

Environmental Concerns at Global Level and Indigenous View

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Abstract

Mr. Ban Ki-moon, ex Secretary-General of the United Nations, stated that 'the United Nations was created from the ashes of World War II. Seven decades later, in Paris, nations have been invited in the face of another threat to life as we know it due to a rapidly warming planet.' It shows a serious concern for the environment from a globalised perspective. The paper deals with emerging concerns and issues relating to environmental degradation and destruction which have been experienced during the end of the 20th century and in the first quarter of the 21st century. At the outset, it has been argued that all countries in the world have a common feeling to save the earth from the ill effects of natural threats caused by over exploitation of natural resources and delineate almost in one voice for a secure future of the future generation. Also, the multifarious aspects of environmental concerns are being addressed. But a difference of opinion remains, between the developed and developing nations, over the matter of extremes of emission and adoption of luxurious life style. In view of this debate the later part of the paper is devoted to understanding and examining the present affair in the context of indigenous values and vision particularly in the realm of Indian community.

From the point of methodology the paper is mainly based on the secondary sources, print media in particular and relevant publications in general, and is of analytical and descriptive nature.

Introduction

It has been observed that various forces of development have been damaging environment and threatening the very existence of humankind. It is evident that man has lived on the earth since the inception of human evolution, but he has never threatened so perilously its environment as he has been doing for the last two or three centuries of the modern era (Indra Deva 1997).

For discussing the current environmental concerns, it would be proper at the outset to refer to the Paris Conference 2015. In that conference, environmental concerns in globalised perspective were addressed more seriously at global level by the United Nations focussing on global warming caused by greenhouse gas emissions. Table-1 reveals how a series of annual conferences have become significant for delineating the relevant issues. These annual conferences have been hosted by the UN to tackle the vexed global warming issue since 1992, but all previous efforts have foundered, primarily due to deep divisions between rich and poor nations. Many poor nations insist that rich countries bear the most responsibility for tackling the problem because they have burnt the most fossil fuels since the industrial revolution on their way to prosperity.

The COP 21 at Paris in 2015 was significant from various angles where the heads/representatives of 196 nations participated. On this occasion, Indian delegates also made a fruitful presence

by way of their logical, valuable and concrete vision.

In this regard, the viewpoint of Indian Prime Minister Narendra Modi became a powerful voice, in the opening ceremony, representing a reasonable picture of developing and under developed countries. He opined that "justice demands that, with what little carbon we can still safely burn, developing countries are allowed to grow, the lifestyles of a few must not crowd out opportunities for the many still on the first steps of the development ladder...We hope advanced nations will assume ambitious targets and pursue them sincerely...Not just a question of historical responsibility. They also have the most room to make the cuts and make the strongest impact." (*Times of India* page 1-8, 01-12-2016).

The global meets on the environmental concerns had been taking place since 1972 UN Stockholm Summit, but an account of annual conferences since 1992 is listed in Table-1

Table-1

Annual Conferences Organised by UN since 1992 Conference of Parties (COP)*

1992	Governments craft UN Framework Convention on Climate Change in Rio de Janeiro to take steps, without specifying any, against climate change. Next five years, governments wrangle over role of developed countries versus poorer nations.
1995	COP1/ Berlin
1996	COP2/ Geneva
1997	COP3/ Kyoto, talks of 5% emission cuts compared with 1990 levels by 2012. Each developed country allotted reduction target. But China, South Korea, Mexico and other rapidly emerging economies allowed to increase emissions at will.
1998	COP4/ Buenos Aires
1999	COP5/ Bonn
2000	COP6/ The Hague

2001	COP7/ Marrakesu
2002	COP8/ New Delhi
2003	COP9/ Milan
2004	COP10/ Buenos Aires, Russia decides to pass treaty. Protocol came into force. But with the US remaining out of Kyoto, no agreement
2005	COP11/ Montreal
2006	COP12/ Nairobi
2007	COP13/ Bali. New plan on an agreement to replace the Kyoto Protocol
2008	COP14/ Poznan
2009	Cop15/ Copenhagen. Developed nations agree on greenhouse gas limits, but no treaty
2010	COP16/ Cancun. Rich nations agree to help poor nations.
2011	COP17/ Durban
2012	COP18/ Doha
2013	COP19/ Warsaw
2014	COP20/ Lima
2015	COP21/ Paris Hopes. Limits agreed in the 1997 Kyoto Protocol will expire in 2020, so it is essential that a new agreement is reached.

