Transformative climate scenarios and global futures

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Alternative Futures

International Panel of Futurists
Rabat
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- Trends
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Context

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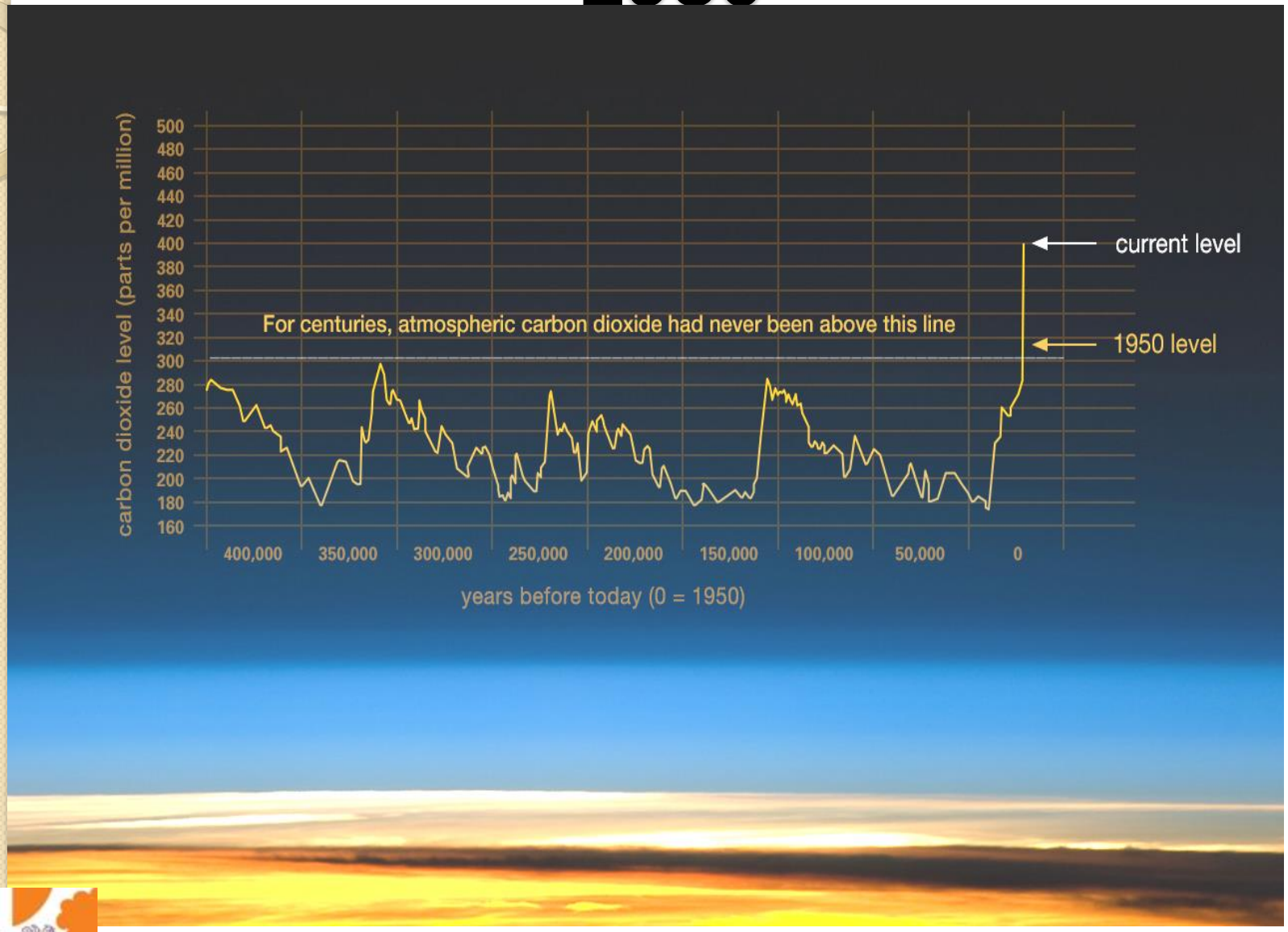
Carbon dioxide peaked after 1950



