

## **RESEARCH PROPOSAL SUBMITTED TO CRG**

**Subject: CLIMATE CHANGE, DROUGHT AND MIGRATION IN MAHARASHTRA**

**Category: (Environmental and Climate induced displacement)**

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### **ABSTRACT (100 WORDS)**

Anthropogenic climate change, global environmental transformation and forced migration are a humanitarian challenge. As policy makers view climate induced drought and migration as inevitable and governments reframe development policies as 'climate action plans', empirical contexts of local communities, that experience drought are reshaped in the language of vulnerability or adaptation. Drawing on the concept of 'social nature' (Castree) and going beyond visions of local people as victims or adaptation experts, this research aims to understand the recent experiences of drought and migration in the state of Maharashtra, from local narratives about environmental crisis and explore its relationship with community decisions and political engagements.

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### **SUMMARY: RESEARCH PROPOSAL (1000 WORDS)**

Climate induced forced migration is viewed as a humanitarian challenge of unprecedented proportion (see World Bank 2018). As global policy makers view climate induced drought and migration as inevitable and national governments realign and reframe development policies as 'climate action plans', empirical realities and contexts of local communities, that experience drought are reshaped in the language of vulnerability, resilience or adaptation (see Watts 2014, de Witt 2018). Drawing on the concept of 'social nature' (Castree), this research aims to understand the recent experiences of drought and migration in the state of Maharashtra, from local (informal, common-sense, gendered, official; and offline and online) interpretations and narratives about environmental crisis and its relationship with community actions, decisions and political engagements.

A 2018 World Bank report predicted that by 2050, millions of people in the global south would be forced to migrate within their own countries due to the slow onset impacts of climate change.<sup>1</sup> However, researchers and policy makers have consistently faced difficulties in attributing the causation of environmental migration to phenomena such as drought, due to its slow onset, long time-scales, definitional issues and intertwining with complex socio-economic

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<sup>1</sup> "Rigaud, Kanta Kumari; de Sherbinin, Alex; Jones, Bryan; Bergmann, Jonas; Clement, Viviane; Ober, Kayly; Schewe, Jacob; Adamo, Susana; McCusker, Brent; Heuser, Silke; Midgley, Amelia. 2018. Groundswell : Preparing for Internal Climate Migration. World Bank, Washington, DC. © World Bank.  
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and political causal factors. For instance, in India, where an estimated 330 million people were affected by severe drought in 2016, the areas that witnessed migration by several million people were also regions with high seasonal migration (IDMC 2020).

Drought, according to the Intergovernmental Panel on Climate Change (IPCC), is defined as a 'period of abnormally dry weather long enough to cause a serious hydrological imbalance (IPCC 2012:558).' Frequent droughts are known to have widespread, long term and devastating social and environmental effects. Less visible to policy makers the debilitating effects of drought are most often absorbed by the poorest communities and the agricultural sector. Despite the close relationship between drought and population movement has multiple causal factors and it remains difficult to conceptualize migration as emerging from purely environmental crisis.

Climate change discourse, with its scientific, political and moral import has been influential in recent times, in shifting the understanding and enframing of local events (Milton 2008:57) cited in (Crate 2011:178). Anthropologists have greatly contributed to our understanding of: 'how place-based peoples who depend directly on their immediate physical environment observe, perceive and respond to the local effects of global climate change' (Crate 2011). An important contribution by Sara de Wit (2018) makes a case for the need to shift our focus from techno-managerial representations of climate and adaptation that makes local communities appear as victims, perpetrators or adaptation experts and attend instead to the rich 'counter voices and narratives'.

An estimated 330 million people were affected by drought in 10 states of India in 2016. These areas were characterised by rising summer temperatures and water crisis, following poor monsoon rains. The western state of Maharashtra suffered several consecutive drought years.<sup>2</sup> In 2016, a series of 13 articles on Maharashtra drought, attributing causation to climate change related factors such as uneven seasonal precipitation and intense heat waves, general agrarian distress, inadequate irrigation infrastructure, farmer-indebteness, water-intensive sugarcane cultivation and poor implementation of Government's Climate Action Plan.<sup>3</sup> During the 2018 drought, newspapers again reported widespread migration as farmers experienced multiple crop failure. Many farmers told the visiting reporters how their family members had been forced to take on low status migrant wage work such as sugar cane harvesting.