*(Times of India December 12, 2015 page 10)

Since 1992, the United Nation has been organising annual Conference of the Parties (COP) regularly on climate change with the objective of making consensus to cut greenhouse gas emission. It has been observed that most of the greenhouse gases are emitted by the use of coal for the production of electricity and consumption of fuel for transportation.

In 2015, the Paris negotiations took place under the banner of the UN Framework Convention on Climate Change (UNFCCC). The UN Climate Change Conference at Paris was considered as an historic summit because the world leaders opened it with the "hope of all of humanity" laid on their shoulders as they sought a deal to tame calamitous climate change. In this summit, the heads of nations participated and deliberated in search of pact that would indirectly restructure the world economy, weaning it off fossil fuels that stoke global warming. The UNO reported it the largest single

day gathering of heads of state or government in the history. French president Francois Hollande in his opening speech said, "Never have the stakes of an international meeting been so high because it concerned the future of the planet, the future of life, the hope of all of humanity rests on all of your shoulders." In this conference scientists warned that unless action to curb greenhouse gases is taken soon, mankind will have to endure ever worsening droughts, floods, storms and rising seas, threatening millions with hunger, disease and migration.

Main Issues at COP 21

Paris is the 21st stop for 196 nations (conference of parties) that have met since 1992 to tackle climate change. The Paris Meet hopes to:

- Keep warming below 2 degrees Celsius, means not above the preindustrial average. Poor nations want to limit it to 1.5 degree. Scientists say that at current levels of pledges that countries have made on emissions cuts,

earth will become warmer by at least 2.7 degrees. 186 nations pledged emission cuts. India has not.

- Mobilise the \$100bn a year (agreed at Copenhagen 2009) committed by states, global bodies and private sector from 2020 onwards to develop technology and build infrastructure to cut emissions.

Who should cut how much? What should be the limits as all nations do not emit equally?

- Today's richest nations (the US and those of the EU) use coal (largest source of global greenhouse gas emissions) as energy source for development. But they want lesser developed countries to cut use of coal.
- India staved off pressure from the US and the EU on fixing limits on emission saying rich nations are to blame.
- Rich nations expected to contribute to Green Climate Fund, but they want emerging economies, including India, to contribute.
- Rich nations also want the money to go to countries poorer than India.
- The G77-plus- China grouping, including India, want this fund to be available to all developing countries.

Common but Differentiated Responsibilities (CBDR) was the core principle of the UN convention, the situation means the differentiation must exist under each article, either it is mitigation, adaptation, finance or technology transfer. The theme of the globe summit was 'Towards Coherence and Impact: The Challenge of Paris and the Post-2015 Agenda for a Prosperous and Sustainable world.'

Emission Matters (Action to Cut and Curb Emissions)

Emissions of carbon dioxide and other gases that trap solar heat and cause climate change have been continuing without significant change, with the result, leading to increasing extreme weather events such as cold spells, heat waves, floods, droughts and so on. Scientists predict that the situation will get worse if nothing is done to stop runaway emissions. Everybody argues that global temperature should not be allowed to rise more than 2 degrees Celsius, above the pre-industrial average, by 2100. But the emission rate is such that this target is now considered unreachable. Countries have been squabbling over how much emission each of them can cut. They have been trying to strike a balance between short term national interest and long-term global interest. The whole world must agree to work together – only a few countries cutting emissions will not help.

