

RENEWABLE ENERGY

Global Warming: Fact or Fiction?

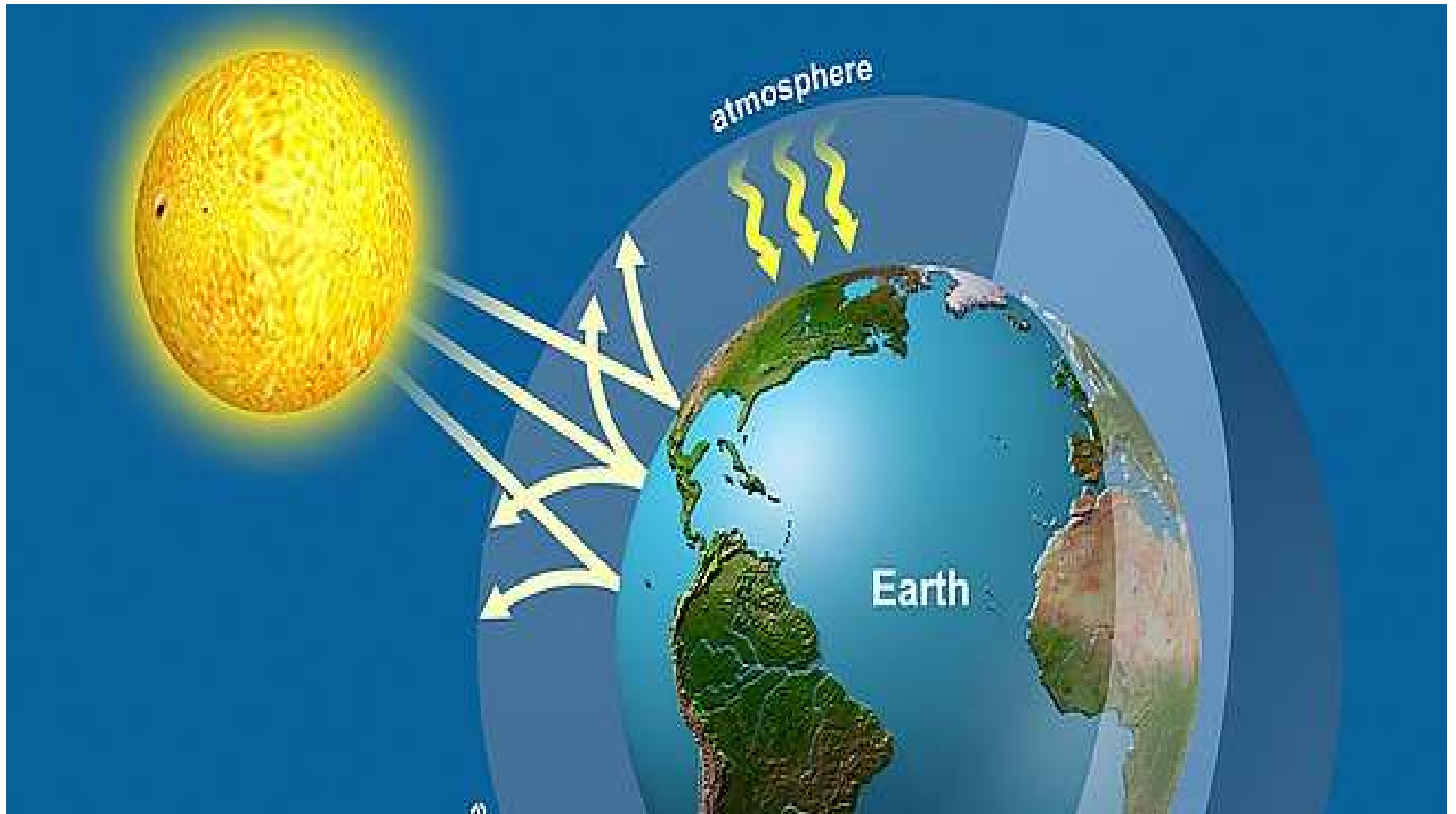
GLOBAL WARMING: IS IT A FACT OR FICTION?

**Dr Herman Wiechers
DNW Environmental Consultancy (Pty) Ltd**

GLOBAL WARMING: IS IT A FACT OR FICTION?

