

# Climate change and why it needs urgent attention?

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# Background

- The environment (global and local) has been a subject of major concern to the international community for several decades
- Several international conferences have been held on a regular basis and actions taken with significant milestones worth a review

# Milestone 1

- **1972** UNEP established after Stockholm UN Conference on the Human Environment to provide global leadership and encourage partnership in caring for the environment.

## Milestones 2, 3, 4

- **1973** Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) adopted.
- **1975** Adoption of the Mediterranean Action Plan.
- **1979** Bonn Convention on Migratory Species (CMS) established.

# Milestone 5

- **1982** The Montevideo Programme adopted by UNEP Governing Council setting priorities for global lawmaking.
  - Led to major agreements, including the Basel, Stockholm and Rotterdam Conventions and the Montreal Protocol.
  - Assisted 120 governments develop environmental legislation.

# Milestones 6, 7, 8

- **1983** The Brundtland Commission established: definition of sustainable development; Published "Our Common Future", a blue print for work on sustainability.
- **1987** Zambezi River Action Plan adopted; Montreal Protocol on Substances that Deplete the Ozone Layer established following the Vienna Convention of 1985.

# Milestone 9

- **1988** Intergovernmental Panel on Climate Change (IPCC) established by UNEP and the World Meteorological Organization: Since then it has been delivering the most influential, comprehensive and scientifically reviewed reports on climate change; played a decisive role in the establishment of the UN Framework Convention on Climate Change and the Kyoto Protocol.

# Milestones 10, 11, 12, 13

- **1989** Basel Convention on the Transboundary Movement of Hazardous Wastes and their Disposal adopted.
- **1991** Business Charter on Sustainable Development issued at the 2nd World Industry Conference on Environmental Management (WICEM II); Global Environment Facility (GEF) established.
- **1992** UN Conference on Environment and Development (Earth Summit) adopts Rio Declaration and Agenda 21; Convention on Biological Diversity (CBD) established.



## Milestones 14, 15, 16, 17, 18

- **1995** Global Programme of Action (GPA) launched as a non-binding agreement to protect the marine environment from land-based sources of pollution.
- **1995** Basel Ban Amendment barring export of hazardous wastes adopted.
- **1996** UN Convention to Combat Desertification (UNCCD) entered into force.
- **1998** Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade adopted.
- **1999** UN Global Compact launched.

## Milestones 19, 20, 21, 22

- **2000** The Malmö Declaration adopted.
- **2000** Millennium Declaration adopted: “ensuring environmental sustainability” as one of eight Millennium Development Goals (MDGs).
- **2001** Stockholm Convention on Persistent Organic Pollutants (POPs) adopted.
- **2002** World Summit on Sustainable Development

# Milestones 23, 24

- **2005** Bali Strategic Plan for Technology Support and Capacity-building adopted by the UNEP Governing Council; Millennium Ecosystem Assessment highlights the importance of ecosystems to human well-being, and the extent of ecosystem decline.
- **2007** Fourth IPCC Assessment Report states that warming of the climate is unequivocal; 2007 Nobel Peace Prize; Bali Action Plan – calling for comprehensive action beyond 2012; Integration of climate change and sustainable development policies.

# Milestones 25, 26

- **2007** The Economics of Ecosystems & Biodiversity (TEEB) launched; International Panel for Sustainable Resource Management established to provide the scientific impetus for decoupling economic growth and resource use.
- **2008** UN-REDD program launched to combat deforestation, forest degradation and climate change; UNEP becomes a climate neutral organization (through reducing greenhouse gas emissions and procuring carbon credits to compensate for the remaining emissions); launch of the Global Green New Deal--Green Economy.

# Milestones 27, 28, 29

- **2009** International negotiations to prepare a global legally binding instrument on mercury are launched.
- **2010** Nusa Dua Declaration adopted at UNEP's Global Ministerial Forum in Indonesia; Governments agreed to establish an Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).
- **2011** UNEP launches the Green Economy report: Pathways to Sustainable Development and Poverty Eradication; UNEP and UN-HABITAT open New Energy Efficient Office Facility in Gigiri



**Much done; yet there are still more issues**

# Kyoto Protocol a

- The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change, which **commits** its Parties by setting internationally binding emission reduction targets.

# Kyoto Protocol b

- The Kyoto Protocol was adopted in Kyoto, Japan, on 11 December 1997 and entered into force on 16 February 2005. The detailed rules for the implementation of the Protocol were adopted at COP 7 in Marrakesh, Morocco, in 2001, and are referred to as the "Marrakesh Accords." Its first commitment period started in 2008 and ended in 2012.



# Kyoto Protocol c

- Recognizing that developed countries are principally responsible for the current high levels of GHG (green house gases) emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

# Doha Amendment

- During the first commitment period (2008-2012), 37 industrialized countries and the European Community committed to reduce GHG emissions to an average of five percent against 1990 levels. During the second commitment period, Parties committed to reduce GHG emissions by at least 18 percent below 1990 levels in the eight-year period from 2013 to 2020.

