Forestry – "A Magic Answer" on Global Warming ?

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Abstract

Although climate is naturally dynamic and has been altered by natural causes; in the recent past, the magnitude and rate of current climatic changes is unprecedented. Computer models are long proven to be inherently incapable of providing projections of the future state of the climate that are sound enough for policymaking. Even if the models could ever become reliable, there are studies that demonstrate that it is not at all likely that the world will warm as much as the IPCC imagines. Global warming, many scientists and social workers argue, is more a political drama than the real issue.

The extra materialistic comforts and the decorative non-eco-friendly living that people have in cities are the real problem. This creates a psychological intolerance. And the cities are warming. Temperature measurements are records in the cities for the past few years (for the earth of hundreds of crores of years, this is a small sample) with concrete structures and local pollution around. Thus the so-called Global Warming is only the projection of the Local City Warming. Even if mitigation might do more good than harm, adaptation as (and if) necessary would be far more cost-effective and less likely to be harmful.

Forests are centres of biodiversity, play a key role in water distribution, and are essential for carbon storage - key aspects of effort to address climate

change. To investigate forest management as a method for controlling global warming, researchers are continuing study of carbon exchange between the atmosphere and forest. Climate change threatens forests. The forest may not cool climate and the present booming discussion. We can't solve the climate problem by just saving forests. However, it helps in aggressively protecting and restoring wild lands, wildlife, and water as an enduring legacy. It is nice to see that the forest is protected as permanently road-less areas and old-growth forest ecosystems. More studies understanding forest carbon flows and forest management is essential. The Indian heritage knowledge and the modern research must work in tandem towards better forest management.

Global Warming - Alarming ?

Although climate is naturally dynamic and has been altered by natural causes; in the recent past, the magnitude and rate of current climatic changes is unprecedented. Global temperatures are projected to rise anywhere between 1.4 and 5.8 ° C in the coming 100 years, resulting in changing weather patterns, increasing frequent extreme events and a 0.09 to 0.88 meter rise in sea level. These changes are attributed to an enhanced greenhouse effect. Many scientists believe high levels of carbon dioxide, which is released when fossil fuels and wood products burn, could permanently alter the environment.

Is Global Warming for Real ?

While the global warming alarmists have done a masterful public relations job in promoting their agenda, they are losing badly in the areas of science, logic and common sense. Even if temperature had risen above natural variability, the recent solar Grand Maximum may have been chiefly responsible. Even if the sun were not chiefly to blame for the past half-century's warming, the IPCC has not demonstrated that, since CO_2 occupies only one-ten-thousandth part more of the atmosphere that it did in 1750, it has contributed more than a small fraction of the warming. Even if carbon dioxide were chiefly responsible for the warming that ceased in 1998 and may not resume until 2015, the distinctive, projected fingerprint of anthropogenic "greenhouse-gas" warming is entirely absent from the observed record. Even if the fingerprint were present, computer models are long proven to be inherently incapable of providing projections of the future state of the climate that are sound enough for policymaking ["Is Global Warming for Real?", J. C. Sprott, http://sprott.physics.wisc.edu/ lectures/warming.ppt] [APS-Physics – Climate Sensitivity Reconsidered - http://www.aps.org/units/fps/newsletters/ 200807/ monckton.cfm].

Key Players Give Solution

Climate change has far more to do with the fluctuations in the sun's magnetic fields than the meager CO2 in the atmosphere. We have not been able to stop, or affect in any way, hurricanes, floods or tornadoes or even make it rain. The developed nations want others to have to revert to a near cave-man existence for non-affordable advanced developments. Key players who were responsible for the pollution are now in worthless scams such as taxing people and selling carbon credits. Global warming, many scientists and social workers argue, is more a political drama than the real scientific issue. [US senate committee on Environment and Public Works - http://epw. senate. gov/ public/ index. cfm? FuseAction=Minority. Blogs & Content Record_id=2158072e-802a-23ad-45f0-274616db87e6]

Only Local City Warming

More than the global effect, the cause and effect of pollution and CO2 in the atmosphere will be local. The weather is changing and the pattern of weather in long years is the climate that is stable. Climate has a pattern. What we are worried about is the weather change and that humans have less tolerance level and they suffer. The extra materialistic comforts and the decorative non-eco-friendly living that people have in cities are the real problem. Temperature measurements are records in the cities for the past few years (for the earth of hundreds of crores of years, this is a small sample) with concrete structures and local pollution around. Thus the so-called Global Warming is only the projection of the Local City Warming.

Mitigation Might Do More Good than Harm

Even if the models could ever become reliable, there are studies that demonstrate that it is not at all likely that the world will warm as much as the IPCC imagines. Even if the world were to warm that much, the overwhelming majority of the scientific, peer-reviewed literature does not predict that catastrophe would ensue. Even if catastrophe might ensue, even the most drastic proposals to mitigate future climate change by reducing emissions of carbon dioxide would make very little difference to the climate. Even if mitigation were likely to be effective, it would do more harm than good. Already millions face starvation as the dash for biofuels takes agricultural land out of essential food production. Even if mitigation might do more good than harm, adaptation as (and if) necessary would be far more cost-effective and less likely to be harmful.

Forest / Desert – is Cultural

Forests are centres of biodiversity, play a key role in water distribution, and are essential for carbon storage - key aspects of effort to address climate change. They are also vital to the livelihoods of billions of people as sources of wood fuel, building materials, food and timber. Changes in vegetation patterns, the misuse of natural resources such as the clearing of forests, climate change, extreme weather events and natural disasters can sometimes lead to the desertification of a previously less arid region. Approximately one quarter of the land on earth is threatened by desertification. Most people when they think of deserts think of Africa. In reality many places, such as China, are dealing with major desertification problems. More than 27%, or 2.5 million square kilometers, of land in China is desert. An estimated 110 million Chinese people suffer firsthand from the impacts of desertification and, each year 2,500 sq km turns to desert. The Buddhist Kingdom of Bhutan nestled in the middle of the Himalayas is struggling to protect its unique culture and natural heritage. In order to do this they have committed to maintaining 60% forest cover, slow development, the promotion of cultural events and minimal tourism.

