

**Title:**

*Author:*

# Occupy Climate Change (OCC!) *City initiative entry*



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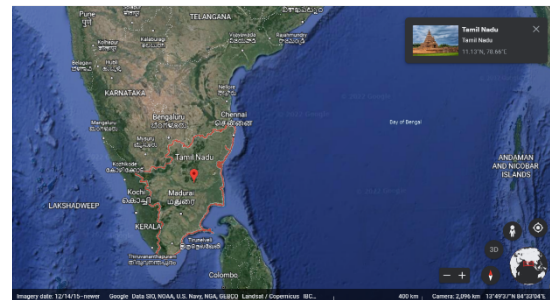
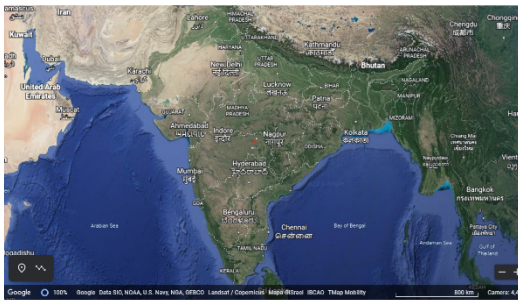


# Clarion Call for Tackling Climate Change in Tamil Nadu: A Critique

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## **Where is this grassroots initiative implemented? Who are the promoters? Who are the beneficiaries?**

Tamil Nadu, one of the highly industrialized states in India, holds agriculture as its predominant occupation and it is considered an important coastal state in India with a coastline of 1,076 kilometers. Among the thirty-eight districts in the state, fourteen districts that share the coastline are Thiruvallur, Chennai, Chengalpattu, Villupuram, Cuddalore, Mayiladuthurai, Nagapattinam, Tiruvarur, Thanjavur, Pudukkottai, Ramanathapuram, Thoothukudi, Tirunelveli, and Kanyakumari. All these districts vary in several aspects like landscape, climate, flora and fauna, socio-economic development, business, and so on.



**From Left to Right: Maps of India and Tamil Nadu (Image Credits: Google Maps)**

Among these aspects, climatic change poses a great challenge and threat for the stakeholders at different timescales. It heavily impacts the lives and livelihoods of the people, who reside in the places and pushes them to transform their pattern of life at regular intervals. At present, the inhabitants of these places experience the visible consequences of climate change like intense drought, storms, heatwaves, and extreme flash floods. In this regard, the Government of Tamil Nadu (India) proposed three significant missions to combat climate change: (a) Green Tamil Nadu Mission, (b) Tamil Nadu Wetlands Mission, and (c) Tamil Nadu Climate Change Mission. The proposed missions are going to be implemented in different districts based on the landscape, challenges encountered by humans and non-human others, resources, and various other closely-related factors.

To implement the missions successfully in various parts of the state, the government has set up a special purpose vehicle named *Tamil Nadu Green Climate Company (TNGCC)*. The *TNGCC*,

with the support of the *Tamil Nadu Infrastructure Fund Management Corporation Limited (TNIFMC)*, is given the responsibility to coordinate and monitor the proposed missions for the successful implementation. Some of the above-mentioned missions are furthered by multiple government departments, and private entities like educational institutions, industries, NGOs like *Care Earth Trust* and the *Nature Conservancy India*, along with the locals. Though beneficiaries, by and large, would include both humans and non-human others belonging to particular geographical locations and neighboring regions, it is difficult to evaluate their outcomes since all of these missions are in the initial stages and will take at least a decade to measure their results. Also, it would be important to include the inhabitants to identify the feasibility of the proposed missions, but there is no such sign as the missions are conceptualized and consulted largely with a team of educated individuals in governmental departments and NGOs. Neither the opinions of the locals nor their participation is considered critical for this establishment of the project. The insights of the educated individuals are heavily influenced by modern sciences rather than indigenous knowledge. Therefore, the outcomes of these initiatives are highly doubtful.