The talks about cutting and curbing emissions have at times got heated up as developed and developing countries have bickered over who should bear responsibility for reducing carbon emissions. It happened during the agreement – Lima Call for Climate Action – the Lima COP 20 UN climate change conference 2014 held at Lima, the capital of Peru. The argument is that per capita emission of developing countries is lower in comparison to the developed countries. Therefore, developed countries must do more to mitigate their current emission while assuming responsibility for historic pollution. However, every country declared its own commitment, albeit in the light of different national circumstances. For example, China pledged emissions peaking by 2030 because its citizens are protesting against pollution. In the case of

our own country we want clean air too along with the economic growth and poverty elimination. And our per capita emission is far lower than China or any of the developed countries.

India's challenge is how to reconcile targets like economic growth, manufacturing revolution, job creation and sufficient energy for all of this with controlling emissions. This is where vision and differentiation will be critical. Keep pushing for technology and financial transfers from developed countries and create new economic opportunities around them. For instance, we will remain dependent on coal in the foreseeable future but we can shift from dirty to clean coal.

It is to notice how the environmental concerns are globalised. At the Paris summit, while addressing Xi Jinping (the Chinese president), the US president Obama said, "As the two largest carbon emitters, we have both determined that it is our responsibility to take action."

But the US and other developed nations insisted on some other occasion that more must be done by China, India and other emerging countries. There are, however, many potential stumbling blocks, ranging from providing finance for climate-vulnerable and poor countries to scrutiny of commitments to curb greenhouse gases and even the legal status of the accord. Yet an important progress was made. A key success at the Paris Summit was a roster where 183 nations submitted voluntary pledges for reducing greenhouse gas emissions. The UNFCCC chief, Christiana Figueres, said that these provided the architecture for more ambitious efforts that could eventually reach the goal of limiting warming less than two degrees Celsius from pre industrial levels.

Multifarious Aspects of Environmental Concern

Global perspective of environmental concern has an enormous scope. In this regard, a significant event may be mentioned which reveals environmental concerns in a global perspective. At the time of COP 21 in Paris a large gathering of people were exhibiting their concern by way of protest in London. As glimpses of the protest, "There is no planet B" and "Our children need a future" read the placards held by some of the 50 thousand people assembled in London's Hyde Park. The French authorities had banned protests in Paris due to security fears following the terror attacks (*Times of India*, December 1, 2015 Page1-8).

Are the Paris Summit and all other global meets following the first 1972 UN Stockholm Summit nothing more than urban legend or a kind of modern ritual that is meaningless?

Nothing can be further from the truth. Despite the fact that climate summits do resemble an annual ritual that yield little or no results, the issues discussed and the efforts made towards thrashing out ways to save ourselves from our own excesses- even if the efforts so made do not lead to one hundred per cent fruition are vital to broadening our understanding of the issue and creating public awareness.

It is not enough if individuals succeed in raising their consciousness level to gain a more macro perspective of life and living. Collective consciousness needs to rise, too, to comprehend both local and global happenings. The term 'global' was coined precisely for this reason, to indicate that all life is interconnected; what happens in one geographical location or even in the mind space of one or a few people is bound to

impact those living in another location or culture. The frame of reference to interpret the happenings may not be common, that becomes a perspective. The downside of interconnectedness is that negative happenings tend to have a ripple effect over the global community. On the other hand, the upside is that any positive movement towards overcoming crisis of climate change and global warming has far reaching implications that help ease difficulties across borders and cultures.

It is in this spirit of faith and hope that we need to look forward to any kind of attempt to arrive at a worldwide consensus on dealing with disasters-whether it is to do with the physical environment or the metaphysical. ('Climate Summits: Making of a Modern Ritual'? *Times of India* 30-11-2015 page 12)

That way we have been making efforts to comprehend the relevant environmental issues and their multifarious aspects. Now we may discuss certain relevant concepts and concerns which are significant from the viewpoint of action plan in global perspective.

