



## Neglected: ‘Development’, Climate Change and the impact on marginalized Communities

**Ishita Pradeep**

**School of Interwoven Arts and Sciences, Krea University  
E mail: [ishita\\_p.sias19@krea.ac.in](mailto:ishita_p.sias19@krea.ac.in)**

**Keywords: Adivasi, Climate change, Development, Environment, Mumbai, Tribal life**

In late 2019, Mumbai witnessed a large-scale civil-society protest against the proposed metro car-shed project at Aarey, a heavily forested area in the city. The Mumbai Metropolitan Region Development Authority (MMRDA), acquired a significant part of the Aarey forest for building this shed. This case got a lot of media attention both locally and nationally (FP staff 2020). The MMRDA chopping down upwards of 2000 trees within 24 hours was the main point of contention. One can assume that shrinking greenery in the age of climate change made environmentally conscious urban citizens anxious, eventually leading to this protest. Undoubtedly, climate change is one of the major global concerns of our times, prompting action in the form of everything from demonstrations in the streets to international agreements. The Mumbai protest to stop the Aarey project is one instance of the same.

### **Who Pays for Development?**

The way economic and developmental activities like manufacturing, mining, urbanization take place today is unsustainable. There is consensus among most of the scientific community about the causes of Climate Change, with the Intergovernmental Panel on Climate Change in its Fifth Assessment report concluding that human activity, especially large scale emission of greenhouse gases, is responsible for the warming of our planet over the past 50 years (IPCC fifth assessment report 2014). It is increasingly evident that human activity is affecting earth and its ecosystems in radical, irreversible ways (Chakrabarty 2009). From the large – scale production of the food we eat, to the flights we take to get from place to place (Timperley 2020), to even cryptocurrency like bitcoin we may choose to invest in (Sorkin 2021), the processes involved in many of our day to day actions are often extremely damaging to the climate. Faced with the prospect of an apocalyptic future, it is evident to most of us that our political and economic systems must shift drastically if we are to have any possibility of a viable future for our generation and the ones to come. However, initiating large - scale change to try and solve climate change is often seen as being antithetical to development and detrimental to the economy. Hence, these efforts are curbed by lawmakers, corporations, or often both in coordination.

In such a scenario where any concrete change is pushed to the bottom of our priorities in favor of ‘development’, it is worth questioning our very notion of development. Because development is often skewed in favor of a select few groups in the world and the impact of it

is faced by others, more often than not separated in distance and wealth from the previous group. It is now known to us that 20 fossil fuel companies are responsible for nearly 35% of the world's carbon emissions, and that these companies have not only ignored data on climate change, but also actively carried out advertising campaigns to shift the onus onto individuals (Taylor and Watts 2019). These kinds of developmental activities often take place with very little oversight, and adversely affect the most marginalized communities. In such a situation, we must ask ourselves, who is development for? Who benefits from it, and who suffers? We often see that development only causes an increase in income for those who are already well-off, creating massive income and wealth disparity between the super-rich and the rest. Not only are the fruits of development unevenly distributed, but the cost of development is also borne highly unequally. The effects of climate change we see around us are disproportionately faced by poor and marginalized communities, both in urban and rural areas. Due to this, these effects are often ignored or get much lesser attention than they deserve. By analyzing some of the recent developmental projects and their impacts in Mumbai and its suburbs, I will illustrate how the marginalized communities are excluded by developmental activities but have to bear the brunt of their effects.



Adivasis in Aarey colony protesting against displacement due to infrastructure projects

### Life of Adivasi Communities in the Mumbai in the Midst of Development and Climate Change

I would like to focus on the Adivasi (tribal) communities in and around Mumbai. According to the 2011 census, Adivasis constitute 8.61% of the population of India (Sen and Pattnaik 2015). Their population in Mumbai consists of communities like the Warlis, Dangs, Malhar Kolis, Mahadev Kolis, Dublas, among others, who are indigenous to the city. The Adivasi communities have historically lived in the northern part of Mumbai and Thane, and today live in scattered settlements and slums across the cities. These communities have faced continual displacement and alienation from their forest environment. They first faced displacement by

colonial authorities starting in the late eighteenth, in order to expand the city of Bombay (Edelblutte and Gunnel 2014) and then beginning in the 1980s in the name of conservation as the urbanization in Bombay spread northward (Zérah and Landy 2012). I have been raised in the city of Mumbai, and have known the Aarey forest as a recreational spot, yet I have remained largely unaware of the struggles these communities face. In this article I will explore how massive development projects in this metropolitan city impact the lives of these Adivasi communities. I will particularly focus on the inhabitants of the Versova Koliwada, as well as the Adivasi communities in the Aarey forest and Sanjay Gandhi National Park, in suburban Mumbai.