## **RATIONALE**

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<sup>2</sup> Historically Maharashtra has been affected by frequent droughts, especially in the 'rain-shadow' districts. After the drought years of 1971-72, economists and observers had noted the absence of preventive mitigations in the form of protective irrigation systems. They had also noted the absence of adequate opportunities in the urban-industrial sector to absorb the distressed, drought affected surplus labour that was migrating from the rural areas. The policy makers then had suggested economic growth as the key solution to this crisis (Ladejinsky 1973).

<sup>3</sup> <https://www.firstpost.com/india/marathwad-drought-how-climate-change-has-destroyed-agriculture-and-ruined-farmers-2736992.html>

Migration occupies a central role in the long-term coping strategies of rural households, ebbing and flowing with exceptional crisis events. It is important to understand how drought affected rural migrants perceive the recent crisis based on cultural understandings about water crisis, agrarian decline and migration, how they negotiated the terrain of new environmentalism and climate knowledge and how they participate in political debates on some of these concerns. According to Castree (2001), knowledge of nature not only expresses social power relations but such knowledge also has material effect when they shape belief and action, even as nature is continuously shaped by human action. Thus climate knowledge and action, adopted or interpreted in local struggles over power and influence may shape actions that would affect livelihoods and environment in ways that would have social and environmental consequences.

## **RESEARH OBJECTIVES**

To provide an overview of the changing trends and contexts of drought In Maharashtra and its social and environmental implication for affected people. To study the importance given to migration as seasonal coping and during exceptional drought years among people in rural Maharashtra in the past and in recent times. To examine the interpretation of environment and climate change and its relationship with drought causation and migration decisions. To examine how people (farmers, migrant wage labour and officials) obtained their knowledge about drought and changing climate and how this shapes their views and political activism and claims-making around drought and state responsibility – both in their offline and online worlds.

## **METHODOLOGY**

The study will review secondary literature to provide an overview of the drought incidence and trends in Maharashtra and its social and environmental implication for affected rural population in origina and destination locations. It will also collect, analyze, interpret and report data on local understandings of environmental change and drought-induced migration from selected drought prone areas of Maharashtra and Migrant destination area (Marathwada, Vidarbha, Mumbai). The study will use a digital ethnography approach to collect data about computer-mediated environments and online activities, including consumption of social media reportage of drought, water crisis, election debates and official responsibility among members of the local community. Data collected will derive from public/user-shared content such as threads, posts, tweets, videos, and observation of online activities.

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## **RESEARCH PROPOSAL (EXPANDED)**

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## INTRODUCTION

The term Anthropocene describes the unprecedented impact of human activities on Earth that has or is in the process of producing 'existential threat' to all life forms. Anthropogenic climate change and global environmental transformation is a key dimension of the idea of living in the Anthropocene (Castree 2014). Within this climate induced forced migration is viewed as a humanitarian challenge of unprecedented proportion (see World Bank 2018). Where are impoverished rural communities from the global South located with respect to this narrative of imminent catastrophe? As global policy makers view climate induced drought and migration as inevitable and national governments realign and reframe development policies as 'climate action plans', empirical realities and contexts of local communities, that experience drought are reshaped in the language of vulnerability, resilience or adaptation (see Watts 2014, de Witt 2018). While this enables a sustained and renewed focus on the survival crisis of monsoonal agriculture and informal sector dependent rural communities, it tends to eclipse the specific knowledge, interpretations and decisions of local communities around environmental change and livelihood needs and possibilities. Drawing on the concept of 'social nature' (Castree), this research aims to understand the recent experiences of drought and migration in the state of Maharashtra, from local (informal, common-sense, gendered, official; and offline and online) interpretations and narratives about environmental crisis and its relationship with community actions, decisions and political engagements. Qualitative and contextual research design would enable this study to contribute to the usually difficult to establish connection between drought and population displacement, in areas of high seasonal migration.

