# The Climate Emergency Situation in Maharashtra: A Big Challenge for Uddhav Thackeray

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## Summary

A key challenge facing the new Maharashtra government is the urgent need to deal with the "climate emergency" in the state. A number of studies and reports on the impact of climate change have shown that if appropriate steps are not taken now, Maharashtra could face serious economic consequences in the near future.

## Introduction

After a month of political drama, the Shiv Sena (SS) joined hands with the Indian National Congress (INC) and the Nationalist Congress Party (NCP) in November 2019 to form a coalition government in the Indian state of Maharashtra. Called *Maha Vikas Aghadi* (Great Development Front), this alliance is led by SS' chief Uddhav Thackeray. The SS and the INC-NCP combine is a coalition of ideologically opposing parties<sup>1</sup> which is not a new experiment in Indian democracy. In the past, many ideological opponents have formed coalition governments. One of the best examples of this is the Bharatiya Janata Party (BJP)-Jammu and Kashmir People's Democratic Party government (2015-2018) in the erstwhile Indian state of Jammu & Kashmir. Only a few of the many such coalition governments have not completed their full five-year terms. The BJP led National Democratic Alliance (NDA)-Janata Dal (United)<sup>2</sup> coalition (2005-2010) in Bihar completed its first five years in 2010 and stayed in power from 2010 to 2015. During the 2015 Bihar assembly elections, JD (U) left the NDA and became a part of the *Mahagatbandhan* (Grand Alliance).<sup>3</sup> However, in 2017, JD (U) broke from the *Mahagatbandhan* to re-join the NDA.

Due to this coalition of ideologically opposed parties, the future of the Thackeray-led government depends upon the political flexibility of the coalition partners to accommodate each other's interests. Besides political challenges, Thackeray's government also faces multiple economic issues due to the debt burden of about ₹6.71 lakh crore (\$1.2 billion).<sup>4</sup> More so than the prevailing political and economic conditions, the impact of climate change in Maharashtra is a major concern that requires attention from the government. The phenomenon of climate change has had a direct effect on the economy of the state; the most visible being in the agriculture sector on which the state's economy is highly

<sup>&</sup>lt;sup>1</sup> The SS believes in the concept of Hindutva while the INC and the NCP are secular parties.

<sup>&</sup>lt;sup>2</sup> The BJP is a Hindu right-wing party while JD (U) believes in secular principles.

<sup>&</sup>lt;sup>3</sup> The *Mahagathbandhan* also comprised Indian National Congress, Rashtriya Janta Dal (National People Party), Hindustani Awam Morcha (Indian People Front) and Rashtriya Lok Samta Party (National People Equality Party).

<sup>&</sup>lt;sup>4</sup> "Fadnavis govt put State under 6.71 lakh cr. Debt", *The Hindu*, 3 December 2019. <u>https://www.thehindu.</u> <u>com/news/national/fadnavis-govt-put-state-under-671-lakh-cr debt/article30145315.ece</u>. Accessed on 4 December 2019.

dependent. A decline in agriculture production has not only affected the state's gross domestic product, but also caused distress among the farmers. In the cities, frequent floods have damaged infrastructure, and killed and displaced a number of urban poor. This paper looks at the impact of the climate change in Maharashtra and the measures the government might adopt to deal with the challenges.

### Impact of Climate Change in Maharashtra

Due to climate change, Maharashtra experiences erratic weather conditions – floods in some parts of the state and droughts in others. This affects the agriculture sector, whose contribution to the state's economy is about 12 per cent of gross state value added. In 2019, according to an estimate, unseasonal rains wiped out crops in an area of 94.5 lakh hectares (9.4 million hectares). It is estimated that the total economic cost of the loss was more than ₹5,000 crore (S\$100 million) in 30 of the 36 districts of the state.<sup>5</sup>

Drought has also affected agriculture in drought prone regions of Maharashtra such as Vidarbha and Marathwada. To deal with the situation, in December 2014, *Jalyukt Shivar Abhiyaan* (Water Conservation Mission) was launched. Its objective was to make the state drought-free by 2019 and it focused on deepening and widening streams, constructing cement and earthen stop dams, working on nullahs and digging farm ponds. Through all such water conservation structures, the mission aimed to make 5,000 villages free from water scarcity every year.<sup>6</sup> Nevertheless, after five years, in 2019, the Maharashtra government had to declare drought in 20,000 villages across 26 districts of the state. Of these, eight districts in the Marathwada region were among the worst affected.<sup>7</sup>

Unseasonal rainfall, unwanted floods and droughts have caused a decline in agricultural production, which, in 2018-2019, resulted in an estimated eight per cent decline in the crops' real gross state value added.<sup>8</sup> The decline in crop production, due to drought or damage to standing crops because of excessive precipitation, increases the financial pressure on farmers. Many of them take loans from banks or individuals promising to return the principal amount with interest after selling their crops. However, when the crop fails, these farmers fall into debt. Some then sell or mortgage their land and migrate to the nearby city while a few, unfortunately, take extreme measures and commit suicide. It is estimated that, between 2015 and 2018, about 12,021 farmers from Maharashtra committed suicide.<sup>9</sup>

<sup>&</sup>lt;sup>5</sup> "The seven hurdles that will test 'Maha Vikas Aghadi' of Sena", *Mumbai Mirror*, 28 November 2019. <u>https://mumbaimirror.indiatimes.com/maharashtra-assembly-elections/news/the-seven-hurdles-that-will-test-the-sena-ncp-congress-tricycle/articleshow/72268828.cms</u>. Accessed on 28 November 2019.