**How does this initiative engage with climate? Does it tackle mitigation, adaptation, both or other dimensions of climate change?**

Since there are three different initiatives, all of these initiatives cannot be viewed from a homogenized perspective but from a compartmentalized framework, based on the unique features and feasibilities that they can offer to tackle climate change. For example, the ***Green Tamil Nadu Mission***, which combines both adaptation and mitigation measures, focuses on two major activities like restoration of degraded forest lands, planting trees species in places like farmlands, industrial areas, educational institutions, temple lands, public lands, and defense establishments to increase the green cover and to reduce the deforestation and land degradation. Whereas, the ***Tamilnadu Climate Change Mission*** is keen on introducing new technologies to build energy-efficient homes, develop electric vehicles, and create alternative sources of energy, which are apparent steps toward mitigating the Green House Gases. Such energy measures reduce energy waste and are cost-effective. Another initiative, the ***Tamil Nadu Wetlands Mission*** is an adaptive measure to grapple with climate change by restoring the wetlands, which can not only capture and store the carbon but reduce floods and relieve droughts. Plus, it supports biodiversity during extreme weather conditions as it serves as a habitat for birds, fishes, turtles, and other organisms besides stabilizing the shorelines and

stream banks. The missions mentioned above, hence, carry both adaptation and mitigation dimensions to tackle climate change through various ways and means. The impacts of these missions can be understood holistically only when all of these missions are planned meticulously and executed within a short span of time coupled with empirical analysis of outcomes at periodic intervals. Also, the scale on which these missions are going to be executed is not only unpredictable but also a matter of concern; in other words, the qualitative and quantitative aspects of these initiatives in averting climate change have to be introspected from various perspectives. Apart from these, all of these initiatives share the responsibilities equally in engaging with climate change and addressing the issues with a wider and collaborative vision.

### **What are the main objectives? What are the main values?**

Though all the three missions have exclusive objectives, in a larger aspect, all these objectives are intricately connected with one another to combat climate change. First, the objective of the *Green Tamil Nadu Mission* is to enhance the forest and tree cover from the existing 23.7 % to 33 % by organizing massive tree plantation programs of indigenous and diverse species to enhance the carbon sequestration potential on an average of 8 Mt every year. It may also reduce the risks that arise due to floods, droughts, landslides, and outbreaks of pests. Second, the aim of the *Tamil Nadu Climate Change Mission* is to create a smart infrastructure system to handle natural disasters, enhance the efficacy of public transport systems, develop educational courses, and encourage research related to climate change. Also, the important information to be noted is that all these missions are implemented in collaboration with private players like educational institutions, NGOs, and so on. Third, the *Tamil Nadu Wetlands Mission* plans to identify and map 100 wetlands in the state and ecologically restore them to serve as a natural sponge during flood and drought, and to protect the coastlines. All these objectives are collective and holistic to combat climate change. Though the objectives are different, their focus is to keep the emission of carbon under control.

### **What is the timeline? Are there already visible effects?**

All these initiatives were proposed, recently, on 03.11.2021, during the Tamil Nadu budget session by the state finance minister. According to the Govt. Order No. 101, the timeline given for *Green Tamil Nadu Mission* and the *Tamil Nadu Wetlands Mission* are ten and five years respectively. There is no timeline given for the *Tamil Nadu Climate Change Mission*. Overall,

most of these initiatives are only in the initial stages and a lot of discussion and planning should go into it before and during the implementation. In short, there are no visible effects till the present time.

### **Who are the actors involved? What is their background?**

Major actors involved in these projects are private and public departments like Environment, Climate and Forest Department, Municipal Administration and Water Supply Department, Agriculture and Farmers Welfare Department, Public Works and Water Resources Department, academia, private sectors like industries, and NGOs, which foster a transition to climate-friendly platforms. Since NGOs, educational institutes, and many other organizations come under private sectors, they will be forced to work under political influence. Also, another significant problem typically faced in India is caste. The influence of caste can be witnessed in every aspect of governance, decision-making, planning, and so on. The members of the legislative assembly are mostly from the major caste group of the particular district and state. Although people who work in the government offices and laborers are from different castes and communities, the decisions are taken only by these representatives (MLAs) elected by the people, which mostly favors the people belonging to those castes. Sanction of loans, distribution of resources, subsidiaries, and offering of adequate facilities are challenged by the prevalence of the caste systems and caste politics. It is crucial to monitor both the distribution and utilization of resources for the successful implementation of these initiatives. Landlords may influence the local officials and get the resources required, especially monetary benefits, and later fail to meet the expectations and their level of awareness about climate change is also highly questionable. Therefore, the govt. should take necessary steps to identify the right people and educate them about the importance of these missions and empower them periodically.