- **Most people believe global warming exists. But is it true?**
- **Most scientists agree that there is global warming, but there is no scientific consensus about what causes global warming or how it will affect us**
- ***Many do not believe that global warming is a problem. No wonder: they are targets of a massive and well-organized campaign of disinformation lavishly funded by polluters who are determined to prevent any action to reduce the greenhouse gas emissions - Al Gore***

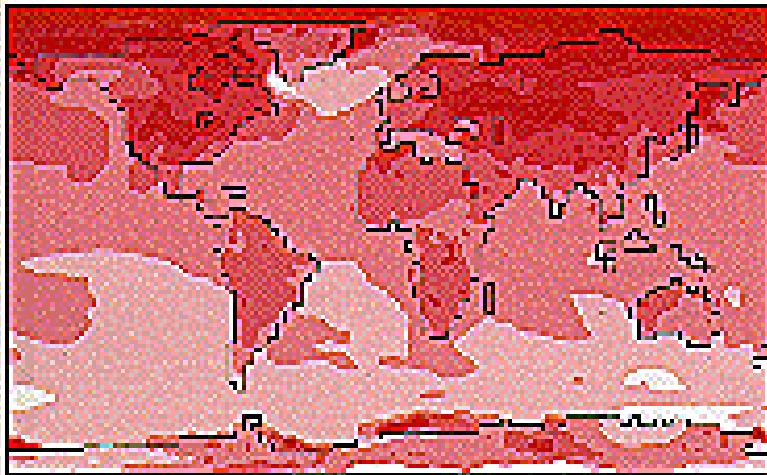
WHAT IS THE GREENHOUSE EFFECT?



TORNADOES & FLOODS: UNITED STATES, APRIL 2011



*IPCC Technical Guidelines
for Assessing Climate Change
Impacts and Adaptations*



UNIT OF THE ECONOMIC AND SOCIAL
COMMISSION FOR ASIA AND THE PACIFIC
OF THE UNITED NATIONS

INTERGOVERNMENTAL PANEL
ON CLIMATE CHANGE



World Meteorological Organization, United Nations Environment Programme



INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)

- IPCC established in 1988 by World Meteorological Organization & United Nations Environment Program
- IPCC has compiled Climate Assessment since 1990
- 2001 Report predicted average global temperatures would rise 2.5 to 10.4 degrees by the end of this century
- The rise from 1901 to 2005 was just 1.2 degrees.

IPCC HEAD - RAJENDRA PACHAURI

IPCC head says UN panel's next report must make sure "errors of any kind are completely eliminated", Monday 19 July 2010

[Network guardian.co.uk](http://network.guardian.co.uk),

- **IPCC chairman sent the letter on 5 July 2010 to 831 experts selected to take part in preparing the panel's fifth assessment report on CC**
- **This report is to be published in 2013 and 2014, and follows on from the fourth assessment released in 2007, which concluded that global warming is real and very likely due to increasing levels of greenhouse gases in the atmosphere due to human activities.**
- **The assessment exercise is made up of three working groups that will deal with the fundamental science and impacts of climate change as well as mitigation and adaptation strategies.**