The Versova Koliwada (wada in Marathi means village) in suburban Mumbai is home to 1072 families from the Koli community, considered one of the original inhabitants of Mumbai. The community has historically been a fishing community. The Koliwada is located near the coast and many members depended and continue to depend on fishing and selling fish as a sustainable profession. In recent years, especially since the 1980s, the conditions around the coast have changed drastically. A coast, that Koli elders claim used to be crystal clear, is now polluted by the discharge of industrial and domestic effluents from the urban areas. Many species of fish that used to be abundantly found now seem to be decimated. As large swathes of Mumbai's mangrove forests are cut down for developmental projects, the fish that used to come to the coast to lay their eggs don't come there anymore. The troubles of this community due to local pollution and urbanization (such as clogging up of streams) are exacerbated by climate change (Jiwani 2019). As climate change increases the marine dead zones, zones with hypoxic conditions that cannot sustain life (Howard 2019), the places where fish are found moves further away from the coast. With rise in ocean temperatures fish have moved deeper to seek cooler temperatures. Climate change also means that cyclonic storms away from the coast are increasing in frequency. For the fisherfolk, this means that they have to invest more to buy deep sea nets and sturdier boats, and spend more time traveling farther away in search of catch. To add to all this, due to rise in sea temperature, many fish are moving to deeper levels, and are smaller now than they used to be. Major local fishes, like the pomfret and the Bombay duck have shrunk greatly in size since the '80s. With the increased investment and the time and effort, the inhabitants of the Koliwada are not getting as much yield as they used to. Aside from all this they also bear the brunt of an increasingly erratic sea. The reclamation of the coastal area for building projects, along with the increased cyclonic storms made the living and livelihood of the Koli community risky and vulnerable (Jiwani 2019).

The 16 sq. km Aarey Forest, located in Mumbai's western suburb of Goregaon is considered the green lung of Mumbai. It is home to the Aarey Milk colony, a veterinary college, a "Film city" and various other tourist attractions. The Aarey forest of Mumbai was, till 2019, home to 27 Adivasi padas (hamlets). Around 10,000 people from Adivasi communities lived in these hamlets. These families lacked access to basic amenities like running water and electricity. Many of these people owned farmlands and depended on forest and forest products to supplement their livelihoods, aside from having low-paying jobs in various parts of Mumbai. The building of the metro shed in Aarey by MMRDA had a massive impact on its Adivasi communities, who were the first to face material losses in the interest of this project. They had

their farmlands taken away for the construction, and many of their houses were demolished. 2600 of the trees whose products they depended on, were marked by the government for felling. The number of padas fell from 27 in 2017 to 15 in 2019 (Akanksha 2019, Sen and Pattnaik 2015). According to estimates by locals, about 70 Adivasi families lost their homes in this process. In addition to this they had to face government negligence. While they were given alternate homes (since their homes were classified as slums), they did not receive any remuneration for the farmland they lost (Akanksha 2019), which is a common problem due to lack of adequate paperwork and ambiguity of bureaucratic criteria for land ownership (Zérah and Landy 2012).

The Adivasis of Sanjay Gandhi National Park (SGNP) have a somewhat different story but suffer from many of the same problems as the Adivasis of Aarey. In the early 19th century, many from these communities were displaced from their various settlements across Mumbai because of developmental activity and urbanization in the rest of the city, and they settled inside what is now Sanjay Gandhi National Park. In the late 19th century many Adivasis were evicted from the park as conservation efforts labelled them encroachers in their own land, forcing them to settle in slums across the city (Edelblutte and Gunnel 2014). Many of these settlements were then absorbed by the park when it expanded from 20.26 sq. km. to 103.69 sq. km. in 1974, beginning a new set of conflicts between the communities who once again became inhabitants of the park, and the park and city authorities (Zérah and Landy 2012). Currently SGNP is home to 1795 Adivasi families who reside in its 43 Adivasi padas (Edelblutte and Gunnel 2014). Despite living in the middle of one of India's most developed cities, these families, like the Adivasi families in Aarey, lack access to basic amenities like electricity and running water (Shinde 2017). Due to conservation efforts, economic activities of the Adivasis which depended on forest and forest products have been curtailed (Edelblutte and Gunnel 2014). The people of SGNP are affected by urbanization in ways that we do not usually think about. In order to maintain a 'pristine' park, as a getaway for people to be free from the pressures of city life, these people are losing out on their livelihoods. The modern, elite, urban concept of the wilderness as something pristine and separate from modern life, and as something that must be protected at the costs of socio-environmental justice (Cronon 1996) is actively harming communities who are dependent on these areas for their livelihood.

