



CLIMATE CHANGE: NONE IS SERIOUS TO TACKLE IT

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Abstract

Climate change has become the most challenging problem and task for every one living on the land escape of the earth. The most unfortunate thing is that neither the developed countries nor the developing economies are serious on this task and as a result, on concrete solution has come so far. There has been more myth rather reality. As the time running very fast, it has become imperative for those economies which are major player in the issue of climate change must come forward with a concrete solution to this problem at all costs. Otherwise, the globe will have to face irrecoverable damages and every one will have to bear the unimaginable loss of humanity and materials. The present paper analyses the major issues relating to solution to most vital and strategic challenges of the present Century.

Keywords: Kyoto Protocol, Bali Action Plan, Copenhagen Accord, global community, Mitigation, and Cancun summit.

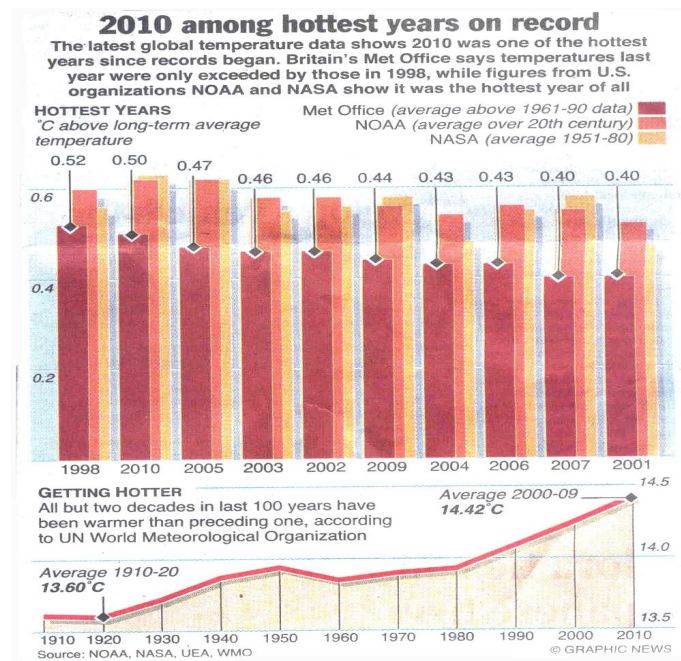
Global warming has come up the biggest and most critical challenge of 21st Century. For the last 25 years i.e. from 1985, global warming summits have been taking place. But the real breakthrough has not been come up and the same has become a distant dream. Copenhagen or COP 15 Accord made some head way and as a result; global leaders took note of it. But the same was not considered as a decision and hence, there was no legal binding on the members in respect of cut in global carbon dioxide emissions (chart). Keeping in mind the out come of Copenhagen Summit, it was believed that Cancun summit would give some concrete solution to the problem of global warming or climate change. The Cancun summit out come is mixture of optimism, consensus and compromises. Now in Durban (South Africa) in December 2011 what would happen and come out would largely depend upon the attitude and approaches of Developed and Developing nations. The most unfortunate thing is that the countries are not taking it as seriously as it should be. There is no doubt that if this is not taken seriously then in coming times the world become hell. ***The current disaster in Japan must be a lesson for developed nations and they must realize that the same disaster could happen to other parts of the world***

The globe is entering in era wherein the environment would get intertwined in a spiral of decline and degradation affecting the availability and access to water, food, and energy in a big way. According to a study, world over people would consume 10 per cent more water per year than nature could replenish [Mehta 2011]. Increase in global warming has been melting glaciers and receding snowlines. Accordingly, seventy rivers have stopped flowing into the sea and as a result, aquifers are depleting. {TOI}

Persisting trends

There has been three warmest years namely- 1998, 2005 and 2010 (chart 1). Since the beginning of the record of the global temperature, 2010 was one of the hottest years. The agencies of the UK and USA have also confirmed. The UK's Met Office revealed that temperatures exceeded in 2010 than that of 1998. Similarly, the US agencies namely- NOAA and NASA opined that the year 2010 has witnessed the highest temperature and hence is being considered as the hottest year {Hindu}.

Chart 1: Emerging trends in global temperature from 1998 to 2010



The United Nations Agency on Weather (UNAW) has pointed out that the globe is slowly but surely heating up. In 2010, the average global temperatures were 0.53 Celsius more than the recorded world temperature between 1961 and 1990. World Meteorological Organization (WMO) has observed that the year 2010 statistics confirms the globe significant long-term warming trend and the ten warmest years after records began as back as 1954 have all occurred since 1998 [Jarraud 2011].

Emergence of worries

The rising trend in global warming in terms of temperatures over the last Century i.e. 20th (average global temperature was 13.88 degrees Celsius) is creating more and alarming worries for climate experts. According to many atmospheric scientists, the major contributory factor has been a continuous rise in carbon dioxide and gases released into air because of burning of gasoline through engines and also due to the other industrial processes {GHCN}. As a result of these, the gases tend to trap heat in the atmosphere such as a greenhouse.