Carbon to Store in Forest / Atmosphere ?

To investigate forest management as a method for controlling global warming, researchers are continuing study of carbon exchange between the atmosphere and forest. As tree grows they absorb lot of carbon and store within. At maturity, for example, trees store less carbon and remove less carbon

dioxide from the atmosphere. The number of dead trees also affects carbon balance. When a tree decays it releases some of its carbon back into the air.

Climate change threatens forests. Conserving forests will store carbon and help mitigate a threat to earth's climate and to the forests themselves. The forest may not cool climate and the present booming discussion. We can't solve the climate problem by just saving forests. However, it helps in aggressively protecting and restoring wild lands, wildlife, and water as an enduring legacy. It is nice to see that the forest is protected as permanently road-less areas and old-growth forest ecosystems. Forests just happen to store a lot of carbon. Forest conservation is part of the solution to a very large problem. Understanding forest carbon flows. Forests absorb, store, and emit carbon. Forest management affects all three. Relevant carbon pools include not just trees, but the atmosphere, dead wood, other vegetation, roots, litter, soil. Study on carbon for its longevity in each pool is essential to understand the carbon flow in forest. Even under extreme climate scenarios, forest conservation still makes sense. Keeping more carbon in the forest instead of the atmosphere will help prevent a bad situation from getting worse. Even if forests switch from being carbon sinks to carbon sources, we could make the source worse through mismanagement of forests. If the effects of economic exploitation of forests are added to anticipate climate stresses, carbon emissions will increase. ["Forest Sensitivity to Elevated Atmospheric CO2 and its Relevance to Carbon Management", Richard J. Norby, Oak Ridge National Laboratory, Aspen Global Change Institute, www.vangoghgallery.com]

Earth is Greening ?

A NASA-Department of Energy jointly funded study concludes the Earth has been greening over the past 20 years. As climate changed, plants found it easier to grow. The globally comprehensive, multi-discipline study appears in this week's Science magazine. The article states climate changes have provided extra doses of water, heat and sunlight in areas where one or more of those ingredients may have been lacking. Plants flourished in places where climatic conditions previously limited growth. Plants started migrating to mountaintops.

Many studies indicate contradicting scene on the role of forest / tree on global warming / CO2. Challenges the idea that planting forests could be an effective way to absorb emission of carbon dioxide, heat-trapping gas that many scientists believe is causing global warming. There are studies showing that forests won't soak up excess CO2. Some scientists and policy makers claim forests can absorb enough carbon dioxide to cut the risk of further global warming. But at least some forests are not up to the job. Trees that are planted today will be growing in a higher CO2 concentration tomorrow. CO2 effect on stem growth and age-wise influence on C-cycle are researched. Some studies suggests that additional carbon entering the soil through root systems has the potential to add to long-lived soil organic matter pools, but most analyses suggest this is unlikely.

Temperature affects all biological processes. Effects are non-linear, time-dependent, and highly dependent on initial conditions. Warming can stimulate productivity through increased photosynthesis and

longer growing season. Warming can decrease productivity through increased stress. Elevated CO2 is likely to ameliorate negative effects of warming.

Conclusion

Earth's climate system is very complex. The inhabitants and the measures and models are limited to a small percentage on the entire globe. Developments and the growth must continue.

Plant is most responsive species. The certainty / uncertainty of rising atmospheric CO2 / Global Warming shouldn't influence forest management decisions. Some results suggest that forest management can help mitigate global warming by controlling carbon exchange; but numerous factors should be considered. Forest management is a complex issue. No single result is available to lead clearly to any one management recommendation. The traditional knowledge in forestry suggests wild forest and not plantations. Plantations demonstrate the compartmentalized life whereas the wildness shows the co-existence with variety. Let us learn the cultural / moral lessons from wild forest to live in mixed-mingled society.

From the best-known solutions from traditional and the modern knowledge, let us protect the nature and environment. Many of the Vedic knowledge can be seen providing quotes on environmental protection as the ways of salvation. Forest preservation was part of their agenda. These could be in terms of the 'Kavukal' the preserved forests in every village in the name of 'naga' (snakes) etc.

Follow the saying.

vaapii kuupa thataakaani
deva-thaaya-thanaani cha
anna pradaana mudyaanam
puurththa ithyabhi-dhiiyathe

Poortha karma is the dharma of every one. In that water harvesting and plantation are given importance.

ishtena labhathe svargam
puurththe moksha mavaapnu-yaal

In the normal pooja (*ishta karma*) one can reach haven (*svargam*), put poortha (environmental protection) can get *moksha* (salvation)

asvaththhamekam pichumanda-mekam
nyagrodh-mekam dasathindriniischa
kapiththha-bilvaa-malaka-thrayascha
panjchaa-mra-naalii narakam nayaathi

Thirty-two trees are named that are to be planted to save one from *naraka* (hell). The entire vedic text does not have any other prescriptions so as to save one from hell, other than this.

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We are now faced with the fact that tomorrow is today. We are confronted with the fierce urgency of now. In this unfolding conundrum of life and history there is such a thing as being too late… We may cry out desperately for time to pause in her passage, but time is deaf to every plea and rushes on. Over the bleached bones and jumbled residue of numerous civilizations are written the pathetic words: "Too late."

- Martin Luther King, Jr.