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# GOVERNANCE OF CLIMATE CHANGE RELATED MIGRATIONS IN ASSAM (INDIA)

Ritumbra Manuvie



A thesis submitted in fulfilment of requirements for the degree of  
Doctor of Philosophy – Politics  
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Dedicated to

Gezinus, Mechelina en Rintcius Blok  
(for their untiring support)

And

To my grand-mums Savitri Verma and Usha Bhandari  
(who dreamt of education they never had a chance to receive)

### **Thesis Abstract**

The thesis asks two crucial questions, (a) what are the normative frameworks available for protecting the rights and status of a person migrating due to climate change related hydro-metrological changes? (b) why is there a non-uniformity and inadequacy in the deliverance of assistance from the state? To address these questions, I have analysed the perception, framing and assistance a climate change migrant receives from the state of Assam in India, while also explaining the reasons for the differential nature and deficits in protection.

Based on interviews with senior bureaucratic officials (elite actors), group-discussions, field surveys, and engagements at the block and village level, the thesis makes three critical arguments. First, the sub-national government perceive climate-induced migrations as a developmental issue. Second, the way in which climate change migration is framed as a developmental issue by elite actors does not correspond with how the issue is understood by street-level bureaucratic actors. Instead, the routine judgements and discretions exercised by street-level actors are complexly tied to the political and social circumstances of local areas. Finally, while it is known that socio-political and demographic factors (such as gender, membership of a social group, and religion) contribute to forced forms of migration, the thesis argues that these demographic factors also adversely affect the performance of the programs meant to reduce climate vulnerabilities.

## Declaration

I declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where states otherwise by reference or acknowledgment, the work presented is entirely my own.

Date

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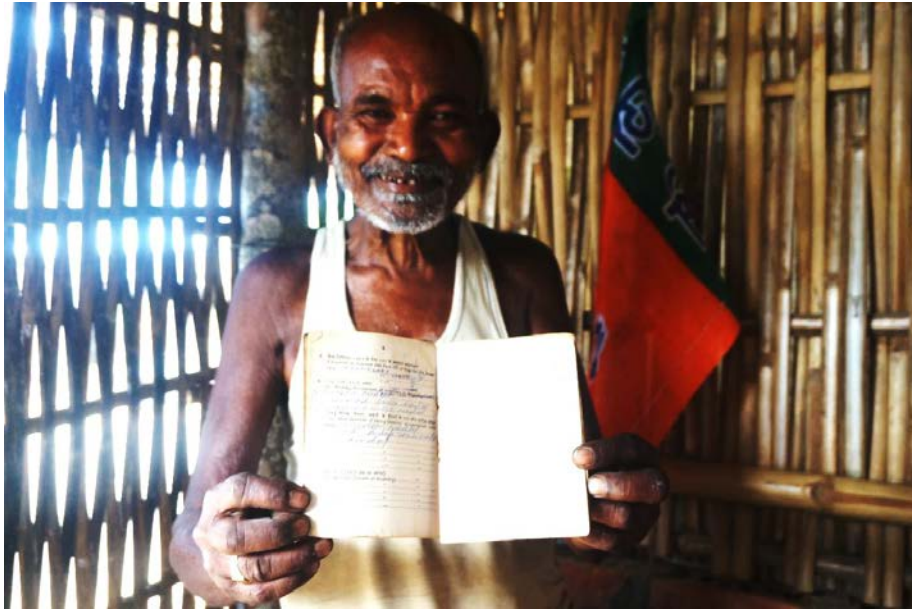
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### Abbreviations and Vernacular terminology

AAGSP	All Assam Gana Sangram Parishad
AASU	All Assam Student's Union
AGP	Asom Gana Parishad
ASDMA	Assam State Disaster Management Authority
DDMA	District Disaster Management Authority
DRR	Disaster Risk Reduction
FLEWS	Flood Level Early Warning System
GoI	Government of India
IAY	Indira Awas Yojana
IDMC	Internal Displacement Monitoring Centre
IOM	International Organisation for Migration
IPCC	Inter-governmental Panel for Climate Change
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
NDMA	National Disaster Management Authority
ULFA	United Liberation Front of Assam
UNFCCC	United Nations Framework Convention for Climate Change
UNHCR	United Nations High Commission for Refugees
UNHRC	United Nations Human Rights Council
UNISDR	United Nations International Strategy for Disaster Reduction
<i>Char</i>	River Islands
Pradhan Mantri Awas Yojana	IAY renamed as Prime Minister's Rural Housing Scheme