<sup>&</sup>lt;sup>6</sup> Water Conservation Department, Government of Maharashtra, *Jalyukt Shivar Abhiyan*. <u>http://mrsac.</u> <u>maharashtra.gov.in/jalyukt/</u>. Accessed 18 May 2019.

<sup>&</sup>lt;sup>7</sup> Surendra P Gangan, "90% drought in Marathwada, 100% apathy, claim villagers", *Hindustan Times*, 2 April 2019. <u>https://www.hindustantimes.com/mumbai-news/90-drought-in-marathwada-100-apathy-claim-villagers/story-dMTmZERpB3ryjlV1qU4cUM.html</u>. Accessed on 18 April 2019.

<sup>&</sup>lt;sup>8</sup> Chaitanya Mallapur, Jameela Ahmed, and Prachi Salve, "Repeated Floods, Drought Affect Maharashtra, But They Are 'Not An Election Issue': Experts", *India Spend*, 19 October 2019. <u>https://www.indiaspend.</u> <u>com/repeated-floods-drought-affect-maharashtra-but-they-are-not-an-election-issue-experts/</u>. Accessed on 29 December 2019.

<sup>9</sup> Ibid .

It is not only the rural areas that are experiencing the impact of climate change. Mumbai, the capital of Maharashtra, is also severely affected. In 2019, Mumbai received the maximum rainfall in its recorded history during the official monsoon season from June to September 2019. The city recorded a total rainfall of 3,670 millimetres from 1 June to 30 September 2019, which was more than the previous record of 3,452 millimetres set in 1954.<sup>10</sup> In 2019, Mumbai also witnessed five 'extremely heavy rain' days, when the rainfall crossed over 204 millimetres within 24 hours.<sup>11</sup> The International Panel on Climate Change, an intergovernmental body set up by the United Nations in 1988 to study the impact of climate change, in its 2018 report, highlighted that an increase in global warming from 1.5 degree Celsius would make the coastal cities of the world, including Mumbai, more vulnerable to sea floods.

Further, in a research paper published in *Nature Communications*, Scott A Kulp and Benjamin H Strauss from the United States-based research institute, Climate Central, argue that, by 2050, the projected rise in sea levels would be high enough to threaten lands which are currently home to about 150 million people. The worst affected Asian countries from the sea rise will be China, Bangladesh, India, Vietnam, Indonesia, Thailand, the Philippines, and Japan. The whole of Mumbai has been listed by the authors in the paper as one of the vulnerable coastal areas.<sup>12</sup>

## The MSAAPCC Report

To understand and deal with the impact of climate change, the Maharashtra government awarded a contract to The Energy and Resources Institute (TERI) in 2010 to carry out a comprehensive vulnerability assessment study. TERI entered into partnership with the United Kingdom Met Office and came out with a report titled 'Assessing Climate Change Vulnerability and Adaptation Strategies for Maharashtra: Maharashtra State Adaptation Action Plan on Climate Change (MSAAPCC)' in 2014. This report discussed the impact of climate change on six important sectors – agriculture, water resources, health, forests and biodiversity, livelihoods, and energy and infrastructure. It also talked about modelbased projections for rainfall and temperature in the state; and assessed the future sealevel rise, and extreme rainfall, flooding and adaptation in Mumbai and nearby areas.<sup>13</sup> To deal with the impact of climate change, the MSAAPCC mainly recommended:<sup>14</sup>

- 1. Integrating future climate change projections and uncertainties into state disaster management plans and disaster risk reduction strategies.
- 2. Incorporating climate change concerns into development plans and land use planning.

<sup>&</sup>lt;sup>10</sup> "Monsoon Withdraws from Mumbai; Thunderstorms May Continue", TWC India Edit Team, 14 October 2019. <u>https://weather.com/en-IN/india/monsoon/news/2019-10-14-monsoon-withdraws-from-mumbai-maharashtra-rains</u>. Accessed on 15 October 2019.

<sup>&</sup>lt;sup>11</sup> Ibid.

<sup>&</sup>lt;sup>12</sup> Ibid.

 <sup>&</sup>quot;Assessing Climate Change Vulnerability and Adaptation Strategies for Maharashtra: Maharashtra State Adaptation Action Plan on Climate Change (MSAAPCC)", TERI 2014. <u>https://www.teriin.org/projects/nutrition-security/files/Maharashtra-CC-Report.pdf</u>. Accessed on 12 November 2019.