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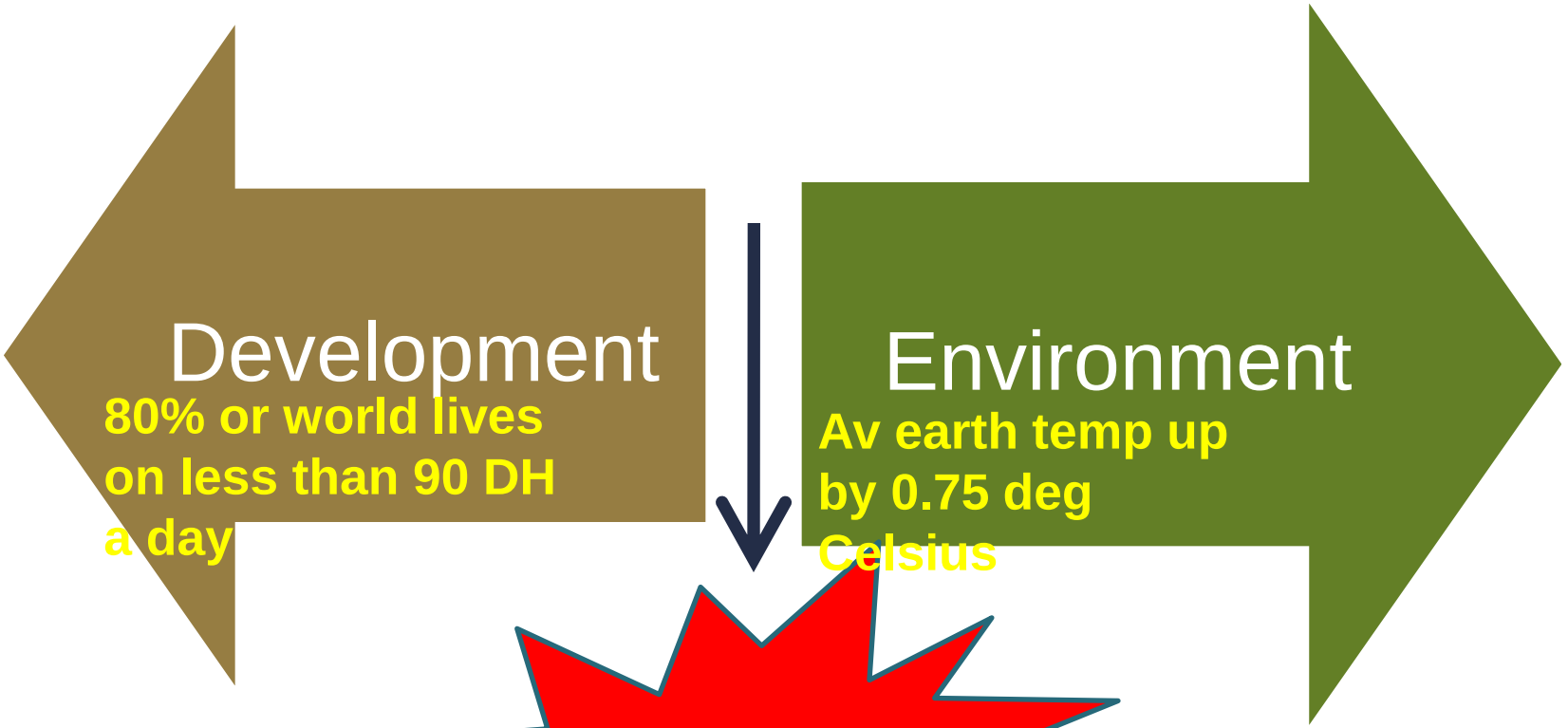
Trade-offs
To Grow or to Conserve?



