

CLIMATE CHANGE EFFECTS ON LAND RIGHTS

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Carbon sequestration is the process through which Carbon Dioxide is removed from the atmosphere by Photosynthesis and impounded in plants to release Oxygen.

- When the levels of carbon dioxide (CO₂) and other greenhouse gases increase in the atmosphere it is an indication of a slow down in the capacity of photosynthesis process to recycle the gases back to carbon and oxygen. The photosynthesis industry is overloaded.

- Global carbon dioxide (CO₂) emissions, from burning fossil fuels alone, stood at a record 8.38 gigatons in year 2006, 20% above the level of year 2000. Emissions grew 3.1 percent per year between 2000 and 2006. This is more than twice the growth rate of the 1990s.

- The atmospheric buildup of CO₂ and other greenhouse gases is a result of the expanding human activities in the use of fossil fuels, forests, agricultural applications, refuse treatment, communications etc, activities which lead to Global warming or Climate Change

- A global warming trend of about 1.0 to 1.7°F is said to have occurred between 1906-2005. The greenhouse gases emitted by human activities now remain in the atmosphere for longer periods due to depletion of the carbon sinks, namely plants and the oceans, the photosynthesis factory.

- Examination of the growth rate of atmospheric CO₂ concentrations in 2007 suggested that a slowdown in carbon sinking has occurred much earlier than scientists had anticipated. This has led to a world **climate change agenda which also affects Land Rights.**

Consumption of Vegetation Land Cover

- Forests have gone to charcoal, fuel wood, timber, carvings, clearing for crop cultivation, grazing lands etc. The Oceans will also soon be exhausted of underwater plant life. Green plants on the Earths' surface and the Oceans are the primary sinkers of carbon dioxide and their capacity is almost exhausted

- The world population, including indigenous groups, has been increasing to a current count of about 6bn people. Of this 6bn about 60m still live in forests and lands claimed by indigenous people. All people need oxygen, food, water and other resources which must come from plants on land and in oceans.

- Consequently, cultivation and fishing must expand into unopened lands. Over time, there is less and less land for the indigenous people to forage in or cultivate crops as a fall back occupation when foraging has become untenable.

- Indigenous communities also will fail to survive on the degraded lands and move off to new areas of forests for a repeat of the deforestation. Great expanses of forests are cut down and abandoned as wasteland. When vegetation is being reduced at current rates there is no way of balancing carbon emissions in photosynthesis.

Loss of Vegetation Land Cover

- Currently, 2 gigatons of carbon are released per year as forests are logged for timber, burned to get agricultural land and pasture, burned accidentally or by fanatics. Deforestation is most severe in Indonesia, Brazil, the DRC, and several other countries with remnants of tropical rainforests. Forest people are being squeezed out slowly.

Wild and “Tame” Fires

- Accidental and anarchist burnings generate large carbon emissions and expose land to degradation. The top soils are roasted and bacterial nutrients are burnt beyond repair. Recovery is limited to plants that have roots and stems which are resistant to fire and draught. Such plants are also very poor carbon emission sinkers

- Hence arid and semi arid lands have expanded in recent years with much damage on the surface of mother earth. This expansion of the arid regions has taken a heavier toll on indigenous communities many of whom have had to abandon the lands in favor of other habitable locations.

Industry, Energy and Communication

- The world is now going for big, bigger, biggest; heavy, heavier and heaviest machinery that are needed to pull the wagons on the railways, move the mega ships, propel the earth movers of the mega mines, move the mega aircraft, produce the mega watts of electricity in places where water falls do not exist and keep the mega motor traffic moving in the cities.

- All these plant works need oxygen and produce carbon emissions. The vegetation cover now existing on earth can no longer recycle in time the carbon emissions coming out of the huge human energy demand.

- Looking on are the vulnerable communities which are not party to carbon emissions and suffer from a climate change for which they are also not party to it. And vegetation cover on the earth can no longer balance the carbon emission output with photosynthetic or recycling processes.

Depletion of the Ozone Layer

- The world is consuming enormous amounts of oxygen in the lower atmosphere while aircraft travel is doing the same in the upper atmosphere. This consumption is punching holes in the ozone layer of the higher atmosphere; holes through which unfiltered sun rays reach the earths' surface.

- These unfiltered rays, combined with the devastation of vegetation land cover, generate excess heat on the earth's surface leading to a change of climatic conditions. Climate regulatory sea currents and winds are made useless by the extra heat on the earth's surface. Few indigenous people know of these effects.