<sup>&</sup>lt;sup>14</sup> Ibid.

- 3. Spreading public awareness about the impact of climate change. Self-help groups, community leaders, schools, grassroots organisations and local media, among others, should be proactively engaged in spreading awareness about climate change and motivate people to adopt climate change resilient practices. Even celebrities from different fields may be encouraged to act as Climate Change Ambassadors to spread awareness relating to climate friendly lifestyle.
- 4. Need to develop a Knowledge Management Centre, which would facilitate flow of information and knowledge between experts, policy makers, and vulnerable communities.

Five years after its submission, the MSAAPCC report was accepted by the Maharashtra government in 2019. However, the need is to implement it.

Unfortunately, all earlier signs of the climate emergency were ignored by the previous governments of the state. In recent times, some of the decisions taken by the former Chief Minister of the state, Devendra Fadnavis (2014-2019), have, in fact, added to the already worsening situation. A few days before the Maharashtra assembly elections in 2019, when the entire world, including his party's leader and Indian Prime Minister Narendra Modi, were talking about climate emergency, Fadnavis' government surreptitiously cut about 2,700 trees in Aarey Colony for a Metro train car-shed project. Environmental activists protesting this project challenged the government's decision in the Bombay High Court and later, dissatisfied with the judgement, appealed to the Supreme Court of India but were unsuccessful in getting it halted. Prior to felling trees at Aarey colony, the Fadnavis government also came up with a plan to raze about 54,000 mangrove trees for the Mumbai-Ahmedabad bullet train project. Both were opposed by SS, then-alliance partner of the BJP in the NDA. After assuming the office of Chief Minister, Thackeray halted both projects.

Another environmentally dangerous and controversial project is the Mumbai Coastal Road (MCR), which was quashed by the Bombay High Court in July 2019. The Maharashtra government challenged the order in the Supreme Court, which has put a stay on it. The MCR was initially planned when Prithviraj Chavan was the Chief Minister of Maharashtra (2010-2014). It is a 29.2-kilometre coastal road project to connect Marine lines in South Mumbai with Kandivali, a northern suburb of the city. Once in operation, the MCR is expected to considerably reduce the travel time between Marine lines and Kandivali, which now takes more than two hours.<sup>15</sup> For the MCR project, about 90 hectares of land are to be created by reclaiming the inter-tidal western coast of Mumbai. The environmentalists, social activists and fishermen from the region have opposed this project. They believe that the MCR will destroy the ecology and affect the livelihood of local people who depend a lot on the inter-tidal zone for fishing.<sup>16</sup>

<sup>&</sup>lt;sup>15</sup> Sanjana Bhalerao & Kavitha Iyer, "Explained: Mumbai Coastal Road Project, and why it's caught in litigation", *The Indian Express*, 19 December 2019. <u>https://indianexpress.com/article/explained/mumbais-contentious-road-project-coastal-regulation-zone-6172297/</u>. Accessed on 17 January 2020.

<sup>&</sup>lt;sup>16</sup> Sarita Fernandes, "Mumbai Coastal Road: Pathway to Ruin", *Down To Earth*, 16 July 2019. <u>https://www.downtoearth.org.in/blog/environment/mumbai-coastal-road-pathway-to-ruin-65665</u>. Accessed on 27 July 2019.

In Mumbai, even powerful individuals have damaged the environment for their private projects. For example, the lavish Seven Eleven Club in Mira Road, Mumbai, was built after clearing 3.5 acres of mangroves. The majority stake, at 57.5 per cent, is owned by Narendra Mehta, a BJP legislator who was once Mayor of the Mira-Bhayandar municipality, and his brother, Vinod Mehta.<sup>17</sup>

#### Conclusion

In the coming days, the impact of climate change will be more threatening to the populace and will severely affect Maharashtra's economy. Its impact on the agriculture sector is likely to further increase migration from the rural areas to various cities across Maharashtra. Such migrants will put additional burden on city infrastructure. To overcome such a situation and deal with the challenges of climate change, the first step is to recognise the problems climate change creates. Unfortunately, despite the severe impacts already seen, such as death and economic losses, climate change is yet to be recognised as an imminent threat to the state. Second, development projects in Maharashtra have to be planned without degrading the city's environment. There is a need to save the existing mangrove forests and increase the tree cover in Mumbai, as they check sea floods and salinity. Third, as recommended by the MSAAPCC report, the government must create mass awareness about the threat of climate change. There is a need to train people to use new technologies and inclucate a civic attitude among the people.

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<sup>&</sup>lt;sup>17</sup> "Mumbai: BJP MLA 'killed' 3.5 acres of mangroves to raise posh club", DNA, 18 July 2019. <u>https://www.dnaindia.com/mumbai/report-mumbai-bjp-mla-killed-35-acres-of-mangroves-to-raise-posh-club-2773140</u>. Accessed on 19 July 2019.

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