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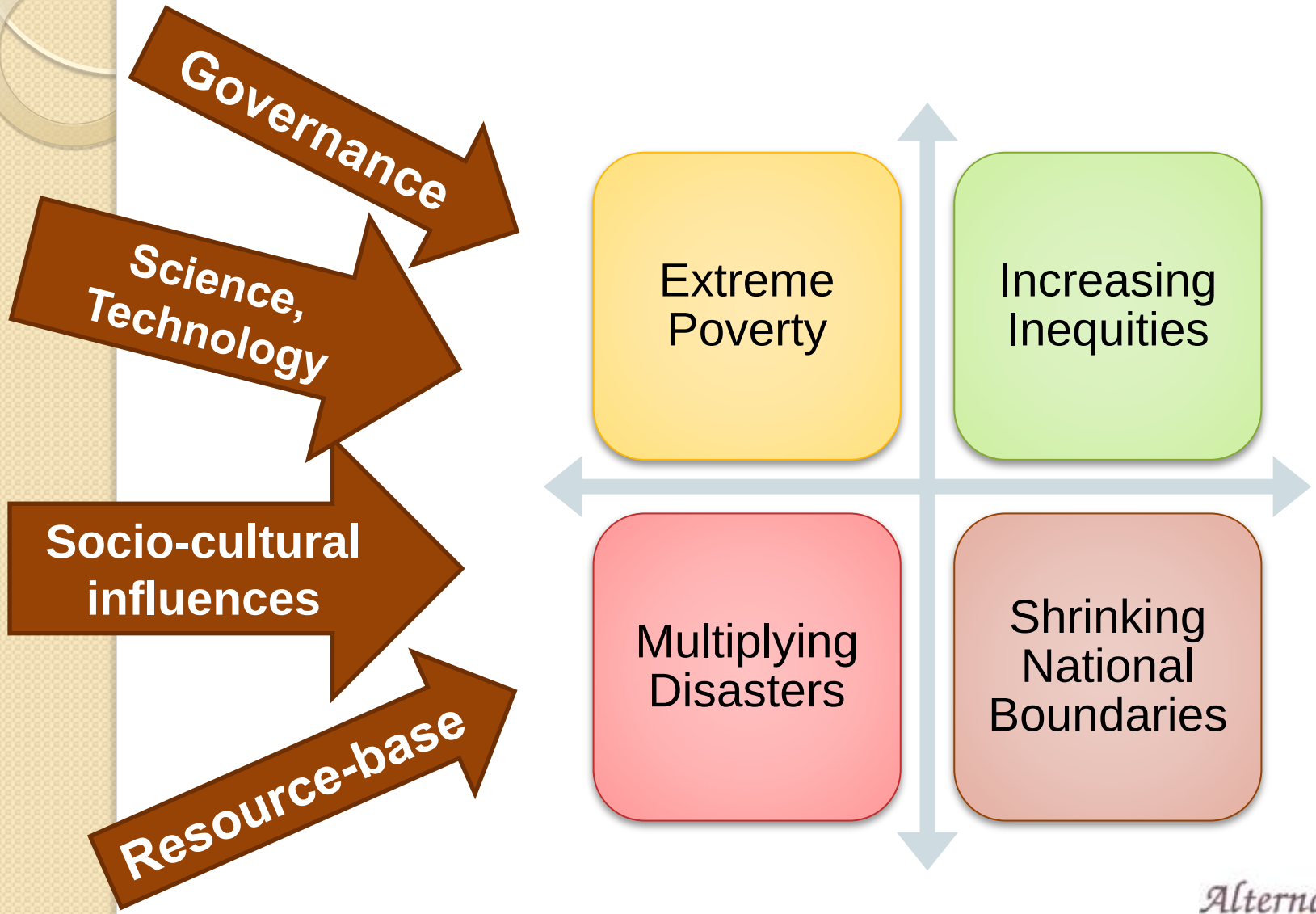
Climate Change: Deepening Challenges
Drivers of Change



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Trends

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Looming Food and Water Crisis