### **Common Problems, Common Solution and More Common Problems**

By and large, all three case studies share the same problems – dispossession, displacement and loss of livelihoods. While there are government initiatives to relocate the people who lose their homes, these initiatives are laden with their own set of problems. Resettlement theoretically provides access to better income opportunities, but in reality it often increases the cost of living as people have to pay for utilities, maintenance of buildings and transportation (Zérah and Landy 2012). Many resettlement sites are often ill-equipped, with people often not having easy access to essential services like hospitals and schools. The rate of unemployment also tends to be higher in resettlement colonies as compared to slums or settlements. (Vaquier 2010 in Zérah and Landy 2012). In many cases people are unable to even access government schemes that

may be available to them, due to absence of adequate documentation and the fact that many in these communities, aside from the present generation, are illiterate (Sen and Pattnaik 2015). Adivasis not only lose the additional streams of income from selling forest products, but also lose access to the sustenance they derive from the forest and the sea (in case of Versova Koliwada). There are forms of loss that are not quantifiable or recorded, such as the Adivasis' spiritual connection to the land and forest, and loss of community relations (Sen and Pattnaik 2015). There is action by civic society to address these issues, especially the issue of the Aarey forest. However, NGOs and Civic Society Groups that take up these causes often focus on protecting the environment and tend to be less concerned about the socio-cultural and economic losses of the people who are directly dependent on it (Kade 2019).

### **The Way Ahead**

The stories of these Adivasi communities tell us a lot about the concept of development. Mumbai is one of the most 'developed' cities in India, and the developmental activity here is always in full swing. But the questions we need to ask is development for whom and who are bearing the cost of this development? As the case studies illustrate, development doesn't help the minority Adivasi communities. These communities are not only ignored by the authorities, but also by the people living in Mumbai. They are not only excluded from the development that grips the city, but are also actively harmed, and dispossessed because of this very development, that helps the middle, upper middle and upper classes. It is evident from here that our current idea of development is economically and materially beneficial to only a very select part of even our urban population.

Although the above instances are potentially unique, none of the problems discussed are problems of Maharashtra alone. Throughout the world we see countless examples of the marginalized people's lives and livelihoods being lost due to the homogenized notion of development. As the current form of development continues, this inequality will only increase. As resources become scarce, access to them will only become dearer, putting the poor and disenfranchised at a further disadvantage. It is important, on the one hand, to challenge our homogenized notion of development and on the other hand, understand how climate change creates an enormous pressure on the diverse traditional livelihoods and ways of life. As the first step towards that I, being part of the privileged middle-class and upper middle-class society—propose that it is crucial to acknowledge the impact of climate change as well as the development on the communities around us, and how unequal this impact is. We need to engage with and highlight struggles of minority communities. Maybe then climate change will stop being treated like a theoretical problem and start to be treated like something with real dire consequences, and something that demands urgent, mass action.

### **Acknowledgments**

I would like to thank Dr. Kalpita Bhar Paul for her guidance, for her comments and suggestions on the drafts of this article and Stuti Khandelwal for proofreading and helping with sources.

