# **Environmental Issues : Avoiding a Point of no Return**

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# ABSTRACT

The green cover is rapidly shrinking on Planet Earth. The climate is changing and varieties of environmental problems are now affecting our entire world. As globalization continues and the earth's natural processes transform local problems into international issues, few societies are being left untouched by major environmental problems. Well, today, humans have to combat many such manmade effects that have harmed the Mother Nature in many ways over the years. Alarming climatic changes, deforestation, destruction of habitat and extinction of species, rising pollution levels are only some of the current environmental issues we are faced with today. It becomes the duty of all to solve this global and substantial problem with unique and bizarre solutions. The solutions must come on broad, cultural, bioregional, even global levels, as well as on individual and local levels. The paper is a modest attempt to highlight some of the issues like sustainable development and carbon credits in specific and Environment in General.

Key Words: Environment, Earth, Carbon Credits, Sustainable Development, Climate

## 1. Introduction

There is no doubt that the world faces an enormous environmental challenge. The world's rich have been living well beyond the means of global ecology. There are serious threats to ozone layer, global climate and the oceans. Vast areas of the croplands, grasslands and the forests are being degraded to produce luxury biomass goods and mineral products to meet the needs of the rich. The world's market systems are failing to set prices in ways that include the ecological costs of production. The worst impact of the environmental destruction is passed on to the poor.

Every time an American family decides to take a car out , the resulting carbon dioxide adds to the existing stock in the atmosphere for atleast a hundred years. Every time somebody decides to use a fire extinguisher with halons in United Kingdom, it is the Australians and the Chileans who are likely to feel the impact of the ozone hole. And every time an Indian uses DDT to kill a few mosquitoes, he can be rest assured that one day the substance will find its way into the sea, probably as far as Antartica and affect the wild life there. That is the integrated character of the global eco system we live in today. The threat of climate change is real and urgent. Man is upsetting the balance. Global warming has emerged as the chief menace of our times. Green house effect was considered as a fiction in 1960's but today it's a real threat and a matter of concern. How did we get here? The major culprits are OECD countries which though house just 15% of the world's population but account for as much as 50% of the world's total carbon dioxide. Carbon dioxide has been rising steadily in the earth's atmosphere. In 1780 it was 280 parts per million (ppm), in 1930 it was 315 ppm, in 2005 it was 380 ppm and it is predicted to reach 500 ppm by 2050. Global emissions of carbon are expected to cross 14

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billion metric tones by 2054 and scientists say we will pass a point of no return.

However recent definitions explicitly rely on three aspects of sustainability: economic, environmental and social. It is defined as a process of environmentally responsible human development that discourages the present generation to become better off at the cost future generations. The definition contains five important points: (1) the right to development must be fulfilled to meet the basic needs; (2) the overall quality of life is critically influenced by the quality of environment; (3) the natural resources represent a common heritage and must be preserved; (4) the needs of the future generation are equally important and should be taken care off; (5) the process of sustainable development cannot be divorced from the existing state of economic development policy framework and problems including the poverty, population growth, urbanization and rural development and the institutional structure of the global economy.

Any discussion on SD has to focus on environment and economy relationship, which is not only close and interconnected, but it is two way as all economic activities either affects or are affected by environmental resources (Economic Survey, 1999).

In a developing country like India, economy – ecology relationship becomes little complicated as poverty, demographic pressures and environmental degradation get closely associated through day to day compulsions of food, fuel and fodder on one hand and poor using family extension as a source of supplementing family incomes to reduce the risk of destitution. Poverty, if not the worst pollutant, is generally blamed for both population growth and environmental degradation.

# 3. Carbon Credit

Amidst growing concern and increasing awareness about the need for pollution control, the concept of carbon credit came in vogue as part of international Kyoto protocol. Carbon Credits are certificates awarded to countries that are successful in reducing the green house gases (GHG) that cause global warming. It is estimated that 60-70% of GHG emission is through fuel combustion in industries like cement, steel textiles and fertilizers. Carbon Credits are measured in units of certified emission reductions (CERs). Each CER is equivalent to one ton of carbon dioxide reduction. India has emerged as world leader in reduction of green house gases adopting Clean Development Mechanisms (CDMs) in the past two years. Developed countries that have exceeded the levels can either cut down emissions or borrow carbon credits from the developing countries. Carbon credit is defined as an action that helps reduce the atmospheric concentration of  $CO_2$ , such as fossil fuel conservation and planting trees, defines Canadian Environmental Literacy Project (www.celp.ca). Carbon Credit as defined by Kyoto Protocol is one metric ton of carbon emitted by burning of fossil fuels.

There are different types of carbon credits. First, Credits defined in Kyoto Protocol include Assigned Amount Units (AAU), Certified Emissions Reductions (CERs), Emission Reduction Units (ERUs) and Removal units (RMUs). Second, credits for specific emission trading markets to assist in achieving Kyoto targets including UK Allowances and European Emission Trading Allowances (EAU). Third, non Kyoto compliant credits under which are listed Emission Reductions (Ers) and Verified / Voluntary Emission Reductions (VERs)

The concept of carbon credit trading seeks to encourage countries to reduce their GHG emissions as it rewards those countries which meet their targets and provides financial incentives to others to do so as quickly as possible. The Protocol and new European Union emission rules have created a market in which companies and governments that reduce GHG gas levels can sell the ensuing emissions 'credit'. These are purchased by business and governments in developed countries – such as the Netherlands – that are close to exceeding their GHG emission quotas.

For trading purpose, one credit is considered equivalent to one tonne of carbon dioxide emission reduced. Such a credit can be sold in the international market at a prevailing market rate. The trading can take place in open market. However there are two exchanges for carbon credit viz Chicago Climate Exchange and the European Climate Exchange.

The Kyoto Protocol provides for three mechanisms that enable developed countries with

quantified emission limitation and reduction commitments to acquire greenhouse gas reduction credits. These mechanisms are Joint Implementation (JI), Clean Development Mechanism (CDM) and International Emission Trading (IET). Under JI, a developed country with relatively higher costs of domestic greenhouse reduction would set up a project in another developed country, which has a relatively low cost.

Under CDM, a developed country can take up a greenhouse gas reduction project activity in a developing country where the cost of GHG reduction project activities is usually much lower. The developed country would be given credits for meeting its emission reduction targets, while the developing country would receive the capital and clean technology to implement the project. Under IET mechanism, countries can trade in the international carbon credit market. Countries with surplus credits can sell the same to countries with quantified emission limitation and reduction commitments under the Kyoto Protocol.

#### 4. Discussion

The major problem with the current environmental diplomacy is its very agenda. Dividing environmental problems into global and local has created a standing conflict between industrialized and developing countries. While developing countries have a greater interest in immediate and short environmental problems like land degradation, ground water depletion, water scarcity and deforestation, which are classified as local environmental problems, industrialized countries are taking a great interest in the long term environmental issues like climate change, classified as global environmental problems.

Unless all the environmental problems are addressed within an integrated perspective that takes into account the local and the global-the local within the global and the global within the local- there will be little confidence within the developing world that their concerns are being taken into account in the global environmental agenda.

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