The worst impact has been witnessed in many countries of the world namely- Russia (heat wave); Pakistan (monsoon flooding); Sri Lanka and Philippines; Brazil and Australia (heavy floods). In the beginning of 2011, Australia has again witnessed floods. The year 2010 was also considered as the wettest. Since rain and snowfall patterns varied greatly world over, the atmospheric scientists are of the firm view that there is an immediate need for undertaking more researches to establish and confirm a link between the warmer temperatures with the unusual moisture {GWA}.

Why do we care?

Mankind has added enough greenhouse gases in the atmosphere to raise temperature to a dangerous level and emissions are set to keep rising, particularly from poorer economies for at least the short-term. We are already committed to what scientists believe would be serious impacts from rising temperatures such as more floods, droughts, heat waves and rising seas. Global temperatures may be 4°C hotter by the mid-2050, if current greenhouse gas emissions trends continue. According to an UN Report 'climate change outpacing worst-case scenario forecast in 2007 by the UN's Intergovernmental Panel on Climate Change (IPCC)'. In the words of another study 'results are showing similar patterns (to the IPCC) but also show the possibility that more extreme changes can happen'.

Cost of Climate Change

How much money is needed the most pertinent question that is a matter of concern for developed and developing nations. According to an estimate, the total cost involved into facing the chronic issue of climate change is US \$ 1.1 trillion. The classification of cost for different components of climate change is given in table I.

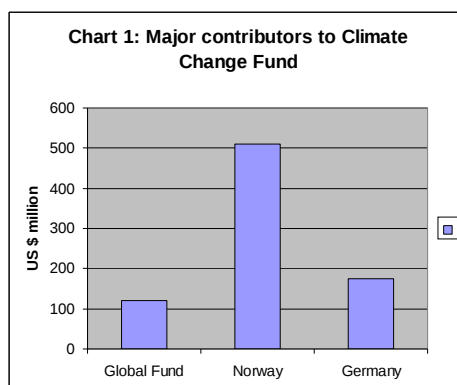
Table: I Money needed for different components of climate change 2010 to 2050

Reduced to after fuel, efficiency savings	US \$ 53 billion
By 2030 for early weather warnings, flood prevention	US \$ 100-150 billion
Climate funds rich should pay developing countries by 2020	US 147 billion

Source: Reuters.

Contribution of funds by different sources

Funds already available for meeting the challenge of climate change and global warming stood at US \$ 6.9 billion. The largest contribution has been made out by the World Bank amounting US \$ 5.1 billion. Funds already made available by different countries can be seen from Chart 1.



Source: prepared by the author

Delegates at the start of climate negotiations at Bangkok (Thailand) were told that the world expects action as they struggle to break the deadlock in talks for tougher pact to fight global warming. Agreement on climate funds and who will pay is an important or strategic segment to get a deal to fight climate change in Copenhagen (Denmark) in coming December 2009.

Proposal on how to raise funds

The following are the major proposals for agreement in coming climate change negotiations:

- US 4 15-25 (Norwegian) billion set quotas of greenhouse gas emissions permits for developed nations for 2013-2020 of which 2 per cent would be sold to them to raise funds.
- US \$ 10 billion (Mexican) international fund form all nations, based on their responsibility for causing climate change, national wealth and population.
- US \$ 55 billion (European Commission), expansion of carbon markets so rich earn rights to pollute by paying for emissions cuts in less developed countries.
- US \$ 28 billion (Least developed economies), Levy on international jet and shipping fuels.

Serious matter

Rich or developed economies are fudging from their pledges. There has been an alarming gap between the commitment and resources provided. In December 2009, in Copenhagen the promise was made for '**fast start finance**' for meeting the cost of global warming. But the same is completely missing as one year has passed out. There is a pass off existing funding to the wrong recipients and hence, concrete steps have not been taken in the direction of reduction in carbon dioxide and gases.

At the UN Climate Change Summit at Copenhagen, developed nations has committed to provide an amount of US \$ 30 billion between 2010 and 2012 for extending immediate help to poor countries and also those economies who are worst affected by global warming. These funds were committed as additional resources especially for small island states, African countries and the other least developing economies. Now more 14 months have passed out the commitments are yet to be materialized and there is doubt that disbursement touch two digit figures.

The matter is of worry that developed nations are attempting to sneak in their existing **aid to large developing economies as a part of fast start finance package**. For instance, the United States has earmarked an amount US \$ 26 million to India. Similarly, European Union has earmarked aid to Brazil as part of the same. This failure to provide on fast start finance is the biggest disappointment after the grand bargain at Copenhagen. The emerging economies namely-Brazil, South Africa, Russia, India and China have pointedly said that there is no point in initiating negotiations and discussion in regard to creation of Green Climate Fund unless and until a considerable or noticeable finances are made available under the fast start finance scheme. Another matter of concern is the **future of Kyoto Protocol and its Second Commitment period** which would be the focal point in Durban in December 2011. These critical issues are on way to Durban.

