FAST FACTS
Bureau for Crisis Prevention and Recovery

CLIMATE CHANGE

Key statistics:

During the 20th century economic losses from climate-related disasters were three times higher than those involving geo-physical hazards (earthquakes, avalanches, landslides) and affected 55 times the number of people.

The rising incidence of climate related disasters:

Between 2000 and 2004 an average 326 climate-related disasters were reported each year. These affected approximately 262 million people annually – more than double the levels reported in the early 1980s.

Who is affected by climate related hazards:

The overwhelming majority of people affected by climate-related disasters live in developing countries. Between 2000 and 2004, on average 1 in 19 people living in a developing country was affected by climate disaster. The corresponding figure for those living in countries belonging to the Organization for Economic Cooperation and Development was 1 in 1,500.

How people are affected:

Between 2000 and 2004, **flooding** affected the lives of:

- 68 million people in East Asia
- 40 million people in South Asia
- two million people in sub-Saharan Africa

Monsoons/Storms: The 2007, Asian monsoons displaced three million people in China, 14 million in India and seven million in Bangladesh.

Drought: In 2007, drought affected 10 million people in sub-Saharan Africa.

A drought in the Nature Reserve of Popenguine, Senegal
UN Photo/Evan Schneider

Tropical storm Jeanne devastates Haiti
UN Photo/ Sophia Paris

Hurricanes: The 2005 Atlantic hurricane season was the most active on record – the best known of which was Hurricane Katrina. Yet 27 other storms wreaked havoc across Central America and the Caribbean, causing mudslides and claiming more than 1,600 lives.

Further human consequences of climate change:

The above impacts demonstrate how climate change can threaten lives, affect livelihoods and exacerbate poverty.
Rising temperatures and prolonged periods of drought will cripple harvests in many parts of the world.
Future climate change is expected to put almost 50 million people at risk of hunger by 2020.
Shrinking freshwater supplies for drinking as well as agriculture will affect billions of people.

Global Effects of Rising Temperatures :

Rising sea levels: Sea levels rose 20 centimeters – 1.5 millimeters annually – between 1870 and 2001.
Between the 1990s and 2006 sea-levels rose at twice that rate, just more than three millimeters per year, affecting low-lying coasts and islands.

Melting permafrost: As permafrost thaws, it triggers the expansion of existing as well as the emergence of new water bodies, which are bubbling with methane, a powerful global warming gas.

Melting glaciers: The Himalayan glaciers are receding faster than in any other part of the world. At current rates of global warming, they could disappear altogether by 2035, if not sooner, affecting half a billion people in the Himalaya-Hindu-Kush region and a quarter billion people downstream who rely on glacial melt waters. Meltwater lakes trapped behind thinning glaciers are an increasing hazard, posing a threat of glacial lake outburst floods.

Shrinking snow and sea ice cover: Shrinking snow and ice coverage causes more of the sun's heat to be absorbed land and polar oceans, which in turn may speed up global climate change.

Call to Action:

Climate change is one of the most critical global challenges of our time – one that can only be countered by global action. Failure to act will result in human tragedy and have grave consequences for human development, undermining efforts to reduce poverty and achieve other Millennium Development Goals.

Climate-related disasters do not threaten everyone equally. While climate-related hazards – droughts, floods, storms, etc. – affect billions, not everyone is equally vulnerable. The degree to which a community suffers long-term – or even irreversible – setbacks, is determined not only by how often it is exposed to these hazards, but also by how vulnerable it is.

Judging by the increase in climate-related disasters in developing countries, the world's poor are facing a seemingly relentless increase in their exposure and vulnerability to climate-related hazards. Climate-related disasters are a major cause of human suffering, poverty and diminished opportunity.

Human and economic losses as a consequence of climate-related hazards are not inevitable. We must redouble our efforts to understand and manage risks so that countries at risk can take actions to reduce their vulnerability and prevent the loss of life and livelihoods:

- **National governments** need to implement sustainable public spending that incorporates disaster risk reduction, particularly reduction of climate-related risks.
- **Affected communities** need to know how to protect themselves from climate variability and change. They need technical and financial support to implement measures to reduce risks through planning, use of appropriate construction standards, and early warning systems.
- **Donor**s must understand that risk management is the key strategy for reducing the negative consequences of climate variability and change.

Identifying and reducing risks associated with climate-related hazards – including drought, floods, cyclones, sea-level rise and extreme temperatures – can help to protect people, livelihoods and assets, thereby protecting the most exposed populations from term consequences of climate hazards.

Residents face the aftermath of cyclone Sidr in Bangladesh
UNDP Dhaka/Steven Goldfinch

UNDP in Action:

Guided by its mandate, UNDP is committed to supporting developing countries in responding to climate change concerns as part of their overall sustainable development efforts. With proven experience and a presence in 166 countries, UNDP is identifying communities at risk and working closely with the affected governments to introduce simple, cost-effective interventions that protect those at risk from the impact of natural hazards.

UNDP's Bureau for Crisis Prevention and Recovery (BCPR) and the Bureau for Development Policy's Energy and Environment Group (BDP/EEG) have developed a joint program to manage climate-related risks, the goal of which is to reduce climate and climate change-related risks in vulnerable countries.

UNDP helps developing countries to adapt to climate change and works to ensure people are less vulnerable to natural hazards. In 2006, UNDP's global disaster reduction portfolio totaled approximately $100 million, operating in some 50 countries. Through its work, UNDP endeavors to climate-proof the Millennium Development Goals (MDGs), assisting developing countries to build environment, energy and climate risk management considerations right into the foundations of all efforts to reach the MDGs and go beyond. For example:

- In Bhutan, UNDP is helping the government identify glacial outburst flood hazards and their implications for hydro-electric power generation, to arrive at a climate risk management strategy for energy planning.
- UNDP is assisting the government of India in tracking changes in flood and drought patterns across the country and in identifying measures for managing emerging climate-related risks in the context of on-going disaster risk management efforts.
- In Bangladesh, UNDP works across ministries to identify where coastal areas' early warning systems need to be strengthened in light of potentially increased risks of storm surges and coastal flooding.
- In Egypt, UNDP is assisting the government in assessing how global warming-related rainfall changes in the Nile river basin would affect water resources and agriculture, two of Egypt's most important economic sectors.
- UNDP's Caribbean Risk Management Initiative assists small island developing states in assessing how climate variability and change affect economic development to support climate risk management planning.
- In Malawi, UNDP is strengthening country capacity to assess climate-related risks and mainstream climate risk management into development planning.
- In Mozambique, UNDP assists the government in strengthening national risk identification systems and institutional and legislative systems for disaster risk reduction.

For further information contact:

Jehane Sedky or Elisabeth Diaz
United Nations Development Programme
Bureau for Crisis Prevention and Recovery
One United Nations Plaza, 20th Floor
New York, NY 10017
Telephone: +1.212.906.6711 or
+1.212.906.6175
Fax: +1.212.906.5364
Or visit: www.undp.org/cpr

MARCH 2008