## LITERATURE REVIEW

Migration brought on by natural disaster is an increasing concern in the twenty first century. In global policy arena this phenomena is viewed as a humanitarian challenge of unprecedented proportion. A 2018 World Bank report predicted that by 2050, millions of people in the global south would be forced to migrate within their own countries due to the slow onset impacts of climate change.<sup>4</sup> During the COP21 consultative process, the forcible displacement of 184.6 million people affected by natural disasters, from their homes was described as environmental migration. According to IDMC (Internal Displacement Monitoring Centre), India has the highest level of displacement associated with disasters globally. In early 2019, disasters led to 2,171,000 new displacements recorded from India (IDMC 2020). However, researchers and policy makers have consistently faced difficulties in attributing the causation of environmental migration to phenomena such as drought, due to its slow onset, long time-scales, definitional issues and intertwining with complex socio-economic and political causal factors. For instance,

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<sup>4</sup> "Rigaud, Kanta Kumari; de Sherbinin, Alex; Jones, Bryan; Bergmann, Jonas; Clement, Viviane; Ober, Kayly; Schewe, Jacob; Adamo, Susana; McCusker, Brent; Heuser, Silke; Midgley, Amelia. 2018. Groundswell : Preparing for Internal Climate Migration. World Bank, Washington, DC. © World Bank.  
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in India, where an estimated 330 million people were affected by severe drought in 2016, the areas that witnessed migration by several million people were also regions with high seasonal migration (IDMC 2020).

Drought, according to the Intergovernmental Panel on Climate Change (IPCC), is defined as a 'period of abnormally dry weather long enough to cause a serious hydrological imbalance (IPCC 2012:558).' But drought is also described as a 'relative term' that needs explication based on the 'particular precipitation related activity' that is being discussed. The three sub-types that emerge from this understanding are agricultural, hydrological and meteorological droughts. The social and economic dimensions of drought are not part of this definition. A World Health Organization (WHO) technical brief, describes drought as a 'slow-onset' phenomena caused by rainfall deficit and other factors that may result in 'mass displacement of population.'<sup>5</sup> Interestingly, population displacement is viewed both as an effect of drought as well as a factor that influences the impact of drought on communities (see *ibid*). In the twenty first century, frequent droughts are known to have widespread, long term and devastating social and environmental effects. Less visible to policy makers the debilitating effects of drought are most often absorbed by the poorest communities and the agricultural sector. A recent global policy report associates the phenomenon with disruptions created by climate change.<sup>6</sup>

Migration affects and is affected by climate related environment stress like droughts all over the world. But despite the close relationship between drought and population movement, it is often difficult to conceptualize migration as emerging from environmental crisis. As Piguet 2010, suggests in an important review article, what is needed is an understanding of population displacement based on multicausal relationship between environmental, political, economic, social and cultural dimensions. It is also argued that environmental stress does not affect all communities equally. In India, seasonal migration plays an important role in supporting rural livelihoods in agricultural lean seasons. Such migration is attributed with increasing rural wages in the origin-communities, though observers highlight the absence of transformatory outcomes. Migrant decisions and outcomes tend to be highly gendered and shaped by class and caste dimensions. Circular or seasonal migration have been viewed as driven by distress among resource less rural people or a temporary coping strategy supported by the need to sell labour in advance and at the cost of debt-bondage (Breman et al 2009, Guerin et al 2013, Carswell and de Neeve 2013). It is also viewed as leading to livelihood diversification and reducing local inequalities (Rogaly et al 2001, Rogaly 2008, Mosse et al 2005).<sup>7</sup> In climate literature migration is viewed as adaptation to disruption of livelihoods, subsistence and prolonged scarcity under

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<sup>5</sup> <https://www.who.int/hac/techguidance/ems/drought/en/>

<sup>6</sup> UNESCAP 2020. Ready for the Dry Years: Building Resilience to Droughts in South-East Asia.

<https://www.unescap.org/sites/default/files/publications/Ready%20for%20the%20Dry%20Years.pdf>

<sup>7</sup> There is a large scholarship on seasonal migration in the context of India. Only a few are mentioned here.

environmental stress. The emphasis on climate change as planetary crisis shifts the frame and scale for understanding the effects of migration in unique ways.