Carbon Neutrality

Carbon neutrality means any carbon dioxide emissions from burning fossil fuels would be offset by planting trees and other interventions. Setting stringent targets for emission cuts for the world, a UN body wants countries across the globe to collectively cut carbon emission to zero to achieve carbon neutrality by 2070 and bring down emissions to net zero for all greenhouse gases, including methane, nitrous oxide and climate damaging refrigerant HFC by 2100. The timeline for desired emission cut was suggested by the UN Environment Programme (UNEP) in its annual emission gap report (*Times of India*, November 22, 2014). The report wants the nations to follow the

timeline diligently so that the world can contain temperature rise under the level.

Carbon Capture and Storage (CCS)

The CCS is a technology that can capture carbon dioxide emitted during electricity generation and store it underground to prevent it from entering the atmosphere. The technology however, has not been perfected yet.

Green Climate Fund (GCF)

GCF was created as a financial instrument to help developing countries for their ambitious mitigation (emission cut) and adaptation actions. The rich nations are supposed to contribute to the GCF for the purpose. It was agreed in Lima that the new agreement would address all elements as key ingredients of the future climate deal that were mitigation, adaptation finance, technology development and transfer, capacity building and transparency of action and support in a balanced manner. It was decided that the countries should not back slide from pledges as made. India's position is clear with regard to protection of its long-term interests and emphasis on the need for growth. A financial instrument is aimed at helping poor nations adapt to climate change and be part of the global effort to achieve target emission cuts. However, the GCF could not attract as much money as was expected by developing countries. Rich nations invariably try to corner their developing counterparts, including India, over reduction in farm methane and refrigerant gas, blaming the latter as being the primary reason for such emissions. Showing India's concern at Lima climate talks (2014) the Indian representative regretted that rich nations had failed to deliver adequately at the finance front and that 'the goal of mobilising \$ 100 billion per year by 2020 was a far cry.'

Legislations and Binding

Unlike talks at the international level, domestic climate change legislation and regulation is advancing at a rapid pace. Indeed, since Kyoto was negotiated in 1997, almost 500 domestic climate laws have been passed across the world covering almost 90 per cent of global greenhouse emissions. This is particularly the case in developing countries, which will probably provide the motor of global economic growth in coming decades. In 2013 alone there was substantive legislative progress in almost 10 countries and positive advances in around 20 others.

Besides all these legislations, it was stated that parts of a global climate agreement should be legally binding (Obama). Whether or not to make the climate accord legally binding is a major sticking point at the two week talks in Paris, which aimed to get all countries to agree to cut emissions that scientists say are warming the earth and increasing extreme weather conditions such as droughts and floods. The specific targets for each country to reduce greenhouse gas emissions may not have the force of treatise, but it is critical that "periodic reviews" of those commitments be legally binding. A mechanism sought by negotiators would ratchet up their commitments every five years to save the succeeding generations.

Concern for Pollution Alert

In view of climate resilient development and generation of low emissions the example set by China seems worthy of mention here. It shows a serious concern for pollution alert in China. It has developed a four-tier colour coded weather warning system with red representing the most severe weather followed by orange, yellow and blue. Local emissions have combined with

weather to produce the year's worst pollution in Beijing. The public has been warned to take protection measures when engaging in outdoor activities and those suffering from respiratory diseases advised to stay indoors accordingly.

It was in the last week of November 2015, the authorities in Beijing issued an 'orange' pollution alert, the second highest of four, wherein outdoor activities in schools and construction work was suspended and residents were warned to stay indoors. Reports said the level of fine pollution particles (PM 25) in the Beijing air had crossed 600 micrograms (mcg) per cubic metre, around 24 times WHO's safe level for a 24 hour period.

It was reported that the situation of smog was almost the same in Delhi during the same period. It witnessed one of the worst smogs of the season, with visibility remaining less than 800 metres. Despite being labelled by WHO as the world's most polluted city, there was no protocol in Delhi for warning residents when pollution levels spiked. PM 25 levels at individual air monitoring stations crossed the 600 mark. Many residents complained of a choking feeling as a white smog hung in the air through the last day of November, a month that saw Delhi's air quality dip alarmingly. In November, such thick fog usually forms only after rain, when moisture levels go up. Since there was no rain, it is likely that high pollution, combined with moisture and absence of winds, caused the fog.

