

Weather forecasting needs huge boost to tackle climate change

AFP, Geneva

The UN's meteorological agency yesterday called for a multibillion dollar boost for weather forecasting, warning that about 30 percent of economic wealth was directly exposed to the impact of global warming.

The World Meteorological Organisation urged the international community to pay greater attention to helping countries, especially poor nations, adapt to the extreme weather conditions associated with climate change.

"We estimate that today up to 30 percent of the GDP (Gross

Domestic Product) of a developed country shows a significant sensitivity to weather, climate and water conditions, and the share can be proportionally even bigger in developing countries," said WMO Secretary General Michel Jarraud.

He urged countries to extend and make better use of the technology available in order to cope with an increase in floods, drought or storms and to better protect lives, health, food supplies and the wider economy.

An estimated five to 10 billion dollars is spent every year around the world on weather forecasting

but the amount needs to increase sharply according to the WMO.

"In developing countries it's definitely much more than doubling. In developed countries it's more subtle than that," Jarraud told journalists.

"In developing countries it's fundamental, it's not just strengthening, it's even rebuilding (weather) infrastructure," he added.

The appeal was made ahead of a meeting of world leaders at the United Nations in New York on Monday to help strengthen action against accelerating climate

change.

Jarraud pointed to gaps in prevention, such as long term weather forecasting, as well as shortcomings in the use of weather information in different economic or social sectors such as farming, water supplies or health.

"It's one thing to issue good warnings, but we have to do something with the warnings," he added.

Most international efforts to deal with climate change have focused so far on mitigation -- attempts to cut pollution or carbon dioxide emissions that contribute to global warming -- more than adaptation.

Drought puts Australia's food bowl at risk: PM

AFP, Sydney

Australia's once-in-a-century drought has tightened its grip on the country's major food growing zone and could kill off the region's orchards and vineyards, Prime Minister John Howard said yesterday.

In his weekly radio address, Howard said that the continued lack of rain meant permanent plantings,

such as fruit trees and grape vines, were dying.

"We are dealing with a genuine crisis," he said of the extreme water shortage in the Murray-Darling Basin.

"Irrigation allocations are still at either zero or extremely low levels, inflows into storages are at record lows and there is significantly less water stored today compared to the same time last year."

"Horticultural and other water dependent industries are, needless to say, the hardest hit of all; and there is now, tragically, a high risk that permanent plantings could be lost."

Andrew Gregson, of the New South Wales Irrigators' Council, said winter rainfall, and run-off into irrigation dams, had been practically non-existent.

"You are looking at everything from citrus, right through to nuts and also you're looking at grape vines (being lost)," Gregson told AFP.

"The trees themselves are actually dying."

If they lose these trees, farmers stand to lose not only this year's crops, but those of coming years, he said.

"If these permanent plantings die, not only do they have to be replaced, it's quite a number of years before they then produce again," he said.

The Murray-Darling Basin is the country's key food growing area, accounting for more than 41 percent of the gross value of agricultural production.

But the drought is not limited to

the basin. Water restrictions are in place in most of Australia's major cities.

Combined with global warming, the drought, which has gripped parts of the country for seven years, has become an issue in the lead-up to this year's election.

Howard earlier this week pledged an extra 430 million dollars (370 million US) in drought aid and Friday added that the government would relax rules for farmers to obtain financial relief.

He also refused to rule out compensating farmers if they had to forego their water allocations to guarantee supplies to parched cities such as Adelaide.

"We will always look at something that's fair and reasonable," Howard said.

Treasurer Peter Costello, who is expected to take over as prime minister should the government win this year's election, said desalination plants could be the solution.

"This is now very serious," he said. "We have a situation where our capital cities are running out of water and I think we should have a desalination plant for every capital city in Australia."

France mulling freeze on GM crops

AFP, Paris

France is reportedly planning a freeze on commercial genetically modified crops, which cover less than one percent of farmland in Europe's top agricultural producer.