# Intergovernmental Panel on Climate Change (IPCC)

- **IPCC** is a scientific intergovernmental body under the auspices of the United Nations, set up at the request of member governments. It was first established in 1988 by two United Nations organizations, the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP), and later endorsed by the United Nations General Assembly through Resolution 43/53.

# IPCC

- Membership of the IPCC is open to all members of the WMO and UNEP. The IPCC is currently chaired by Rajendra K. Pachauri.
- <http://www.ipcc.ch/>

# IPCC

- The IPCC produces reports that support the United Nations Framework Convention on Climate Change (UNFCCC), which is the main international treaty on climate change. The ultimate objective of the UNFCCC is to "stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic [i.e., human-induced] interference with the climate system". IPCC reports cover "the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation."

# What is climate change and why is it preoccupying

- Climate change: change in weather pattern; predictability is gone
- The extremes: flash flood; mega storms; unusual drought
- Melting of the polar caps; rising sea level and temperature; many island countries set to be underwater

# 2014 Climate change: major work in progress

- IPCC Assessment: grim picture
- Large-scale marches worldwide  
September 2014
- UN Summit September 2014
- WAFUNIF Conference October 2014
- Lima/Peru Negotiation Conference Dec  
2014

# The divest movement

- Universities and various groups to remove their investments from companies that contribute to increase in CO2 emissions



# The UN World Summit 2014

- Called by UN Secretary General in September 2014 with high level attendance: head of states; business executives and NGOs
- Get countries to gear up for the 2015 Paris Conference via the Lima, Peru Conference (December 2014)
- “Science has spoken. There is no ambiguity in the message. Leaders must act. Time is not on our side” Ban Ki-moon, UN SG

# **WAFUNIF International Conference on the Global Environment**

- Held at UNHQ in October 2014
- Participants: members of the UN and international communities inc academia
- Stakeholders: representatives of the transportation sector
- Focus on solutions

# Main purpose

- “In highlighting environmental factors of sustainability and within them the detrimental role of greenhouse gases, specially that of black carbon, it seeks solutions in environmentally friendly transportation system” Dr. Ibn Hassan, President, WAFUNIF

# Transportation sector

- US automobile
- Japan automobile
- Canada automobile
- European Commission

# Focus on solutions

- Carbon reduction: the transportation sector has over the years been making effort to improve fuel efficiency, cut down emissions, use hybrid technologies, use electrical energy, use natural gas, use clean diesel, use of hydrogen fuel cell

# Case study: ASUA, Japan

- EcoDrive is a specific driving technique which saves fuel while making driving more pleasurable
- It reduces the negative effect of the use of fossil fuel

# Lima/Peru Conference

## Dec 2014

- Preparatory step to the Paris Conference
- Deemed a success:
  - (a) Climate Fund reached target of \$10 Billion with pledge from Australia
  - (b) With compromises, a Global Accord is in sight

# Paris Framework Conference 2015

- Purpose: continue negotiation among countries to commit to specific targets for CO2 reductions
- Expectations: better than those of the 2009 Conference
- Realism: targets, non binding commitments



# Intervening factors

- Rift between the scientific assessments and political decision making
- Rift developed-developing countries, with the latter thinking that the former is pushing them to do more environmental protection which could hamper their economic growth

# Action needed

- Developed countries: reduce activities that contribute to climate change (CO<sub>2</sub> emissions); diversification of energy sources
- Developing countries: reduce activities that contribute to climate change (CO<sub>2</sub> emissions, deforestation, diversification of energy sources)

# Climate (global) Fund for assistance to developing countries

- Set up to assist the developing countries in their efforts
- France contributed \$1 billion followed by Germany also \$1 billion, others following; US (Obama) pledges \$3 billion; Japan pledges \$1.5 billion
- At Lima/Peru target of \$10 billion reached with pledge from Australia

# Conclusion 1

- “The IPCC’s new Synthesis Report is yet another wake-up call to the global community that we must act together swiftly and aggressively in order to stem climate change and avoid its worst impacts” John P. Holdren, Director, White House Office of Science & Technology Policy

## Conclusion 2

- “The costs will go up enormously if we keep delaying things. The cost of inaction will be horrendously higher than the cost of action” IPCC chairman Rajendra Pachauri

## Conclusion 3

- "...it's not really a scientific problem anymore. Essentially, everything that needs to be done to move the needle is political" David Victor, Professor, UCSD, author of 'Global Warming Gridlock'

# Conclusion 4

- “The reality of climate change is undeniable and cannot be simply wished away by politicians who lack the courage to confront the scientific evidence” Lord Nicolas Stern, Professor LSE

# Conclusions 5, 6, 7

- Given the dire assessment made by the scientific community (via IPCC) and empiricism such as the vagaries of climate change, it is expected that countries will be willing to work together at the Paris Conference 2015 on finding and implementing solutions
- Private sector companies are also making serious efforts at becoming 'green'; WAFUNIF Conference shows that transportation sector is doing its best
- 'Green' seen as a new developing business opportunity