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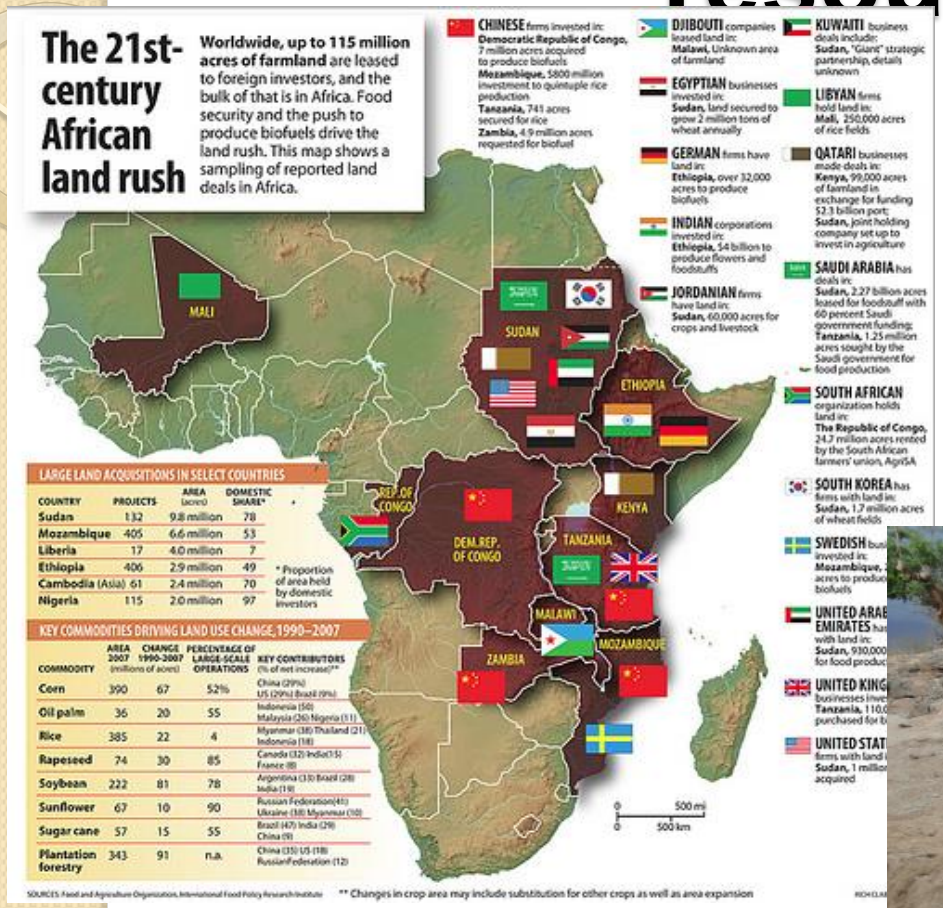
Conflicts over natural resources



‘Land grab’ by foreigners for food and commercial crops in Africa. Also in East Asia.

Water conflict in East Africa

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Climate change-induced civil wars

Lack of rain, ecological crisis and the first climate war in Darfur

Water, Drought, Climate Change and Conflict in Syria

Climate Refugees

2050: Up to 1 billion!

Yet to be recognised by UN for assistance.