City doctors have warned that unless urgent steps are taken, Delhi could witness its own version of London's Great Smog that claimed an estimated 4,000 in 1952. People need to be advised on how to protect themselves on smog-heavy days. Given that children are highly

susceptible to pulmonary ailments, schools too must remain closed when air quality drops beyond a certain point. Emission alert with climate resilient development is still an awaited task for the affected nations.

Technological Measures to Combat Climate Change

Currently, there are three ways of combating climate change; (i) Focus on traditional climate talks, involves reducing emissions of greenhouse gases. It is vital that we reduce emissions as hard and fast as humanly possible. But because we have let emissions grow for decades, it will be all but impossible using this approach alone. (ii) The second involves planetary geoengineering, for example, by injecting sulphur into the stratosphere to cool earth's surface. A fundamental objection to geoengineering is that it is a 'band-aid solution' which does nothing to address the root cause of the problem. (iii) The third way to combat climate change is by drawing enough Carbon dioxide (CO₂) out of the atmosphere to make a difference to our climate future. This is a huge task, a drawdown 18 gig tonnes of CO₂ is required to decrease atmospheric concentrations of CO₂ is by 1 part per million. Until recently, it has been unclear whether this is even possible, but Tim Flannery, a prominent environmental activist, argued in his book 'Atmosphere of Hope' that by 2050, the third way technologies might be drawing 40% of current emissions (around 16 gig tonnes) from the atmosphere annually. There are two fundamental approaches of the third way technology; these are, biological and chemical. Biological approach includes reforestation, the production of biochar; and wood chemistry technologies. Chemical pathways include the manufacture of carbon negative cements. These

can be used to make concrete that draws CO₂ into its structure as it matures. These technologies will need more research and more money.

Clean Energy Technologies

Research and innovation has been humanity's saviour time and again. Antibiotics gave us longer lives, airplanes dramatically expanded our access to the world, and internet has leapfrogged communication and the social matrix. Naturally, the innovation engine is also our biggest hope in the battle against global warming. The real breakthrough will be clean energy solutions that are affordably priced. And one way to get there is by increasing research and development (R&D) spending.

Getting to a true breakthrough means both governments and the private sector have to be on board. On the latter front, there is a commitment on the part of billionaires from across the world to invest big money in clean-energy technology. We expect that people have to lead a worthwhile life on a worthwhile planet. Or as Bill Gates said, "I don't think you can say to somebody who doesn't have lights or a refrigerator that they should cut down on energy usage." Developed countries have occupied vastly more carbon space than developing countries, so they must bear the greater burden for battling this. India is willing to cut back its investments in coal if developed countries give it proper financial and technological assistance to shift to cleaner energy. It is unjust to ask the poor to choose either green or growth.

It has been argued that the Breakthrough Energy Coalition could become a good example of the rich taking responsibility and leadership commensurate with their great wealth and

technical capability. And the need for a breakthrough is quite urgent. It's a disturbing truth that the major technologies in our life today were late 19th and the early 20th century innovations like cars, planes, telephones, TV. Even the internet was invented in the 80s. The next quantum leap is overdue.

Indigenous Vision

Here the meaning of indigenous vision is confined exclusively to the vision reflected through social values, Indian polity, culture and practices adopted by a common countryman in his everyday life. It seems proper to begin with the statement of Mahatma Gandhi. He said, "This earth is capable to fulfil the needs of every human being, but not the greed of people".