## References:

1. Aakanksha. "Aarey Adivasis: 'And then we lost this land of ours'". People's Archive of Rural India. 24th October, 2019. <https://ruralindiaonline.org/articles/aarey-adivasis-then-we-lost-this-land-of-ours/>
2. "About Aarey." *Aarey Conservation Group*, [aareyconservationgroup.org/about-aarey/](http://aareyconservationgroup.org/about-aarey/).
3. Bhadgaonkar, Jai, and Ketaki Tare. "Mumbai Versova Koliwada." *Shelter*, 2016, [shelterglobal.org/competition/2016/mumbai-versova-koliwada/](http://shelterglobal.org/competition/2016/mumbai-versova-koliwada/)
4. Chakrabarty, Dipesh. "The Climate of History: Four Theses". *Critical Inquiry* 35. Winter 2009. pp. 197 - 222
5. Cronon, William. "The Trouble with Wilderness: Or, Getting Back to the Wrong Nature". *Environmental History*. Volume 1 No. 1. January 1996. pp. 7- 28
6. Edelblutte, Émile and Yanni Gunnell, "Le territoire impossible des populations tribales du parc national Sanjay Gandhi (Mumbai, Inde)", *L'Espace géographique*, Volume 43, January 2014, (Translation), pp. 1- 17
7. FP staff. "Aarey Controversy: How Proposal for Mumbai Metro Car Shed in 'Green Lung' Spawned Political Battle." *Firstpost*, 12 Oct. 2020, [www.firstpost.com/india/aarey-controversy-how-proposal-for-mumbai-metro-car-shed-in-green-lung-spawned-political-battle-8904391.html](http://www.firstpost.com/india/aarey-controversy-how-proposal-for-mumbai-metro-car-shed-in-green-lung-spawned-political-battle-8904391.html).
8. IPCC. 2014, *Climate Change 2014 Synthesis Report Summary for Policymakers Chapter*, [www.ipcc.ch/site/assets/uploads/2018/02/AR5\\_SYR\\_FINAL\\_SPM.pdf](http://www.ipcc.ch/site/assets/uploads/2018/02/AR5_SYR_FINAL_SPM.pdf).
9. Jiwani, Subuhi. "The Shrinking Pomfret of Suburban Mumbai" People's Archive of Rural India. 4th December, 2019. <https://ruralindiaonline.org/articles/the-shrinking-pomfret-of-suburban-mumbai/>
10. Kade, Aarti. "The Aarey Land Grab: Mumbai's Adivasi Settlements Are under Siege." *Groundxero*, 16 Oct. 2019, [www.groundxero.in/2019/10/16/the-aarey-land-grab-mumbais-adivasi-settlements-are-under-siege/](http://www.groundxero.in/2019/10/16/the-aarey-land-grab-mumbais-adivasi-settlements-are-under-siege/).
11. Sainath, P. *Everybody Loves a Good Drought: Stories from India's Poorest Districts*. Penguin. 1997
12. Sen, Amrita, and Sarmistha Pattanaik. "Alienation, Conflict, and Conservation in the Protected Areas of Urban Metropolis: A Case Study of Sanjay Gandhi National Park, Mumbai." *Sociological Bulletin*, vol. 64, no. 3, 2015, pp. 375–395., doi:10.1177/0038022920150306.
13. Shinde, Rupali. "Adivasis Celebrate and Demand of Basic Necessities on 'World Indigenous Day'". *Mumbai Live*. 2017. <https://www.mumbailive.com/>
14. Shinoli, Jyoti. "In Thane, the rain has gone rogue". People's Archive of Rural India. 25th August, 2020. <https://ruralindiaonline.org/articles/in-thane-the-rain-has-gone-rogue/>
15. Sorkin, Andrew Ross. "Bitcoin's Climate Problem." *The New York Times*, The New York Times, 9 Mar. 2021, [www.nytimes.com/2021/03/09/business/dealbook/bitcoin-climate-change.html](http://www.nytimes.com/2021/03/09/business/dealbook/bitcoin-climate-change.html) .
16. Taylor, Matthew, and Jonathan Watts. "Revealed: the 20 Firms behind a Third of All Carbon Emissions." *The Guardian*, 9 Oct. 2019, [www.theguardian.com/environment/2019/oct/09/revealed-20-firms-third-carbon-emissions](http://www.theguardian.com/environment/2019/oct/09/revealed-20-firms-third-carbon-emissions).
17. Timperley, Jocelyn. "Should We Give up Flying for the Sake of the Climate?" *BBC Future*, BBC, 19 Feb. 2020, [www.bbc.com/future/article/20200218-climate-change-how-to-cut-your-carbon-emissions-when-flying](http://www.bbc.com/future/article/20200218-climate-change-how-to-cut-your-carbon-emissions-when-flying).
18. Zérah, Marie-Hélène, and Frédéric Landy. "Nature and Urban Citizenship Redefined: The Case of the National Park in Mumbai." *Geoforum*, vol. 46, 27 Dec. 2012, pp. 25–33., DOI:10.1016/j.geoforum.2012.11.027.

**Photo credit:** Source: *The Indian Express*. <https://indianexpress.com/article/cities/mumbai/mumbai-aarey-colony-tribals-protest-against-infra-projects-5753470/>