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Global Warming and India

India is one of the most affected countries due to global warming in the world. On the conservative projection, in India crop productivity could be declined by 20 per cent in years to come. Similarly, an increase of 8 to 10 per cent in the intensity of monsoon would result a rise in risk of floods and crop loss. May to October 2011 could see an up to rise of 20 per cent {**ST**}. Temperatures in India are set to increase; way increase than what India

has registered in the past 130 years. The monsoon too is going to change; it would rain as much; perhaps more, but in short, intense bursts, heightening the risk of floods and crop failure.

According to a study, day temperatures would be higher and there would be less respite from the heat at night. The band of high temperature days would get longer than now, and these unusual changes may result into more heat-waves deaths, apart from negative impact on crops. The average annual temperatures across India could increase by 2 degree Celsius by the middle of the Century and 3.5 degree Celsius by the end of the present Century (21st) [Patwardhan & Kumar 2011].

If greenhouse gas emissions are not declined or managed properly, in India, the average daily maximum temperatures before the onset of monsoon will be routinely nearly 45 degree Celsius. And rains across India could go up by margin of 8 to 10 per cent by the end of 21st Century. This could result into a higher intensity, raising the risk of floods and bad crops [Goswami 2011].

A Case of Basmati Rice

One of the examples of global warming impact is the enormous effect could be on the fragrant basmati rice famous world over. Basmati rice may lose not just aroma, the famously long grains may get shorter. In an experiment at Indian Agricultural Research Institute; when temperature during September comes to 26 degree Celsius, when the basmati rice begins to flower and , 15 to 20 days afterwards [Pathak 2011], when the grain begins to fill out, extra heat prevented the food stored by the crop traveling to the grain. Consequently, it failed to grow to the required or right length. The heat also destroyed fatty acids stored in the grain, a pre-requisite for basmati rice to give off its distinctive fragrance when cooked.

It is believed that global warming may have enormous implications and impact on India's most popular basmati crop which stood at 4.5 million tones. Hence, it is imperative to find out the solution to this crop. The best solution to this crop would be to bring planting dates forward, so that high or unusual temperatures in September do not affect the crop in big way. The other alternative solution would be to develop a new, heat-resistant basmati variety, though they generally have smaller yields [Singh 2011]. The impact of these changes in global warming could be disastrous unless Indian Government pushes adaptation policies and plans. Even adapting, such as introducing heat resistant seeds, would not be able to completely counter the impact and implications of the changes.

Inferences drawn

It is rightly said elsewhere that no water, no future, no food, no future, no energy no future; no environment, degraded future. Environment is impacted by every thing that happens in the other sectors of the economies and in turn it is impacted by them. There is an inextricable linkage. The gravity of the crisis stems from the very fact that natural balance between them has been disrupted. Copenhagen (December 2009) and Cancun (December 2010) notwithstanding, most people now accept that unless and until this balance is restored, the reality of sustainable development of the globe in general and India in particular **would remain a chimera or distant dream.**

In India, the existing situation clearly needs a comprehensive and cohesive strategy and the strategy should be framed within a holistic framework. There is an urgent demand that institutions be established to transform the strategy into reality or practice. The basic crux of the issue is such requirement push against conventional wisdom and vested interests. Hence, it is difficult **to transform the same from myth into reality.** But fact remains that nature would not wait one human's inertia. The crisis of **global warming would deepen further over time; the risks of a no future would become alarmingly a reality.**

Conclusion

Climate change is one of the biggest challenges for entire globe. But developing economies and especially emerging economies like India and China are greatly affected. Hence, the need of the hour is to tackle the challenge with "utmost sincerity". The effects are of far reaching consequences. If human civilization is to be saved then there is no option before any country just to cooperate positively and constructively in save the earth from further decay. Cost-bearing should be logical keeping in mind the capacity of the every nation to contribute. Global decisions should strictly adhere to. The need of the day is to have collective approach to tackle the challenge. The possible replacement of the existing Kyoto Protocol

by a new treaty suggested by the US must be deliberated, negotiated and finalized with all care and cautiousness as the same may have far reaching effects, consequences and implications for every country and continent. The decision should not be in haste. The future of Climate change issue is basically depending upon the out come of negotiations that have to be taken place in Durban, South Africa in December 2011.

Strategy for meeting the Challenge

There is an immediate need **of new political will and strategy**. This has become imperative on the part of every one that the second commitment period has to be agreed upon before the expiry of the first commitment period i.e. 2012. The emerging economies namely- Brazil, South Africa, Russia, India and China should come up with a proposed framework for the second commitment period and emphasis must be from everyone. **The second Kyoto commitment period must reflect what science is telling us** and every one needs to be work together.

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