In India, it is a historical fact that all the components of environment have been considered as life support system since time immemorial, and their protection has been of paramount importance (Saxena 2000). The air, water, land, vegetation, soil, rivers, mountain, trees, animals, and other living and non-livings beings have been considered as sacred in one form or the other. In all pre-modern cultures, whether tribal or peasant, man looked upon himself as part of creation as a whole. He treated other animals, trees and inanimate objects not only as equals but considered them even venerable. In all parts of India, one could observe certain beliefs and rituals connected with living beings. Tulsi, pipal, bargad, and a large number of other trees are considered sacred, and cutting them down and unnecessarily chopping off their branches or even plucking their leaves is regarded as sinful. In Kerala, there has been a vigorous tradition of maintaining sacred groves. In Rajasthan among the Bishnoi community whose members would

prefer to sacrifice their own life to save the khejari (a popular tree in desert area of Rajasthan) and the deer. Rivers and mountains too are sacred. Atonement is sought even for the violence done to the earth in ploughing it or digging it for providing foundation to a building. Proper worship of the earth is to be performed before these activities are started (Indra Deva 1997). Such practices have been observed exclusively among Indian communities.

Social Values

It is evident from Indian traditional social system that value-oriented socialisation in society has been useful for solving the environmental problems (Hussain: 2013). Nature worship has also been a common practice among Indian communities. Relationship with nature could be observed by the places of worship termed as 'sacred groves' among tribal communities, tracts of virgin forests protected by local people on religious grounds. These are categorised as sacred groves in the vicinity of a village or a water resource, temple grove being in the surrounding of a temple dedicated to the Lord and particular trees considered as sacred. These places are very significant for keeping a balance in the ecosystem in the forest.

Value loaded Consumption

Consumption without attachment may be considered as value loaded consumption. In fact in traditional society the material needs of people were limited but modernity has made human needs more complex. Similarly we have lost the sense of oneness with nature (Kattakayam 2012). With this backdrop, a glimpse of Indian scriptures seems relevant. It has been explained in Indian scriptures that the

entire creation (all visible and invisible existence) is by God. The natural resources or environmental resources may not be treated as property of an individual. They are to be reasonably shared. Hence, greed is impermissible. The seer knew that a permission of greed and possession would amount to unwarranted interference and disturbances that would ultimately lead to shattering and collapse of the system. Therefore, whatever is given by that Being is to be consumed without any attachment. Do not be greedy. Consumption should be based upon needs, not upon greed.

A Case of Bird Species

The value of indigenous practices is evidenced by the fact that India is home to the largest number of bird species in the world. Preliminary findings of a recent global event – Great Backyard Bird Count – have put India on top of a list of 127 countries which sent their entries through pictures and videos*. The report of a US newspaper, The Kansas City Star, said that 'want to see a wide variety of birds? India's emergence as a bird watching hot spot underscores the rising worldwide popularity of the pastime'. The global bird count showed that participants from 127 countries found 4,296 species with India reporting the highest number of 819 species, followed by Mexico (683), USA (644), Costa Rica (609), Australia (501), Columbia (397), Panama (278) and Peru (138). (TOI, March 4, 2014). The data endorses that nature and atmosphere in India is still conducive for birds also.

Initiatives and Efforts by India

Other nations have certain expectations from India when the climatic changes and its impacts are reducing harvests and water supplies, increasing air pollution and competition for resources and land. Further, with the two largest

economies and polluters of the world – the US and China – agreeing on key climate targets, and German energy giant E.ON shifting away from fossil fuels to renewable power, the world is now looking to India to give a lead. As India is the third largest emitter of greenhouse gases the decisions taken by our nation and examples set by it matter. In this regard, embedding sustainable development in market strategies, production processes and value chains, businesses and entrepreneurs can accelerate the transition to a green economy. Investment may also be driven in low carbon technologies and energy efficiency. It is the poorest people in the world who suffer most from climate change, because they cannot escape its consequences as easily as the rich. Kofi Annan (2014) believes that Indian business will take up strongly the cause of climate change and poverty reduction and show the world that these two vital objectives are not in competition. They are, in fact, the twin pillars of sustainable development. The world is looking to India to set a lead. India has gained the reputation of a powerful and resourceful nation, hence every effort made by our country towards environmental enhancement and clean energy production becomes meaningful. Some of the initiatives presented at the annual UN climate conference in Lima (2014) are listed as under :

- Enhancement of national clean energy fund to promote clean technologies. Total 46 projects are being funded by it.
- National solar mission is being scaled up fivefold from 20,000 MW to 1, 00,000 MW. It will need an additional investment of \$100 billion. It will save about 165 million tonnes of Carbon dioxide emissions.
- Developing a National Air Quality Index and

have launched a National Air Quality.