According to Le Monde newspaper, the government is preparing to announce a halt to sales of GM seeds at a national conference on the environment taking place next month, involving farmers, business and advocacy groups.

Quoting Environment Minister Jean-Louis Borloo, Le Monde said the government wanted a freeze while working on a new law on GM crops, after ruling that it is impossible to stop the genes of GM crops spreading in the environment through pollination. Growing crops for research would be allowed to continue.

Borloo's office refused to confirm or deny the report, which was greeted as a victory by environmentalist groups including Greenpeace.

But Agriculture Minister Michel Barnier -- speaking at a congress of cereal farmers who largely support

the use of GM crops -- said the question was "not settled."

Cereal farmers meanwhile accused the government of "caving in" to public opinion, which is extremely hostile to GM crops, an issue kept in the headlines by high-profile anti-GM activists such as the farmer Jose Bove.

The FNSEA farmers' union warned it could pull out of next month's environment conference if the report proves true.

As elsewhere in Europe, GM crops are tightly controlled in France: with the exception of crops planted for research purposes, the only authorised GM crop is a single type of maize, called MON 810 and manufactured by the US agro-chemical giant Monsanto. Its licence expires this year.

Some 22,000 hectares of GM maize were planted in France in 2007 -- four times more than in 2006 -- representing 0.75 percent of land under cultivation.

Since 2004, about 10 GM strains have been cleared for the European Union market, mainly maize destined for human or animal consumption.

Cellular response to cutting calories enhances longevity

Says study

Scientists have known for decades that drastically reducing calories -- but not nutrients -- can prolong the lives of everything from yeast to mice and monkeys, but they didn't know why, until now.

In a study released Thursday, US researchers suggest that the link between food restriction and longevity may be a molecular response to the stress from cutting back calories.

That reaction preserves critical cellular functions, helping the body to fight off age-related diseases.

In laboratory experiments on human cells, investigators found that cutting calories, while preserving the nutrients they need, starts a chain reaction in the mitochondria -- or power houses of the cell -- that results in the build-up of a coenzyme called NAD (Nicotinamide adenine dinucleotide).

This in turn amps up the activity of enzymes created by two genes called SIRT3 and SIRT4. The effect of all this is to strengthen the mitochondria, increase energy output and slow down the cell's aging process.

"We're not sure yet what particular mechanism is activated by these increased levels of NAD, and as a result SIRT3 and SIRT4," said David Sinclair, a molecular biologist at Harvard Medical School who worked on the study.

"But we do see that normal cell-suicide programmes are noticeably attenuated," he said, referring to the way cells are programmed to die as part of the aging and regeneration process.

"This is the first time that SIRT3 and SIRT4 have been linked to cell survival," he said.

The fortification of the mitochondria in response to the stress of a much lower-calorie diet can help ward off diseases associated with aging.

Damaged or dysfunctional mitochondria have been implicated in Alzheimer's, stroke, heart disease and diabetes. It is thought that the common link is oxidative stress which damages the mitochondrial DNA leading to cell death.

Even given the growing recognition about the importance of the mitochondria in sustaining health, the researchers were surprised to find just how critical the so-called "battery packs" are to the life of the cell.

Specifically, they found that even when all the other energy sources in the cell, including the nucleus, are wiped out, the cell remains alive if the mitochondria are kept intact and functional.



PHOTO: STAR
Visitors admire paintings put on display at an exhibition of artworks by artists from seven countries at Shilpkala Academy in the city yesterday. The exhibition organised by Buriganga Art and Crafts will run till September 25.



Vice-chancellor of Independent University, Bangladesh Prof Bazlul Mobin Chowdhury hands over a cheque for Tk 1.57 lakh to Chief Adviser Fakhrudin Ahmed at his office in the city recently for flood-affected people. Faculty members and staffs of the university donated their one day's salary to raise the funds.



Chairman of SM Group Syed AK Anwaruzzaman hands over a Tk 5 lakh to Chief of Army Staff General Moeen U Ahmed at Dhaka Cantonment recently for flood-affected people.



