

Stakes 'never been higher' in climate fight: IPCC head

February 14 2022, by Marlowe Hood



Just in the last year, the world has seen a cascade of deadly and unprecedented floods, heatwaves and wildfires across four continents.

The stakes in the fight against global warming are higher than ever, the UN's climate science chief said Monday as nearly 200 nations met to



finalise what is sure to be a harrowing report on climate impacts.

"The need for the Working Group 2 <u>report</u> has never been greater because the stakes have never been higher," Intergovernmental Panel on Climate Change (IPCC) Chair Hoesung Lee said in a live videocast.

Species extinction, ecosystem collapse, mosquito-borne disease, deadly heat, water shortages and reduced crop yields are already measurably worse due to rising temperatures.

Just in the last year, the world has seen a cascade of unprecedented floods, heatwaves and wildfires across four continents.

All these impacts will accelerate in the coming decades even if the carbon pollution driving climate change is rapidly brought to heel, the IPCC report is likely to warn.

A crucial, 40-page Summary for Policymakers—distilling underlying chapters totalling thousands of pages, and reviewed line-by-line—is to be made public on February 28.

"This is a real moment of reckoning," said Rachel Cleetus, climate and energy policy director at the Union of Concerned Scientists.

"This not just more scientific projections about the future," she told AFP ahead the two-week plenary. This is about <u>extreme events</u> and slow-onset disasters that people are experiencing right now."

The report will also underscore the urgent need for "adaptation"—climate-speak which means preparing for devastating consequences that can no longer be avoided, according to an early draft seen by AFP in 2021.



In some cases this means that adapting to intolerably hot days, flash flooding and storm surges has become a matter of life and death.

Climate change: the impact on humanity

Extreme events, heat waves and catastrophic floods are among the consequences of global warming

Around 166 m people in Africa and Central America needed aid (2015-2019) due to climate-related food emergencies

Hunger Between 8 and 80 m more people at risk by 2050* Some **1.4 m** more children with severe stunting in Africa due to climate change in 2050

4-10% drop globally in last 30 years Marine fisheries
40-70% drop in
catch potential
for tropical regions
under high
emissions

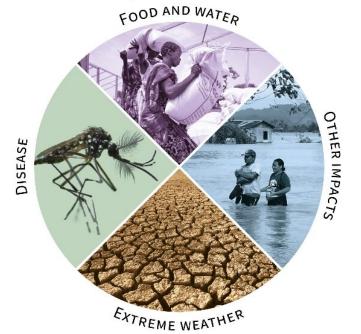
Wild fish populations 4.1% drop in maximum sustainable yield between 1930 and 2010, some regions at 15-35% losses

▲ Dengue fever

2.25 b more people at risk across Asia, Europe and Africa under high emissions scenarios

Vector-borne diseases

Half the world's population at risk of dengue, yellow fever and Zika virus by 2050



Internal migration

Six-fold increase between 2020 and 2050

Water stress

At 2.7°C warming: 122 m people affected in Mesoamerica, 28 m in Brazil, 31 m in rest of South America

Natural disasters

Some **12.8 m** displaced yearly by natural disasters such as storms and floods since 2008

Severe heat

1.7 b more people exposed, and 420 m people subjected to heat waves, subject to temperature increases from 1.5°C to 2°C

Deadly heat

Hundreds of millions of city dwellers in sub-Saharan Africa and South/ Southeast Asia affected by at least 30 days of "deadly heat" per year by 2080 Flood displacement

2.7 m people displaced annually in the future

▲ Flooding

At 1.5°C warming, 100-200% increase in population affected by floods for Colombia, Brazil and Argentina, 300% for Ecuador, 400% for Peru Water scarcity due to severe droughts

At 2°C warming, Over **400 m** more people living in urban areas exposed Physical work capacity

Up to **250** lost work days/year by 2100, in much of South Asia, sub-Saharan Africa, parts of Central/South America

Source: IPCC draft report, main points published by AFP in June 2021 / AFP Photos

*depends on levels of emissions/extent of development

AFP

Impacts of climate change.



'Doping the atmosphere'

"The growth in <u>climate impacts</u> is far outpacing our efforts to adapt to them," said Inger Andersen, head of the UN Environment Programme, noting that climate change threatens to become a major driver of species loss.

IPCC assessments—this will be the sixth since 1990—are divided into three sections, each with its own volunteer "working group" of hundreds of scientists.

In August 2021, the first instalment on physical science found that global heating is virtually certain to pass 1.5 degrees Celsius (2.7 degrees Fahrenheit), probably within a decade.

Earth's surface has warmed 1.1C since the 19th century.

"We have been doping the atmosphere with <u>fossil fuels</u>," World Meteorological Organization chief Petteri Taalas said Monday, comparing the result to the "enhanced performance" of Olympic athletes who used banned substances.

The 2015 Paris deal calls for capping global warming at "well below" 2C, and ideally 1.5C.

This report is sure to reinforce this more ambitious goal.

It will likewise underscore that vulnerability to <u>extreme weather events</u> —even when they are made worse by global warming—can be reduced by better planning and preparation, according to the draft seen by AFP.

This is not only true in the developing world, noted Imperial College professor Friederike Otto, pointing to massive flooding in Germany last



year that killed scores and caused billions in damage.



The people least responsible for climate change are the ones suffering the most from its impacts.

Tipping points

"Even without global warming there would have been a huge rainfall event in a densely populated geography where the rivers flood very easily," said Otto, a pioneer in the science of quantifying the extent to which climate change makes extreme weather events more likely or intense.



The report will zero in on how climate change is widening already yawning gaps in inequality, both between regions and within nations.

The simple fact is that the people least responsible for climate change are the ones suffering the most from its impacts.

The report is also likely to highlight dangerous "tipping points", invisible temperature trip wires in the <u>climate</u> system for irreversible and potentially catastrophic change.

Some of them—such as the melting of permafrost housing twice as much carbon as in the atmosphere—could fuel <u>global warming</u> all on their own.

"There is a finite set of choices we can make that would move us productively into the future," said Clark University professor Edward Carr, a lead author of one of the report's chapters.

"Every day we wait and delay, some of those choices get harder or go away."

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