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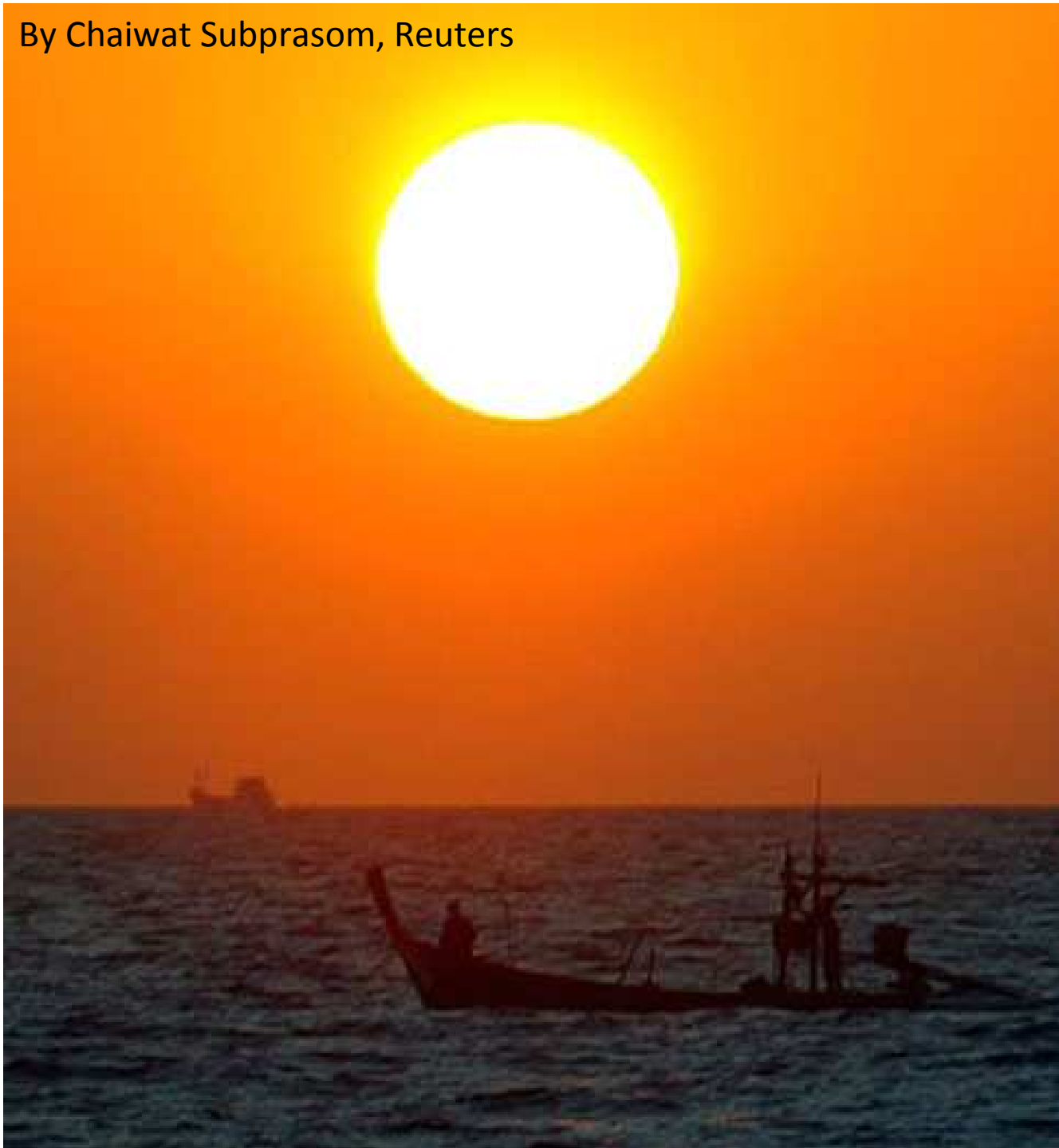
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IPPC'S 2007 FINDINGS

- More droughts, floods, shrinking glaciers and rising sea levels are projected
- The Climate Institute, a Washington, D.C., Think Tank, agrees with studies underlying the report
- A 2005 Nature magazine study, for example, narrowed the 2001 estimate of warmer temperatures to an increase from 2.7 to 8.1 degrees by the year 2100



By Chaiwat Subprasom, Reuters



Rising sea levels could threaten low-lying Pacific islands, coasts from Bangladesh to Florida and cities from Shanghai to Buenos Aires.

FOSSIL FUELS ARE TO BLAME, WORLD SCIENTISTS CONCLUDE

- International analysis of climate change (2007) concluded that humankind's reliance on fossil fuels, e.g. coal, fuel oil & natural gas, is to blame for global warming
- Report resonate worldwide, debate over global warming is more about what is responsible, people or nature?, than whether it is happening

THE INDEPENDENT



NEWSPAPER
OF THE YEAR



INSIDE TODAY: 24-PAGE PULL OUT

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‘I am no longer sceptical.
Now I have no doubt
at all. Climate change
is the major challenge
facing the world’

