

Carbon Negativity a New Positivity

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Introduction

Climate change a non-negotiable reality has been wreaking the havoc and posing threat to livelihood. Impact of anthropogenic climate change can go far beyond our perception. Studies reveal that by 2050, the whole of South Asia will be direly affected by climate change repercussions, disrupting the availability of clean water, food, and energy. This will only add to extreme poverty, occurrence of epidemics and food insecurity globally, resulting in social chaos.

Stritch in time saves the nine

It's better to spend a little time and effort to deal with a problem of climate change right now than to wait until later, when it may get worse and take longer to deal with. Hence forth the situation demanded the proposals for climate change mitigation by United Nations during the Paris Climate Convention to fight climate change and curtail temperature rise. In order to prevent the temperature levels rising beyond the 2⁰C the existing socio-economic and industrial activities needs a changeover in containing Greenhouse Gases (GHGs) concentration and carbon dioxide levels.

What is carbon neutrality?

Carbon neutrality refers to achieving net zero carbon emission by balancing the measured amount of carbon released into atmosphere due to human activities, with an equal amount sequestrated.

Carbon and India

India nests 17% of the human and 15% of the animal population , with only 2.5% of the geographical area (Srinivasarao et al., 2015., Lal, 2015). Here almost 66% of the people resides in villages (World Bank, 2018) with agriculture being the main occupation for around 60% of population (Deshpande, 2017). Agriculture In India, shares 14% of the total greenhouse gas (GHG) emissions during 2016 (MoEFCC., 2021). Hence there is a need for development of villages, which works on minimizing the emission GHGs and enanching

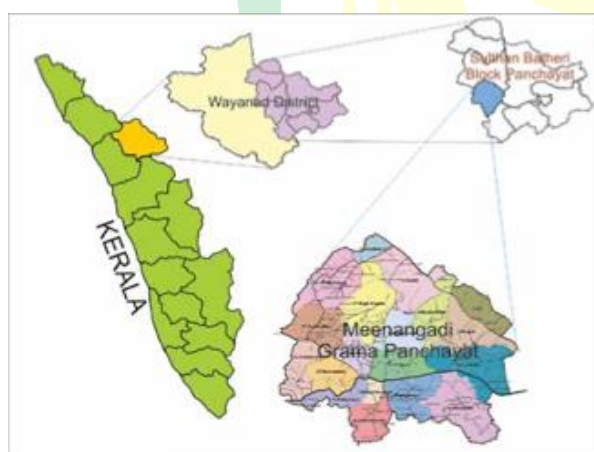
their sequestration which results in a minimal carbon emission (Srinivasarao et al., 2022)



Carbon Positive Village (less emission) Carbon Negative Village (more emission)

Case study - country's first carbon-neutral panchayat

In November 2015, Thomas Isaac, a 64-year-old economist and finance minister for the Indian state of Kerala, travelled to Paris to present a paper on waste disposal at the United Nations Climate Change Conference. He came back to Kerala with an audacious plan to turn Meenangadi, a south Indian settlement of some 34,000 people, into the country's first carbon-neutral village by 2020.



(Dr. Thomas Issa launching carbon neutral project in Meenangadi on 5th June 2016)

Nestled in the undulating hills of the Western Ghats, Meenangadi, evolved a concept of 'Carbon Neutral Grama Panchayat' which puts the notions on zero carbon development, nature conservation, food and energy self-sufficiency, economic well-being and development at local self-government level. Meenangadi's carbon-neutral project was officially launched on June 05 (the World Environment Day) 2016. 'Zero waste and Zero Emission' is one of the

pillars of the Meenangadi project. Money grows on trees was a concept adopted by meenangadi towards the journey of cutting carbon emission.

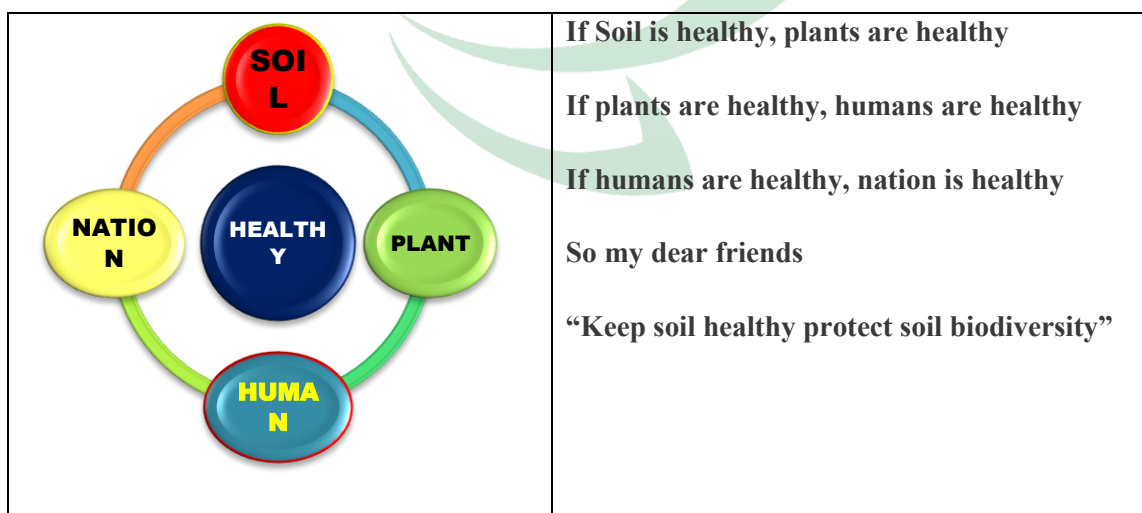
“Change is never easy, but it’s possible”

Today Meenangadi is not only carbon neutral but has witnessed many positive changes that came along. Last year three elephants came and stayed in one of the protected forests. Many varieties of birds returned. The locals say that it feels much colder during summers with all the breeze coming from the mini forests. Meenangadi reminds the world to have more projects like this. We can contribute to the change in multiple ways by visiting projects like these and encouraging them to continue doing more. By planting more trees in our surroundings. By being conscious of food and lifestyle choices.

Conclusion

As USA withdrawing from ‘Paris agreement on climate change’, the efforts to address climate change is in jeopardy. However, like the committed and revolutionary efforts of Meenangadi, which became the first Carbon Neutral Panchayat in India, others has to step forward to tackle the menace of climate change.

“Agroecology is based on applying ecological concepts and principles to optimize interactions between plants, animals, humans and the environment while taking into consideration the social aspects that need to be addressed for a sustainable and fair food system. By building synergies, agroecology can support food production and food security and nutrition while restoring the ecosystem services and biodiversity that are essential for sustainable agriculture. Agroecology can play an important role in building resilience and adapting to climate change” - FAO, 2018



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