Country Manager of S Oliver Overseas Ltd Rahul Chhabra hands over a cheque for \$ 10,000 to BGMEA President Anwar-ul-Alam Chowdhury in the city recently for the post-flood rehabilitation programme of BGMEA.



Officials of Dhaka Ahsania Mission distribute relief materials among flood victims at Matuail in Dhaka on Thursday.

CHILD MORTALITY Millennium Goal set to be badly missed, says study

AFP, Paris

The world will fall badly short of meeting the UN Millennium Development Goal on child mortality, according to a study of trends published by The Lancet.

The fourth goal in the UN's famous Millennium list called for a worldwide decline of 67 percent in the deaths of children aged under five compared with 1990 levels.

The paper, lead-authored by Christopher Murray of the Institute for Health Metrics and Evaluation at the University of Washington, says

that the world is on course for a reduction of only 27 percent by 2015.

Regions in Latin America, North Africa, the Middle East and Europe have made steady progress, helped in many cases by falls in fertility.

The big problem occurs in sub-Saharan Africa, where the decline in infant mortality is slower and couples are still having many children.

By 2015, Central Africa, which has the highest rates of all, may even have greater child mortality compared with 1990.

It is projected to have 228 deaths

Women 'unaware of age-cancer link'

BBC ONLINE

Most British women are unaware that breast cancer risk increases with age, a poll suggests.

A survey of 1,000 people by charity Breast Cancer Care found nearly six out of 10 women did not know getting older was a strong risk factor.

Experts said many young women can worry unnecessarily while older women do not realise they are at risk.

The poll found that 58 percent did not know that the older they get, the higher their risk of breast cancer.

Women aged 18-24 were better informed.

But 65 percent of women aged 45-54 knew there was a strong link between getting older and risk of the disease.

The charity said lack of knowledge was particularly concerning in those

over the age of 70 years as a third did not believe it was necessary to check their breasts at that age.

And although most knew they had the right to request breast screening, only a quarter took up the opportunity.

"While it is helpful to raise awareness of the disease it can cause young women to worry unnecessarily. It may also mislead older women to think ageing is not a factor in breast cancer.

"It is extremely alarming that most women over 70 do not take up breast screening, as this increases the likelihood that any breast cancer they may develop is found at a later stage, which could limit options and reduce the success of any treatment."

She called on the government and screening services to look at why the link to age is not well known.

Sara Hiom, director of health information at Cancer Research UK, said: "Confusion arises when celebrities like Kylie Minogue and Caron

'Jurassic Park' dino had feathers: study

AFP, Washington

The velociraptor, the fierce scaly-skinned dinosaur made popular by the film "Jurassic Park," actually had feathers, according to a study published Thursday in the journal Science.

Scientists have long been aware that many dinosaurs had feathers, but scientists who made a fresh examination of a collection of velociraptor bones found indications of quill knobs where feathers may have been anchored.

Paleontologists from the American Museum of Natural History and the Field Museum of Natural History made the discovery while examining fossils of a forearm bone that was dug up in Mongolia in 1998.

"The lack of quill knobs does not necessarily mean that a dinosaur did not have feathers," said lead author of the study Alan Turner.

"Finding quill knobs on the velociraptor, though, means that it definitely had feathers. This is something we'd long suspected, but no one had been able to prove."

The feathers would have been anchored to the quill knobs via ligaments, but the study's authors believe the dinosaur was not able to fly.

The velociraptor that was studied stood three feet tall and was about five feet long and weighed 30 pounds, but its "relatively short forelimbs compared to a modern bird ... indicated it lacked volant, or flight, abilities."

"Perhaps an ancestor of the velociraptor lost the ability to fly, but retained its feathers," which "may have been useful for display, to shield nests, for temperature control, or to help it manoeuvre while running."

The bones studied were found in the Gobi desert and are believed to be from the Cretaceous Period, dating to around 80 million years ago.

6x4