BY DAVID ATTENBOROUGH



CLIMATE-CHANGE DEVELOPMENTS IN THE USA

- **Congress:** Democrats climate-change bills; committee on climate change; Science & Technology Committee discuss IPCC report
- **States:** 12 states are taking steps to reduce GHGs; California Gov. Arnold Schwarzenegger ordered world's first low-carbon limits on passenger-car fuels
- **Cities:** More than 375 mayors have signed pledges to cut GHG emissions in communities, representing 56 million people in all 50 states
- **Industry:** Ten major companies, including General Electric, Alcoa and DuPont, joined four environmental & climate groups demanding swift passage of federal legislation to cut emissions

CLIMATE-CHANGE DEVELOPMENTS IN THE USA

- Prof. Paul Reiter (Pasteur Institute in Paris) said the list of scientists endorsing the recent IPCC report was a "sham," because it included names of panel scientists who disagreed with its exaggerated climate predictions
- Reiter, an expert in malaria, told the London Daily Mail that he only got his name removed after he threatened a lawsuit. "That is how they make it seem that all the top scientists are agreed," Prof. Reiter said
- In a report in the Jan. - Feb. 2000 issue of *Emerging Infectious Diseases*, Reiter showed that the claim that the increase in malaria was due to climate change was absurd

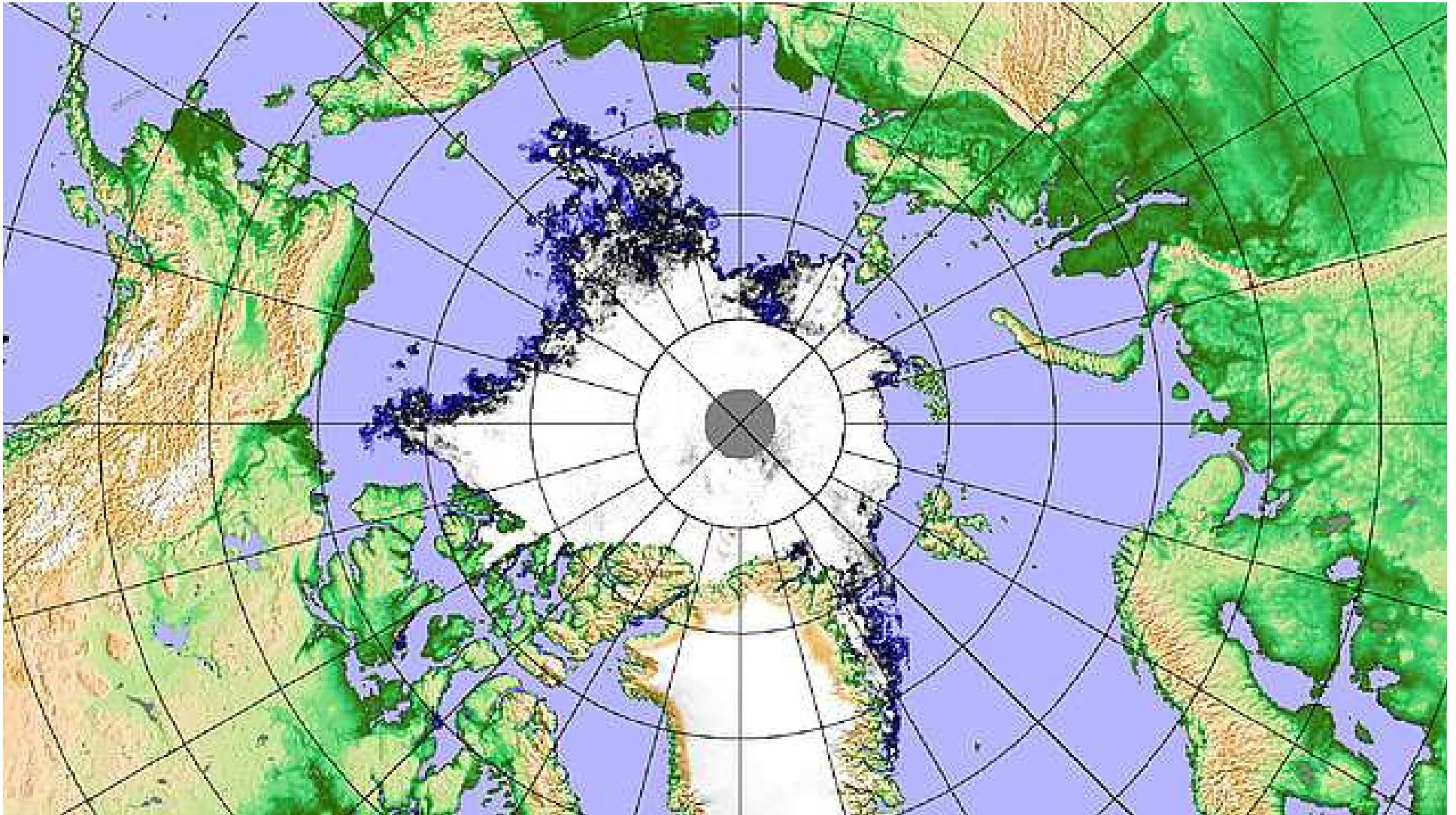
OPPOSITION TO GLOBAL WARMING SEVERELY SUPPRESSED

- **Oregon State Climatologist *George Taylor* is under threat of losing his job for arguing that most climate change is the result of natural variations, not human-produced CO₂**
- **Despite threats from the Governor & a pending bill in the legislatures to have him removed, sponsored by Democratic State Sen. Brad Avakian, Taylor has held firm**
- **"If the facts change, I'll change my mind. So far, I haven't," Taylor told a climate change conference at Oregon State University**
- **Taylor has held the title of "state climatologist" since 1991, when the legislature created a state climate office at OSU**

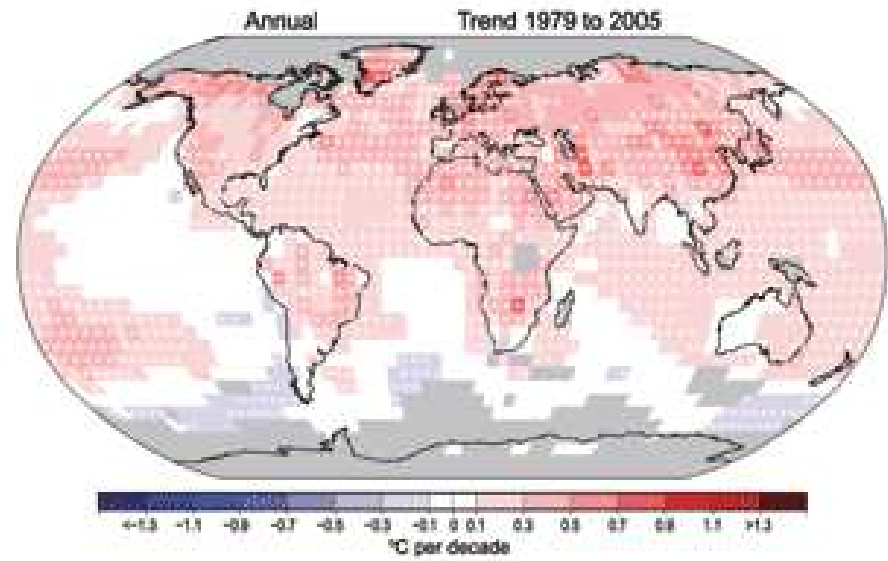
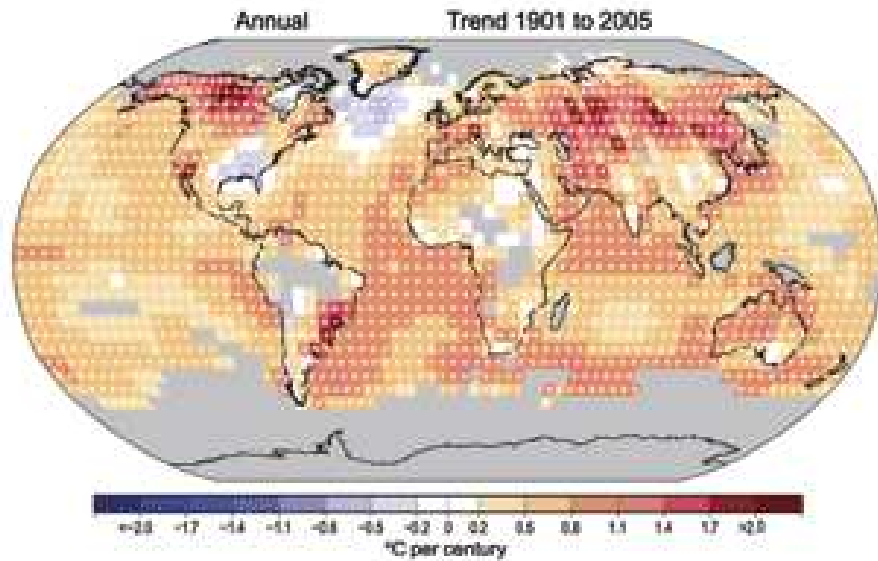
OPPOSITION TO GLOBAL WARMING SEVERELY SUPPRESSED