Climate change discourse, with its scientific, political and moral import has been influential in recent times, in shifting the understanding and enframing of local events (Milton 2008:57) cited in (Crate 2011:178). Writing about climate change knowledge, Piguet 2010 suggests that, 'information related to climate change is not perceived in the same way by everyone and everywhere'. Anthropologists have greatly contributed to our understanding of: 'how place-based peoples who depend directly on their immediate physical environment observe, perceive and respond to the local effects of global climate change' (Crate 2011). Some studies have highlighted the inadequacies of local adaptation strategies to combat climate change, while others have focussed on the social construction and cultural readings of climate change. Some have criticised climate-crisis discourses as promoting colonial stereotypes around scarcity and resource conflicts, population and poor cultivation techniques and migration, thus depoliticizing the issue (Gesing et al 2014)<sup>8</sup>. These studies emphasize the significance of empirical research and local context both for understanding of vulnerabilities and interpretation of climate change (ibid). An important contribution by Sara de Wit (2018) makes a case for the need to shift our focus from techno-managerial representations of climate and adaptation that makes local communities appear as victims, perpetrators or adaptation experts and attend instead to the rich 'counter voices and narratives'. These studies warn against simplified grand narratives of collapse or rejuvenation and encourage more historical and nuanced understanding of the evolving nature of human, environment relationships. What is also needed then, as argue (Castree and Braun 2014) is the delineation of 'the sites of social productions of nature' and understand how these take shape amidst varied interpretations and contestations and the social, ecological and political consequences of these actions.

## CONTEXT

An estimated 330 million people were affected by drought in 10 states of India in 2016. These areas were characterised by rising summer temperatures and water crisis, following poor monsoon rains. A rapid assessment report, described widespread migration due to livelihood insecurity from all the drought-affected states and leaving behind of children and old people and rising incidence of child trafficking, child labour and early marriage (UNICEF 2016:34). The western state of Maharashtra suffered several consecutive drought years.<sup>9</sup> In 2016, the online magazine, firstpost ran a series of 13 articles on Maharashtra drought, attributing causation to climate change related factors such as uneven seasonal precipitation and intense heat waves,

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<sup>8</sup> [https://www.uni-bremen.de/fileadmin/user\\_upload/sites/artec/Publikationen/artec\\_Paper/200\\_paper.pdf](https://www.uni-bremen.de/fileadmin/user_upload/sites/artec/Publikationen/artec_Paper/200_paper.pdf)

<sup>9</sup> Historically Maharashtra has been affected by frequent droughts, especially in the 'rain-shadow' districts. After the drought years of 1971-72, economists and observers had noted the absence of preventive mitigations in the form of protective irrigation systems. They had also noted the absence of adequate opportunities in the urban-industrial sector to absorb the distressed, drought affected surplus labour that was migrating from the rural areas. The policy makers then had suggested economic growth as the key solution to this crisis (Ladejinsky 1973).

Sohini Sengupta  
[sohini.sengupta@tiss.edu](mailto:sohini.sengupta@tiss.edu)  
29.02.20

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general agrarian distress, inadequate irrigation infrastructure, farmer-indebteness, water-intensive sugarcane cultivation and implementation of Government's Climate Action Plan.<sup>10</sup>

Community fieldwork based 'adaptation' studies associated variable drought risks and vulnerabilities on place specific resource endowment (Vedeld et al 2014).

Newspaper reports warned about the humanitarian crisis in Marathwada after four consecutive drought years as adult men and women migrated to cities to look for work and wages, the old people, children and disabled family members were left behind to fend for themselves (Kumar 2016).<sup>11</sup> During the 2018 drought, newspapers again reported widespread migration as farmers experienced multiple crop failure. As 180 tehsils out of 355 were affected by droughts, many farmers told the visiting reporters how their family members had been forced to take on low status migrant wage work such as canecutting. Sarpanches described emptying villages as working age population, including from small farming families had left looking for wages. Officials were unable to assess the new drought-induced migration as the landless rural people from this area seasonally migrate to work as sugar cane harvestors (see Ghoghe 2018).<sup>12</sup> Studies by civil society groups indicated the rise in proportion of sugar cane harvestors (labour migrants) from the drought prone areas of Maharashtra (Shiralkar et al. 2019, Bhadbhade et al 2019)). Most commentators highlighted the mismanagement of water resources<sup>13</sup>, unutilised irrigation potential and 'water grabbing' by sugar industries and local breweries (Jamwal 2016, Dandekar 2015).<sup>14</sup> Images of water trains travelling to parched areas of Marathwada dominated domestic and international media.

