

GLOBAL WARMING:

Is it really man's fault?

Last month's Earth Hour brought more than just green knowledge and awareness — it reopened the debate on climate change, with both global warmers and its band of sceptics riding on it to renew their arguments. CHAI MEI LING hears their versions

Yes 'Never has the warming rate been this fast'

ALTHOUGH global warming does occur naturally, that is between two ice ages as is the case now, today's rate of warming has been unprecedentedly fast.

"We've had warmer periods before, but the warming rate had been quite slow," said climate change expert Chow Kok Kee.

"But in the last 200 years, it's very fast, making it very hard for the ecosystem to adjust itself within such a short period."

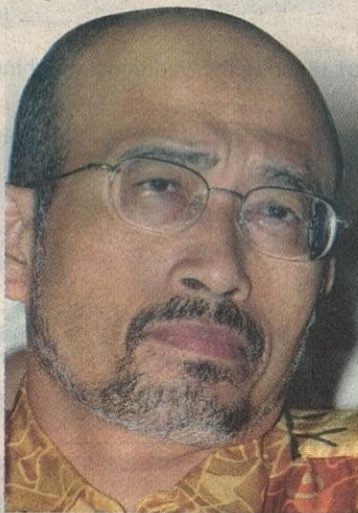
There are supporting reports on the loss of biodiversity due to global warming, such as the bleaching of corals in seawater made more acidic by enhanced absorption of carbon dioxide.

Meteorologist Dr Wan Azli Wan Hassan says ice core studies show that in the last 25,000 years, the Earth's temperature increased by only nine degree Celcius.

"But in the last century alone, the temperature shot up by 0.74 degrees."

This shows that the warming rate in the past 100 years was more than 20 times faster. One possible answer is human contribution.

Wan Azli, who is also director of the Technical Development Division of the Malaysian Meteorological Department, says observations of warming over the past 30 years cannot be replicated in the climate model if only natural factors such as the



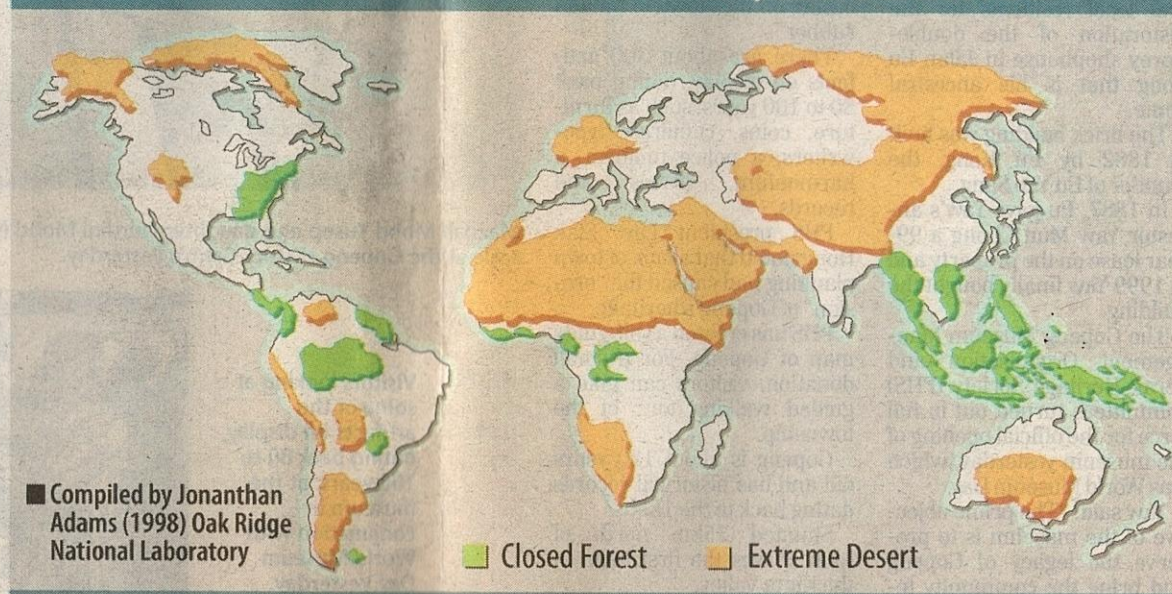
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Meteorologist Dr Wan Azli Wan Hassan

sun's heat and volcanic aerosol are included. However, the model can be replicated once man-made factors are added in.

"We cannot absolutely exclude natural viability as the cause of warming over the past few decades, as it may have played some role.

LAST GLACIAL MAXIMUM — 21,000 YEAR AGO



"But it is very unlikely that this has been the sole reason. Our best estimate is that most recent warming is due to man's activities."

Although the sun has always been the planet's greatest warming tool, changes in the sun could not explain the warming since the 1970s.

United Nations Development Programme's Asfaazam Kasbani says the Inter-governmental Panel on Climate Change (IPCC) report is convincing in presenting the man-made global warming case.

He says evidence shows that the concentration of greenhouse gases has increased since 1750 due to industrial activities.

"Scientists on the panel recognise

the natural global warming trend, but the cycle has been disrupted by anthropogenic causes. Human activities override the natural cycle."

Although global warming detractors may argue that carbon dioxide brings more good than harm, it's not the case, says Asfaazam, assistant resident representative for UNDP's energy and environment section.

"It is true that more carbon dioxide leads to increased productivity for some crops and will be better in greening the earth.

"Unfortunately, this will be offset by drought, water stress and other extreme weather events that come with climate change."

Wan Azli adds: "Because man-

made emissions of carbon dioxide are much greater than any other gas its warming effect will be greater, despite its low global warming potential."

Chow, who headed one of the expert groups under the United Nations Framework Convention on Climate Change, says although computer models can give only a projection, there is always an element of uncertainty.

"Each model is different and has its limitations, but almost all of them predict that in the future, temperature will continue to rise.

"Although the science is not perfect, we have to take precautions to reduce the impact. The cost for early action will be relatively low."