- **Chris Landsea, one of the world's foremost experts on hurricanes, resigned from IPCC in 2005, in protest over their bias**
- **He wrote an open letter shortly before the issuance of the IPCC's Fourth Assessment Report (2004) that although Dr Kevin Trenberth, the lead author of a part of the IPCC report had claimed that the 2004 Atlantic hurricane season was caused by greenhouse gases. Wrote Landsea: "To my knowledge none of the participants in that press conference had performed any research on hurricane variability....."**
- **"All previous and current research in the area of hurricane variability has shown no reliable, long-term trend up in the frequency or intensity of tropical cyclones, either in the Atlantic or any other basin."**

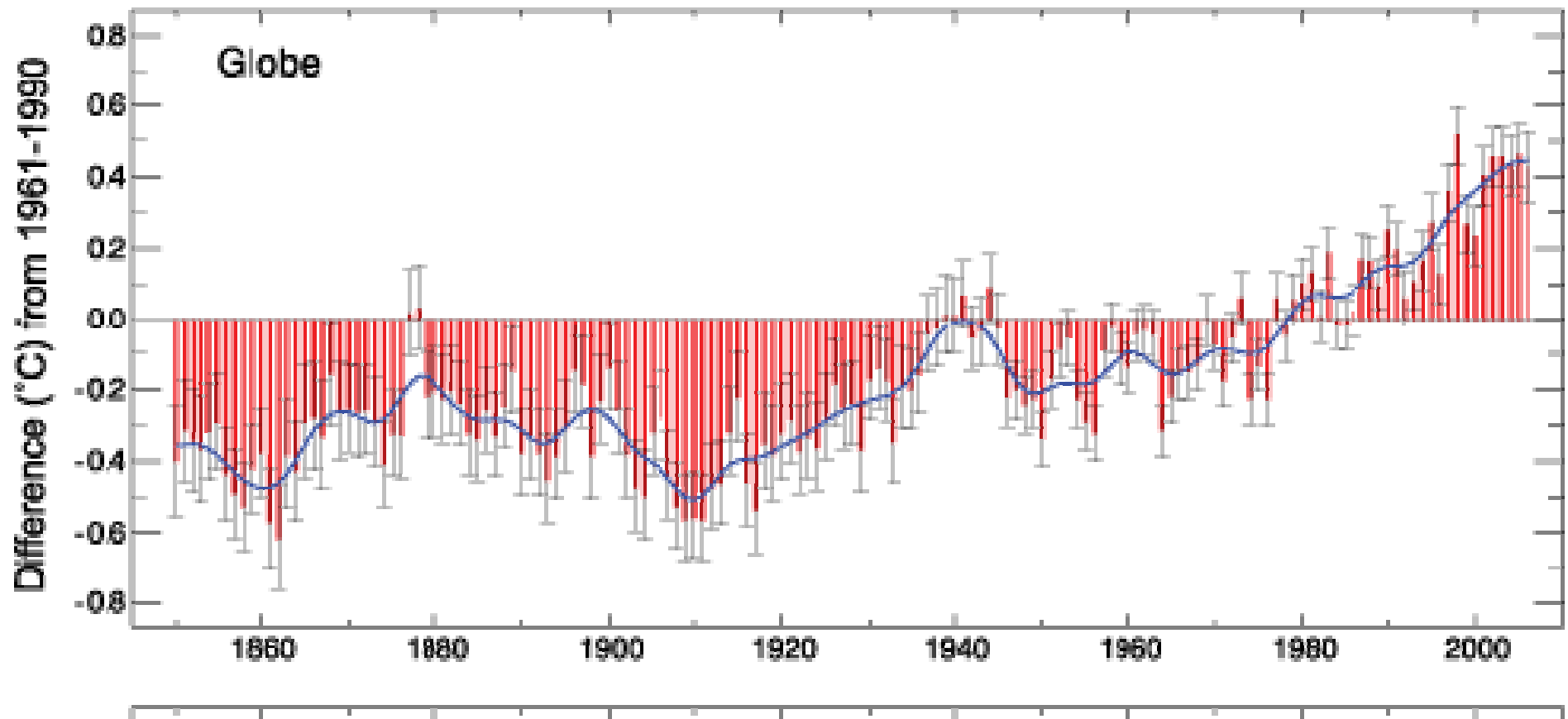
Global Warming The Arctic Meltdown



Is the climate warming?



Is the climate warming?



THE WASHINGTON TIMES



**EDITORIAL: Tax dollars perpetuate global-warming fiction:
\$6 million study is used to lobby for cap-and-tax**

**Carol M. Browner, former administrator of the
Environmental Protection Agency, has been President