## RATIONALE

Drought causation and its impact on rural farming households and land less people in the state of Maharashtra are well understood. Migration occupies a central role in the long-term coping strategies of rural households, ebbing and flowing with exceptional crisis events. Historically government response has focussed on addressing immediate distress and fallen short of long-term mitigation and consistent protective measures. In this context farming people have been dependent on personal agency, cultural knowledge, social relationships and migration networks forged over the years, notwithstanding that many of these are under stress, insecure, fragile and based on unequal or exploitative terms. It is important to understand how drought affected rural migrants perceive the recent crisis based on cultural understandings about water crisis,

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<sup>10</sup> <https://www.firstpost.com/india/marathwadass-drought-how-climate-change-has-destroyed-agriculture-and-ruined-farmers-2736992.html>

<sup>11</sup> <https://economictimes.indiatimes.com/news/politics-and-nation/humanitarian-crisis-in-marathwada-as-drought-forces-families-to-migrate/articleshow/51918044.cms>

<sup>12</sup> <https://www.hindustantimes.com/mumbai-news/marathwada-farmers-turn-to-cities-industries-as-water-runs-out-crops-fail/story-D4m9a8xDEo37Su54JnPtLJ.html>

<sup>13</sup> Dhanagare, D. (1992). 1992 Drought in Maharashtra: Misplaced Priorities, Mismanagement of Water Resources. *Economic and Political Weekly*, 27(27), 1421-1425. Retrieved February 14, 2020, from [www.jstor.org/stable/4398589](http://www.jstor.org/stable/4398589)

<sup>14</sup> <https://sandrp.in/2015/08/18/drought-and-marathwada-an-of-repeated-tragedy/>

agrarian decline and migration, how they negotiated the terrain of new environmentalism and climate knowledge and how they participate in political debates on some of these concerns. According to Castree (2001), knowledge of nature not only expresses social power relations but such knowledge also has material effect when they shape belief and action, even as nature is continuously shaped by human action. Thus climate knowledge and action, adopted or interpreted in local struggles over power and influence may shape actions that would affect livelihoods and environment in ways that would have social and environmental consequences.

### **RESEARH OBJECTIVES**

To study the importance given to migration as seasonal coping and during exceptional drought years among people in rural Maharashtra in the past and in recent times. To examine the interpretation of environment and climate change and its relationship with drought causation and migration decisions. To examine how people (farmers, migrant wage labour and officials) obtained their knowledge about drought and changing climate and how this shapes their views and political activism and claims-making around drought and state responsibility – both offline and online.

### **METHODOLOGY**

The study will use qualitative case study design to collect, analyze, interpret and report data on local understandings of environmental change and drought induced migration from selected drought prone areas of Maharashtra and Migrant destination area (Marathwada, Vidarbha, Mumbai). Non-probability criterion sampling will be used to identify and select women and men, farmers-wage workers-seasonal migrants, representing both dominant and disadvantaged caste groups from the drought-affected community. Key informants will be identified from civil society, environmental NGOs, press, elected Panchayat representatives and local officials. Qualitative interviews will be conducted with willing participants to obtain personal narratives of drought, migration, environmental crisis, state interventions, personal initiative and government responsibility. The study will also use digital ethnography to collect data about computer-mediated environments and online activities, including consumption of social media reportage of drought, water crisis, election debates and official responsibility among members of the local community. Data collected will derive from public or user-shared content such as threads, posts, tweets, videos, and observation of online activities.

### **TIME SCHEDULE**

<b>Activity</b>	<b>Date of Completion</b>
Submission of proposal	February 2020
Finalization of Tool and Design	March
Selection of field site and field investigators	March-April



Sohini Sengupta  
[sohini.sengupta@tiss.edu](mailto:sohini.sengupta@tiss.edu)  
29.02.20  
TOTAL PAGES: 10

Desk Review of literature	April-May
Interviews with farmers, migrants, women, NGO and Government officials in Marathwada, Vidarbha and Mumbai. Observation of public online interaction and collection of public or user-shared online data.	June-October
Data cleaning and transcribing	November
Report Writing	December-January

Sohini Sengupta  
[sohini.sengupta@tiss.edu](mailto:sohini.sengupta@tiss.edu)  
29.02.20

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Submitted by

Sohini Sengupta, PhD  
Tata Institute of Social Sciences, Mumbai  
[sohini.sengupta@tiss.edu](mailto:sohini.sengupta@tiss.edu)