Core data sets from IBRD/World Bank and Columbia University (2005).

Note: Sparsely populated areas and those without significant agricultural activity are excluded from the analysis and appear as white areas in the maps. The global risks of mortality and economic losses resulting from drought were assessed by combining hazard exposure with historical vulnerability, considering population density and GDP per unit area.

Drought mortality hot spots are concentrated in sub-Saharan Africa, but economic loss hot spots are located in several relatively developed regions

Regional differences in loss risks are in part due to differences in population density, in the size of the areas affected and in the degree of hazard across regions. But they also reflect differences in vulnerability. For instance, droughts in Africa tend to result in high mortality rates due to the generally low level of preparedness.⁵⁹

The expanded UN Central Emergency Response Fund (CERF), launched in 2006 as a standby fund to enable more timely and reliable humanitarian assistance to those affected by natural disasters and armed conflicts, is one example of a more proactive approach to disaster risk management.⁶⁰ In the cases where risk cannot be adequately addressed through risk mitigation measures, some countries have used other risk management strategies, such as risk insurance. For instance, weather-index-based insurance to manage drought risk has been piloted in several countries with success.⁶¹

“Desertification has its greatest impact in Africa, where some two thirds of the continent are covered by desert and drylands, and are afflicted by frequent and severe droughts.”

**—Michel Jarraud
WMO Secretary-General**

Endnotes

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