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Changing energy base

Campaign by global youth at <350.org>

Hong Kong: first zero-carbon emission building began in 2012

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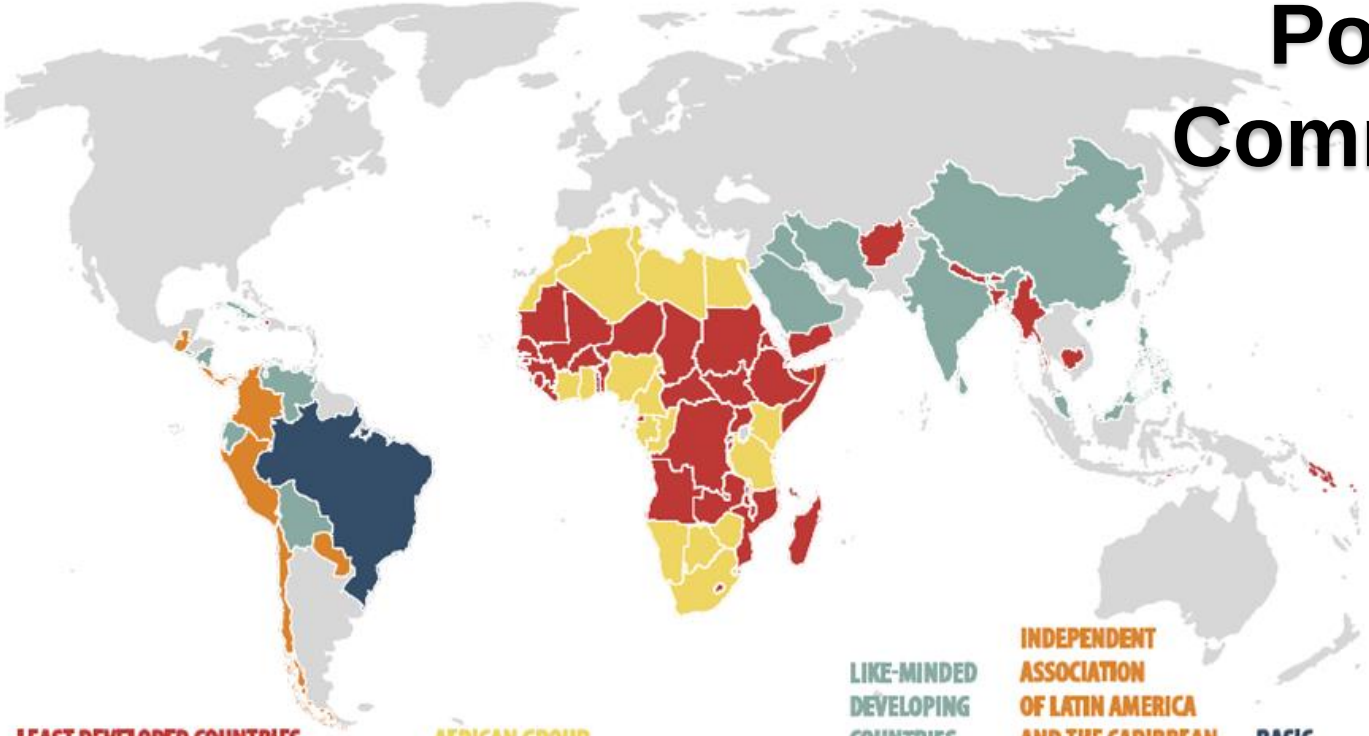
Annex: main groupings of developing countries active in climate negotiations

Political Commitment



LEAST DEVELOPED COUNTRIES

Afghanistan
Angola
Bangladesh
Benin
Bhutan
Burkina Faso
Burundi
Cambodia
Central African Republic
Chad
Comoros
Democratic Republic of Congo
Djibouti
Equatorial Guinea
Eritrea
Ethiopia
Gambia
Guinea
Guinea-Bissau
Haiti
Kiribati
Lao People's Democratic Republic
Lesotho
Liberia
Madagascar
Malawi
Mali
Mauritania
Mozambique
Myanmar
Nepal
Niger
Rwanda
São Tomé and Príncipe
Senegal
Sierra Leone
Solomon Islands
Somalia
South Sudan
Sudan
Tanzania
Timor Leste
Togo
Tuvalu
Uganda
Vanuatu
Yemen
Zambia

AFRICAN GROUP

Algeria
Angola
Benin
Botswana
Burkina Faso
Burundi
Cabo Verde
Cameroon
Central African Republic
Chad
Comoros
Congo
Côte d'Ivoire
Democratic Republic of the Congo
Djibouti
Egypt
Equatorial Guinea
Eritrea
Ethiopia
Gabon
Gambia
Ghana
Guinea
Guinea-Bissau
Kenya
Lesotho
Liberia
Libya
Madagascar
Malawi
Mali
Mauritania
Mauritius
Morocco
Mozambique
Namibia
Niger
Nigeria
Rwanda
São Tomé and Príncipe
Senegal
Seychelles
Sierra Leone
Somalia
South Africa
South Sudan
Sudan
Swaziland
Togo
Tunisia
Uganda
United Republic of Tanzania
Zambia
Zimbabwe