Obama's adviser for energy & climate change. White
House officials confirmed she will leave that post**

VESTED INTERESTS AND CLIMATE SCEPTICS

- **Climate change has no time for delay or denial: Rajendra Pachauri, Guardian Newspaper, UK, Monday 4 January 2010**
- **Powerful vested interests and climate sceptics will work overtime to block legislation and discredit the science ahead of the next global climate summit in Mexico**

- **Substantial scientific evidence indicates that an increase in the global average temperature of more than 2°F above where we are today**
- **Poses severe risks to natural systems and human health and well-being**
- **To avoid this level of warming, the U.S. needs to reduce heat-trapping emissions by at least 80 percent below 2000 levels by 2050**
- **Delay in taking such action will require much sharper cuts later, which would likely be more difficult and costly.**

Why We Need to Act Now

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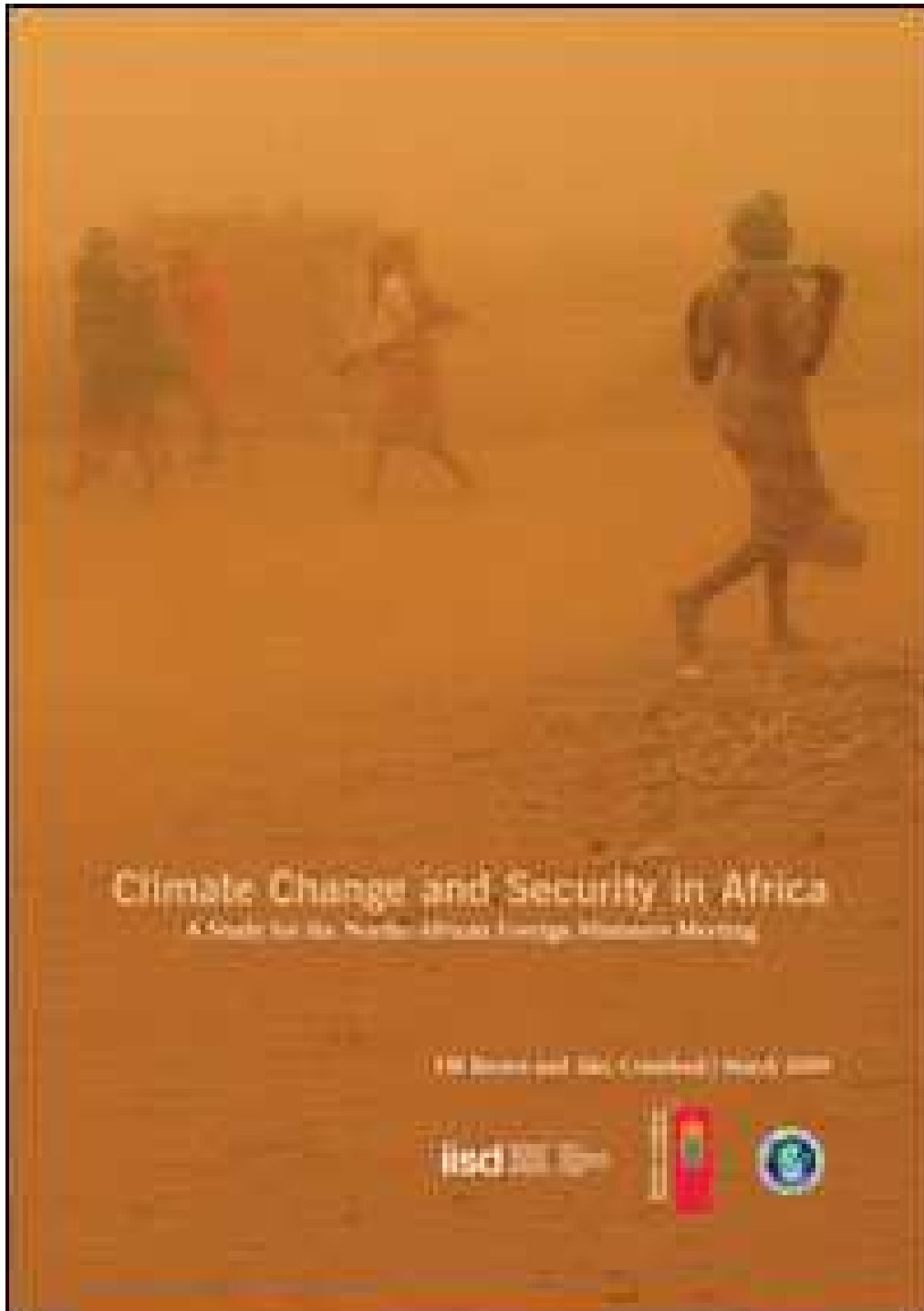




