GLOBAL: Developing countries hardest hit by wildfires

BANGKOK, 28 June 2011 (IRIN) - Wildfires burn several hundred million hectares of vegetation around the world each year and appear to be growing in number and extent, but their impact on developing countries is particularly worrying, experts say.

Subsistence or impoverished populations can find it much more difficult to recover from a serious wildfire. “Fires affecting developing countries impact the livelihoods of people much more than those in wealthy and ‘insured’ countries,” said Johann Goldammer, director of the Global Fire Monitoring Centre (GFMC) in Germany. “A small fire in a developing country may cause much more havoc than it would in a wealthy country.”

Fires used for slash-and-burn agriculture and as a common method of clearing land in developing countries - and important to their economies - pose a significant risk, experts say. “More and more we are seeing pastoral fires get out of hand… We need to do more to educate and inform people about fire risks,” said Pieter van Lierop, Food and Agriculture Organization (FAO) forest officer and one of 10 contributors to a new global assessment of “mega-scale fires”.

The assessment - by FAO and presented at the 5th International Wildland Fire Conference in May - examined recent fire disasters in Israel, Russia, Australia, Botswana, Greece, the USA, Brazil and Indonesia, and found that humans negligently or intentionally were to blame for causing the fires.

Most fires are unmonitored and undocumented so the full record of wildfires around the globe is incomplete.

However, the World Health Organization’s (WHO) international disaster database, EMDAT-CRED estimates that 2,000 people have been killed and US$49 billion lost in 339 major fires worldwide since 1970, making them among the world’s costliest disasters.

“It appears that fire activity, or total land area burned each year, is increasing in many global regions, for many different reasons, including climate change, changes in vegetation, and changing impacts of people,” said Bill de Groot, scientist and team leader with the Canadian Forest Service. “We are concerned about disaster fires, or wildfires that cause loss of life, property, or livelihood.”

Weather, wind and terrain conditions all contribute to fire risk, but humans started most of the past decade’s wildfires.

Recent examples

In 2008, after an unusually wet rainy season led to more abundant grass (a fire fuel source), fires lit by humans spread along the dense grassland savannah of Ghanzi, Botswana. For 50 days the fire burned over 3.6 million hectares of tribal grazing land and national park, considerably disrupting a fragile local economy dependent on indigenous thatch collection and tourism.

In 1998, hundreds of intentionally lit fires for large-scale land-clearing for pulp and palm oil plantations, spread out of control destroying 9.7 million hectares of forests in Indonesia’s Kalimantan Province, and emitting 700 million tons of greenhouse gases.

In the same year, land-clearing fires in Brazil’s Roraima State - exacerbated by limited road access, severe drought and strong winds - burnt out of control for over 30-days, destroying 11,000 hectares of forest.

Managing land, educating people

Both developing and developed countries struggle to suppress such large-scale fires which often cross land ownership boundaries and require the involvement of different jurisdictions of police, fire and emergency services.

“Simply investing in mechanized firefighting is not a solution. The deeper issues are land use and changes in fire policy and practice,” said Steve Pyne, an environmental historian and professor at Arizona State University.
The FAO report lauds Australia’s use of the controlled burning of shrubs to prevent the spread of wildfires in the southwest of Western Australia which is at high risk of fire, but in many developing countries, which lack the technology or infrastructure to carry out such pre-emptive action, prevention has to be done at grassroots level.

“Environmental education would go a long way to improving awareness of fire in forest and agriculture,” said José Carlos Mendes de Morais, pre-fire specialization chief with Brazil’s National Forest Fire Prevention Centre, who studied the Roraima fires.

“We are trying to work with the national governments and local communities to establish community-based fire management programmes,” said FAO’s Van Lierop, adding that appropriate attention to prevention at the local level was critical.

Theme(s): Natural Disasters,