LIKE-MINDED DEVELOPING COUNTRIES

Bolivia
China
Cuba
Dominica
Ecuador
Egypt
El Salvador
India
Iran
Iraq
Malaysia
Mali
Nicaragua
Philippines
Saudi Arabia
Sri Lanka
Sudan
Venezuela

(membership fluctuates)

INDEPENDENT ASSOCIATION OF LATIN AMERICA AND THE CARIBBEAN

Chile
Colombia
Costa Rica
Guatemala
Panama
Paraguay
Peru

BASIC

Brazil
South Africa
India
China

Saudi Arabia commitment to solar PV, solar thermal, wind and geothermal energy and waste to energy systems

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Nations break political barriers to save people from climate impacts

Data sharing policy between India and China since 2003

22 June 2004: Landslide blocked the Pareechu River in Tibet, the upper reaches of India's Sutlej River.

Chinese authorities communicated to their Indian counterparts well before breach occurred.

India identified 56 risk villages.

Dam burst on 25 June 2005

Direct cost of flood damage - approx USD 200 million

No human casualties because of prior communication from the upstream country

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Future Scenarios - 2050

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Scenario1: Business-as-Usual

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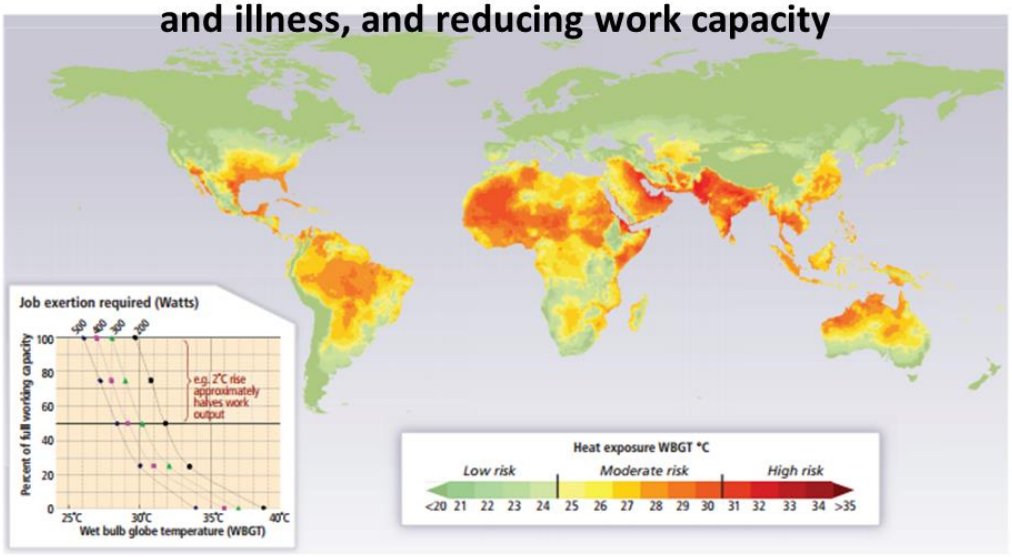
AR5 Current risk of heat exhaustion-
will increase with global warming, exacerbating diseases and illness, and reducing work capacity