SOLUTIONS TO GLOBAL WARMING IN AFRICA

Solutions to global warming in Africa include:

- **Effective land use planning to avoid forest degradation**
- **Developing renewable energy, and**
- **limiting the expansion of coal-fired power plants**



NATIONAL CLIMATE CHANGE RESPONSE GREEN PAPER 2010

Stabilisation of GHG concentrations will require efficient international implementation of an effective and binding global agreement on, among others, GHG emission reductions

South Africa is committed to reducing its GHG emissions in order to facilitate the agreement and implementation of an effective and binding global agreement on, among others, GHG emission reductions;



NATIONAL CLIMATE CHANGE RESPONSE GREEN PAPER 2010

- **South Africa to adapt to unavoidable impacts of climate change through management of risk and reduction of vulnerability**
- **Costs associated with GHG emission reduction, significant short and long-term social and economic benefits, including international competitiveness; These costs far less than costs of delay and inaction**

NATIONAL CCRGP 2010: OBJECTIVES

- **Balanced approach to CC mitigation & adaptation responses its prioritisation, focus, action and resource allocation**
- **Prioritising development of science-policy interface & knowledge management & dissemination systems to ensure CC response decisions are informed by best information**
- **Short-term prioritisation of adaptation interventions that address immediate threats to health of South Africans, interventions in the water, agriculture and health sectors**
- **Prioritisation of mitigation interventions that significantly contribute to declining emission, in particular, interventions within the energy, transport and industrial sectors**

NATIONAL CCRGP 2010: OBJECTIVES

- **Accurately identify sectors & job creation, industrial development potential, work will be done so that White Paper provides a clear understanding and prioritisation**
- **Prioritising the development of knowledge generation & information management systems to measure and predict climate change (especially extreme weather events, floods, droughts and forest and veld fires, and their impacts)**
- **Mainstreaming climate change response into all national, provincial and local planning regimes**
- **Use incentives & disincentives, including regulation and economic and fiscal measures, to promote behaviour change to support transition to a low carbon society and economy**

- **Acknowledging that, with an energy intensive South African economy, mitigation of GHGs will not be easy or cheap; and Government must support & facilitate mitigation plans of the energy, transport and industrial sectors**
- **Recognition that sustainable development is also climate friendly development and need be to build resilience to climate change impacts**
- **Recognise measures by developed countries may have detrimental effects on high carbon and energy intensive economies such as South Africa.**
- **SA's climate change strategy must create mechanisms that will give high carbon sectors support & time to move to lower carbon forms of production.**
- **Recognise that SA's response to climate change will have major implications for both Southern African region and for Africa as a whole**

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