Poisoning the Soils and Oceans

- Chemical (industrial) fertilizer, insecticides, bombing and chemical fishing techniques, sewer water etc are poisoning elements of the earth. The soils grow numb, poison gets into the waters of rivers, oceans and lakes. Living creatures in all mediums of life also get sick of new diseases.

- India has a population increase of over Two Hundred Thousand (200,000) per day with a potential to increase the average life span per person from 50 to 60 years. There is no more land in the countryside that could be planted with additional vegetation cover to consume the carbon emission of this population and its infrastructure..

- Urban settlement can give way to massive rural re-forestation with a settlement infrastructure going underground and high rise above ground. But, there are the dangers of earthquakes, volcanoes and mega structural failures, incidences whose climatic changes have mega effects to the environment.

- There must be changes in living methods including settlement patterns, land rights and use of natural resources now that there is ample knowledge on how much is at stake. Major catastrophes, associated with climate change, may catch up with human survival on earth. This is where “*indigenoucity*” falls apart.

The Issues of Human Rights

- There are human rights campaigners who prevent all environmental recovery strategies. Their success hinges on the implementation of many strategies without adequate public awareness and participation

- Where derelict land has been reclaimed original communities tend to come back to claim land rights on land which they had damaged in the first place. When the land becomes valuable again, typical pastoral communities wants to repossess it and repeat the circle all over again.

- Recovered land should revert back to original communities on conditions that they have received adequate education on the investment made to recover the land value so that it can be sustained; Secondly no re-settlement to alternative land has been done; thirdly, degraded land is most useful for reforestation

- Certain human rights groups hold back indigenous communities from exposure to education and world affairs in an effort to maintain traditions. This suppresses optimum use of resources and community development in general. Traditions can no longer sustain the population but the use of current technologies offer possibilities.

The Economic Spectrum

- Developed worlds have no land management conflicts due to a well established records system which facilitates prompt and lasting decisions. In vulnerable areas, land is not in records and land is out of the economic range. This is particularly so in rural areas where land records do not exist.

- Land is a major resource and employer in the developing world. But it receives least attention in budgeting, provision of human resource and technical development. If there is any way to uphold justice in land rights, then the presence of land in the economic spectrum must be recognized.

Vulnerable Groups

women and children

- This struggle is large and wide. There are places where it is the man who is the disadvantaged. Any of Men or women can be disadvantaged depending on the dominant gender in the traditions of a community. Children are disadvantaged in all cases irrespective of gender domination

- Children have virtually no say in many decisions of the family or the community. It is for this reason that land records give a chance for all, be it men, women and, thereafter, children to participate or get included in the odious process for land rights.

Issues Contributing to Loss of Land Rights to Indigenous People

- Poor institution of initial decision making processes to register land rights
- being squeezed out of the tribal lands by local elites to give way to new land uses such as mechanized agriculture
- worrying of a tribe going extinct due to loss of ancestral traditions

- foreign investor takeover of lands and for extraction of natural resources without consultations with the tribes
- disregard of adverse environmental consequences of modern developments
- community abandonment of tribal lands following massive environmental degradation
- political conflicts

- The Developed world also had indigenous groups a long time ago. Education slowly lifted the traditional inhibitions and brought in new thinking, technologies and development (improvement of life style). This is the beginnings of Development.

- Traditions stick on when children are perpetually prevented from learning new ways of doing things. This approach to life has advantages only in the form of discipline but very disadvantageous in the world of to-day and tomorrow

The Role of World Community

- The world is short of vegetation land cover that plays a major role in the reduction of carbon emissions and thereby maintain land values. There is no way of reducing carbon emissions if the industry consuming it, land vegetation, continues to be depleted. The world must work to recover this natural industry.

Disadvantaged Communities

- These are subsistence land users, cattle headers, honey hunters, indigenous people whose traditions have over stayed change for lack of education, men, women and children. The concern of this paper is the effects of climate change on land rights to disadvantaged groups and the potential ruin to the human race.

- The more concern is for the children of the future who may know not the good earth of years 1800s when recycling of carbon emissions balanced. The men and women of today need to tilt back this balance through the photosynthesis industry to the advantage of children of the year 2100

Conclusion

- Land rights are only meaningful when the target land has value to the individual or community. Once land ceases to be useful, rights are abandoned until such usefulness is recovered by reclamation, mining, cultivation, pasture, settlement etc. It is therefore significant to maintain land values as a means to sustain land rights.

- Women and children are more disadvantaged where land records do not exist. Land rights demand the presence of an initial man and or woman to register the land right in time
Thereafter children can establish a claim
- Global warming is a calamity that is encroaching on land rights and to this end land, which fails to meet minimum values, attracts no land right claims.