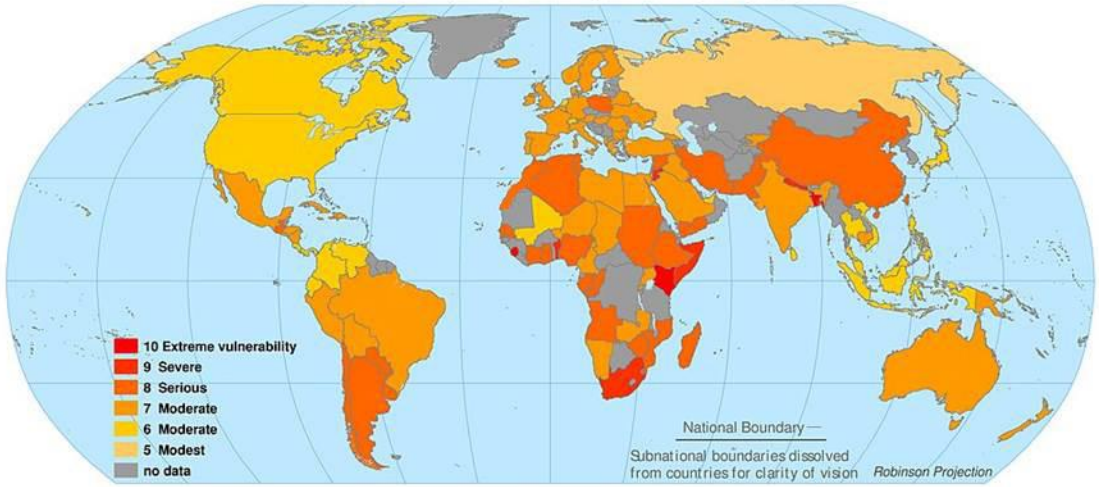
IPCC AR5 WG2 Figure 11-5 | The 1980–2009 average of the hottest months globally, mea
combines temperature, humidity, and other factors into a single index of the impact on v
that some parts of the world already exceed the level for safe work activity during the hc
every 1° C that Tmax goes up, the WBGT goes up by about 0.9° C, leading to more parts
with consequent impacts on productivity, heat exhaustion.

Today

2050

World wars driven by scarcity of natural resources

Global Distribution of Vulnerability to Climate Change
Combined National Indices of Exposure and Sensitivity



Scenario A2-550 in Year 2050 with Climate Sensitivity Equal to 5.5 Degrees C
Annual Mean Temperature with Extreme Events Calibration

http://ciesin.columbia.edu/data/climate/

Scenario 2
Technological and Cultural Revolution

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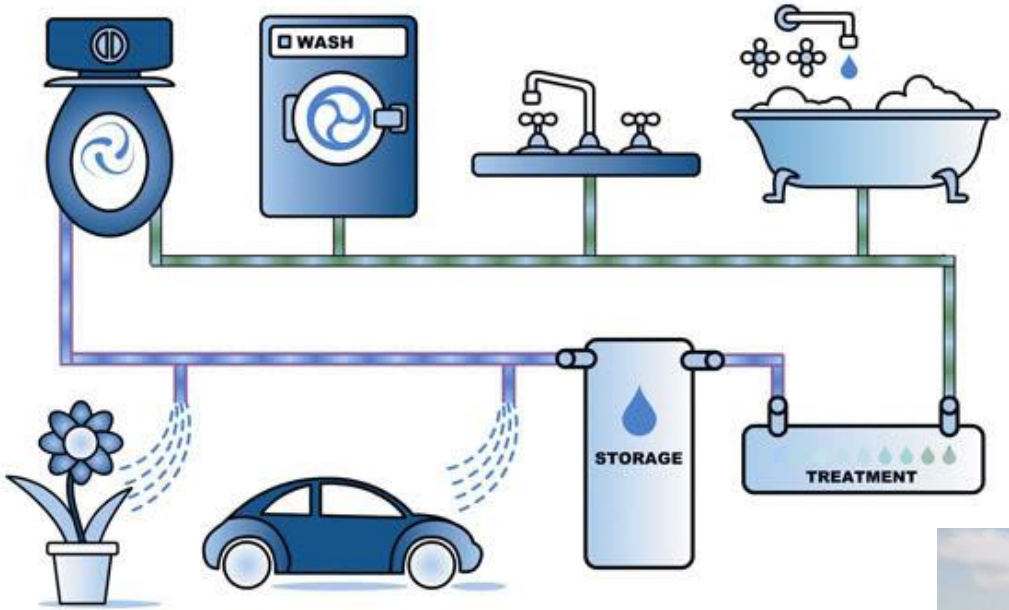

Singapore has been living on recycled water for years.

Techno-knowledge exchange on the rise

Sustainable Agriculture

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Scenario 3: Two worlds

Rising Inequalities despite climate solutions

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SDGs will remain unmet even beyond 2030

Equality will remain a vision

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Thank you

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