# Climate Change: The challenge and opportunity for our world

Sunita Narain, Director General, Centre for Science and Environment, New Delhi. Speech delivered at Asian University for Women Symposium: Imagining Another Future for Asia: Ideas and Pathways for Change, held at Dhaka, Bangladesh on January 21-22, 2011.

On Thursday the World Meteorological Organization announced that 2010 was the warmest year recorded in large parts of the world. South Asia was particularly warm. IMO said – no warned - that there is clear evidence now that the world is warming – its signs are evident in the changing and variable and extreme weather events.

Just think of last year: Forest fires in Russia, which destroyed vast wheat fields; floods in Pakistan – worst ever in human memory; recent floods in Australia, in Sri Lanka, in Brazil. Think of how extreme weather is becoming.

Think of how rainfall comes patterns are changing – it does not rain - pours.

Let us be clear about the following:

- a. Climate change the warming of the Earth's surface is caused by the burning of fossil fuels that we need for economic growth. **It is human made**.
- b. Climate change is real, it is already dangerous.
- c. The world needs to act. It needs to act urgently.

## Why do I say so?

It is human made: Climate change is linked to economic growth, as we know it today. If we breakdown the cause of emissions we find that the bulk come from the energy sector – burning of coal in power stations, which fuel our factories, give us light and air conditioning. It comes from burning oil in our cars. These sectors contribute some 70 per cent of the emissions in the world today. Carbon dioxide and methane are the key gases. The problem is complicated because CO<sup>2</sup> has a particularly long life –what you emit it today remains for 50-100 years. This is why the world worries about the cumulative impact created by the historical emissions.

**It is dangerous:** Scientist say that the world must remain below 2° C to avoid catastrophic damage even this is considered too high).

As I said before it is emissions from growth that have led to this temperature increase. The world has already increased temperature by 0.8 degree Celsius. It has also pumped so much gas in the last 100 years or so that another 0.8 C is now inevitable.

So a very small window of opportunity remains.

It demands drastic action.

The world has to reduce emissions by 85 per cent over its 2000 levels by 2050. The same emissions that give it **growth**.

This is the challenge.

## Why the world needs to act:

We in south Asia are most vulnerable.

Climate change is about extreme events. It is also difficult to estimate. We cannot say that this flood or this extreme winter or even this heat wave is because of climate change. We cannot. But we can.

We can say that the **increased** frequency of extreme and variable weather events is because of climate change.

We can say that **increased** intensity and frequency of storm surges and tropical storms is because of climate change.

But estimating increased frequency requires long-term trends that are still not available. Remember the world is making **history now**. Science will not be certain. It cannot lead policy into action.

But we must be clear: Our climate is changing. This change has the potential to devastate our world. This is not acceptable. So what do we do?

#### The 3-truths:

This is where the 3-truths of climate change must be understood.

- a. Climate change is related to economic growth. No country in the world was built a low carbon growth economy (as yet).
- Climate change is about sharing growth between nations and between people think of the atmosphere as a glass filled with water (emissions of Co2). Countries for their growth have filled this glass, with emissions as they have grown.
  If we take even the recent period 1950-2000 the cumulative emissions of one country US occupy some 30 per cent of the atmospheric space. China with a quarter of the world's people occupied some 10 per cent of the space.

This is called historical emissions or as US academics, Kirk Smith says, is the natural debt of a nation. Rich nation have borrowed beyond their share from the global commons. This **deb**t must be repaid.

But as I said it is about sharing growth. Consider the glass again. It is filled almost to the top with emission. But now emerging nations – India, China and even Bangladesh, need to grow economically. They need their rights to the global commons. This requires making space – the already rich must reduce so that the poor can grow. This is the politics of climate change.

c. Climate change is about cooperation. Let us be clear unless the world has an agreement based on equity and fairness, there will be no cooperation on climate change. Equity is a prerequisite for agreement on climate change. We cannot agree to a world, which does not give the poor the right to development.

## The world is doing little:

But as yet the world has talked big but given small change. Climate change negotiations started in 1990. In Rio the framework convention was signed. In late 1990s the Kyoto Protocol, the first legally binding agreement – to cut 6 per cent below 1990 levels by 2008-2012 was agreed upon.

But the rich world has reneged on its promise. Its life style is not negotiable. Between 1990-2006 UN data shows emissions have increased in spite of this agreement. Today because of recession, emissions are down but countries are investing in economic revival to bring emissions back. Then countries like the US have walked out of the global deal. Now the focus is on emissions of the new world.

Our chimneys are the problem without any concern for equity and the responsibility of the rich to reduce emissions, the demand is that China and India must cut first.

This is the stalemate.

#### The way ahead:

We must stop this kindergarten approach.

- a. The rich have to reduce. Cut emissions drastically. There should be no two views on this.
  - It is clear this will cost money. There are no easy-win-win solutions. The transition to low carbon will require taking tough measures. There is a technology limit currently to efficiency and reduction of emission. Data from UK shows how cars have become much more fuel emission efficient but emissions have continued to increase. The reason is simple: People buy more, people drive more. We need reinvention of growth.
  - We need sufficiency, not just efficiency.
- b. We in the developing world can do much more to **avoid** the growth of emissions. We have not built our homes, our cities, our energy systems. We can build differently.
  - But his transition will **cost**. Solar is not cheap. The question is to agree to a framework based on equity, which gives each person the **right to development**.

# **Adaptation:**

Clearly there is no way the world can avoid the impact of climate change. The poor are the **victims** of our excesses. Let us be clear on this. We need action for adaptation. This needs funding. But this is not a new science. It is about **development** – inclusive and sustainable.

Take water. It is clear that climate change will mean more variable and extreme rainfall. We will need storage to capture rain. To stop it from becoming a flood or drought. It is clear this region – South Asia – knew the art of water management. We would hold every drop of rainfall – we built lakes and ponds. Intricate systems of water engineering. We have to recreate this art. But at a pace and scale never done before.

#### Finally:

I believe it is possible to reinvent development. This is the opportunity to think about reinventing growth – about re-imagining another future, not just for Asia but for the world. Our interdependent, one world needs new politics:

- Where cars are not mobility.
- Where consumption is not growth.
- Where frugality is not poverty.