### **Which limits does it encounter?**

All these initiatives have some limitations in terms of infrastructure, financial support, feasibility, and socio-political influences. For instance, under the *Green Tamil Nadu Mission*, the Govt. of Tamil Nadu has planned to give materials for agroforestry to farmers to help them get additional revenue, which is believed to reduce the rate of deforestation and forest degradation. The challenge lies in how the govt. will identify the dedicated farmers and demarcate the boundaries of all those lands and monitor them closely. And to what extent does the govt. will extend support to those farmers apart from distributing the required materials like water will be a concern. Also, it has planned to increase the green cover on public lands for a

ten-year duration. Now, the govt. has named educational institutes, temple lands, industrial areas, tank foreshore, and defense establishments for increasing the green cover. Excepting government-run organizations, all the other institutions are profit-oriented ones. The insufficiency of laborers to maintain those trees and places can affect the efficiency and outcome. Also, most of the family members of the landlords, and educational institutions run several other businesses. Therefore, the participation of such private players may hinder meeting the expected outcome of the missions. On the other side, some of the initiatives mentioned are already in action. But their rate of impact in tackling the challenge is highly skeptical as multiple factors play a crucial role, especially in helping people understand the urgency and required action to address the larger concerns. In short, it will have limitations at different levels – like functional, social, economic, and spatial.

**Are any shortcomings or critical points visible? What other problematic issues can arise from its implementation?**

Yes. The major shortcoming is the way these initiatives are going to be taken to the public attention and consciousness and seek their support as these initiatives are at the fundamental level with clear and detailed long-term vision and planning. Also, the pace of implementation is critical as already we have started experiencing the impacts of climate change, but still, these initiatives are only in the planning and conceptual stage. The class and caste structures are widely prevalent and they dominate almost all sectors in a country like India. Another side, corporate mafias will show influence not only on the policies but on every decision made by the government. In addition, the nexus between the knowledge partners, policymakers, politicians, and the public is another great challenge because each of these stakeholders will have equal responsibility and challenge.

**How would it be potentially replicable in other settings?**

Some of these initiatives can be implemented at any geographical location with some basic research about the spatial and temporal aspects of a place coupled with practical problems in terms of implementation and inside stories about the place. For example, before initiating tree plantation drives, it is important to examine the native species suitable for the specific location considering its geographical specificities like climate pattern, soil characteristics, and well-being of flora and fauna of the region. Also, it is important to understand and address the sustainability level of such projects in the given location and to conduct an impact level of those projects for a shorter and longer duration. In some contexts, better solutions may be

feasible depending on the land, livelihood, and people, therefore, it is crucial to identify the functional and feasible solutions rather than adopting the initiative without any customization.

**Is this initiative conducive to broader changes? If yes, which?**

No. First, the timeline of these projects spans about ten years and all these projects are only in the initial stages. Not only the outcomes and sustainability but the practicalities of these projects are unpredictable because other ongoing developmental projects and other proposed projects may challenge the new initiatives. For instance, wetlands are to be protected from encroachers, especially real estate mafias and industrialists, who will have planned to use the space for commercial purposes in collaboration with different MNCs. The state is also ready with plans to encourage rapid industrialization to generate income and improve the economy of the state, therefore to what extent these projects will be implemented considering the economic situation, and industrialization is debatable. Also how the government officials and public are going to be educated in terms of establishment, enhancement, and maintenance for a longer duration is doubtful.

**References:**

“Tamil Nadu: TN to Restore 100 Wetlands in Five-Year Period: Chennai News - Times of India.” *The Times of India*, TOI, <https://timesofindia.indiatimes.com/city/chennai/tn-to-restore-100-wetlands-in-five-year-period/articleshow/89979669.cms>. Accessed on 25 April 2022.

“Tamil Nadu to Set up Climate-Smart Villages and Rehabilitate Coastal Districts as Part of Its Climate Action Initiative: The Weather Channel - Articles from The Weather Channel.” *The Weather Channel*, <https://weather.com/en-IN/india/climate-change/news/2022-05-20-tamil-nadu-to-set-up-climate-smart-villages-for-its-cimate>. Accessed on 11 April 2022.

**TN Govt, Orders:**

[https://cms.tn.gov.in/sites/default/files/go/envfor\\_e\\_100\\_2021\\_Ms.pdf](https://cms.tn.gov.in/sites/default/files/go/envfor_e_100_2021_Ms.pdf). Accessed on 28 March 2022.

**Google Maps:**

<https://www.google.com/maps/place/Tamil+Nadu/@10.3149371,75.7168686,6.44z/data=!4m5!3m4!1s0x3b00c582b1189633:0x559475cc463361f0!8m2!3d11.1271225!4d78.6568942>. Accessed on 29 March 2022.