- Released \$6 billion in one go for intensive afforestation which will result in more carbon sinks.
- Allocated about \$200 billion for the National Adaptation Fund, setting up of ultra- mega solar projects, ultra-modern super critical coal-based thermal power technology and the development of solar parks on canals.
- Initiative of 100 smart cities with integrated policies for adaptation and mitigation to reduce vulnerability and exposure of urban areas to climate change and also to improve their energy efficiency for which \$1.2 billion have been allocated.
- Put in place stringent norms for cement industry.
- Initiatives for protecting coastal, Himalayan, and forest areas.

Path to Renewable Energy

Al Gore, climate change crusader, green activist and former US Vice-President, opined that "the size and attractiveness of the renewable energy market in India is looming as one of the biggest business opportunities in the entire history of the world". Indian vision is very clear that it wants to move on the renewable energy path. But costs and technology drawbacks are a big issue. However, it is assumed that India's growth rate will soon be faster than China. Hence, India will be the largest market in the world in this century.

Seeking a grand alliance among 122 nations to pursue solar energy, India made a significant impact at the 12 day climate change conference in Paris with Prime Minister Modi himself unveiling the country's position on the opening

day. The Prime Minister pledged India's support for preserving "our common home." The summit was focussed on forging a legally-binding deal to protect the environment from global warming, without side stepping the aspirations of poor and developing nations. It was also focussed on reaching a pact on keeping the rise in global temperatures at below 2 degrees Celsius, monitoring mechanism on commitments by countries, steps to raise \$ 100 billion annually for a climate fund, and technology transfer from developed to developing nations. (*Times of India* 30-11-2015 front page).

Constitutional Vision

It was in 1977 that 42nd amendment to the Constitution of India was made. Accordingly, Article 48-A imposes a duty on the state "to protect and improve the environment and to safeguard the forests and wildlife of the country". Similarly, Article 51A (g) imposes a duty on citizens of India "to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures."

The establishment of the Ministry of Environment and Forest in November 1980 was another step towards environment protection and also for policy making and planning. In every state of our country, a separate ministry of environment has been constituted. Besides, Central Pollution Control Board has been established to take measures to control water and air pollution and prepare a plan for countrywide awareness against pollution. National laboratories, IITs, university departments, NEERI along with several other institutions and centres have been involved in research in the area of environment.

The National Forest Policy has been framed for the protection and development of forests in the country. A strategy has also been evolved to develop forest resources through social forestry and agro-forestry for the conservation of the bio-diversity of the country. For the protection and progress of the bio-diversity national parks and game sanctuaries have been established in the identified areas.

Conclusion

The environment question in India as well as its global perspective cannot be comprehended in isolation from the global social and economic forces (Punalekar 1998: 39). It is significant to note that big industrial power polluters are currently clubbing with each other to bellow that India is now the world's 3rd largest net polluter. They have been artfully undermining the fact that India's per capita emission is among the lowest in the world (155th), a 10th of that of the US and a fourth of that of China. Similarly, the practical concerns and commitments in moral thinking of Indian society cannot be ignored. So to say, in the light of various environmental issue and global perspective, Indian society may lead to convey the ideas and code of environmental ethic as it has a rich heritage of that kind in its own traditions, practices and scriptures. What is required is simply to interpret and understand the ideology, already given in the present context of environmental protection. In the global perspective, all nations should share and follow logical and good practices. Also, rich nations are supposed to fulfil their commitments which

they have been making with regard to finance and emission cuts.

Note

*The event was launched in 1988 as the first online citizen- science project to collect data on wild birds and to display results in near real time. Participants during the event send snapshots of birds which are analysed and documented by the organisers before displaying the final results of the Great Backyard Bird Count (GBBC)

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