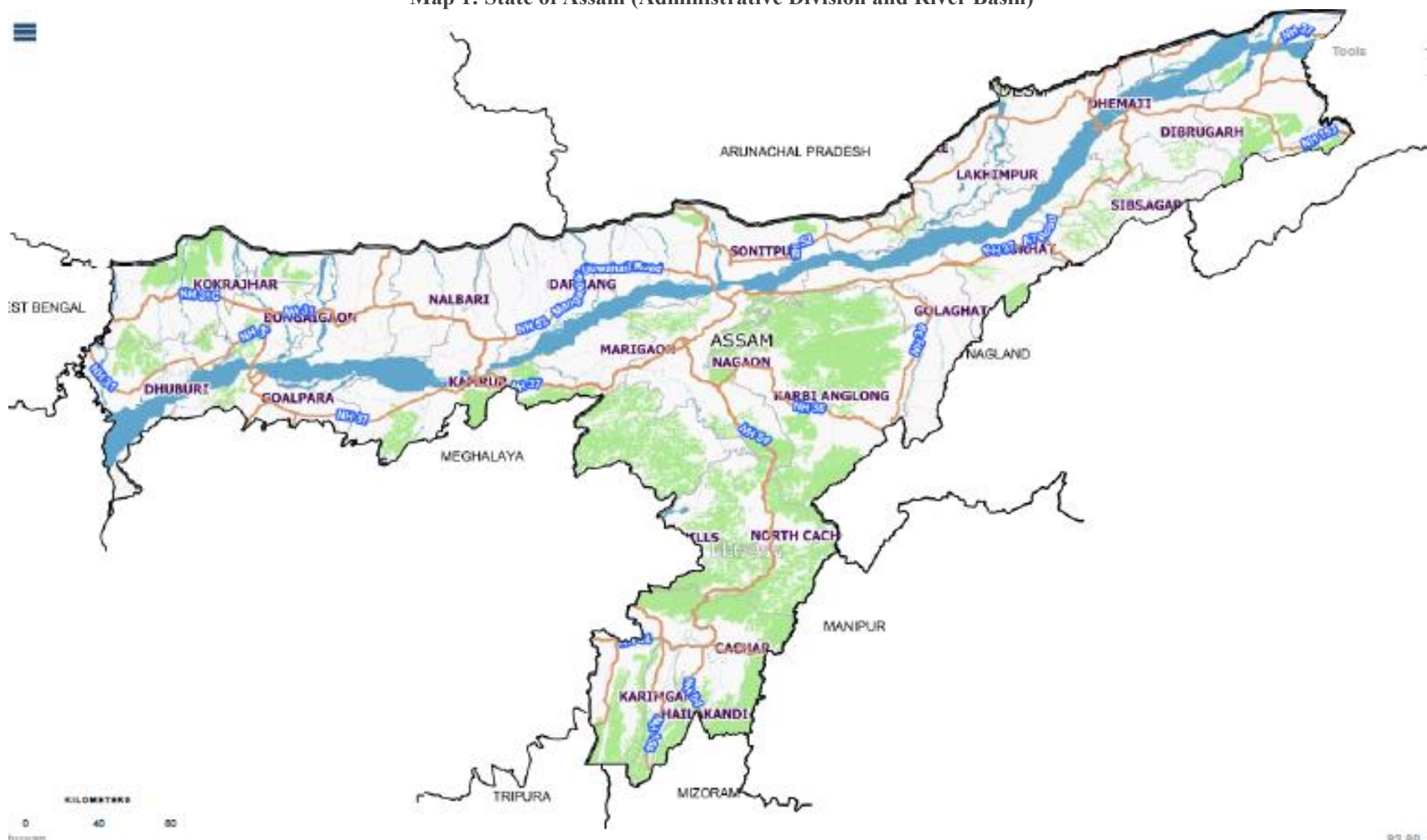
**Citizenry of Assam (A proud ex-Indian Army Jawan, Fafal Gaon)**



**A Doubtful Citizen, Goalpara, Assam**



Map 1: State of Assam (Administrative Division and River Basin)



Source: Generated from Bhuvan, ISRO





# Chapter 1 Introduction

## Prologue

Forced displacement due to the changes in physical environment has been one of the significant motivation behind the international environmental negotiations since the 1970s (Brown, 1976; Jacobson, 1988; Tolba, 1989; United Nations Environmental Programme, 1982; Keeble, 1988; Nilsson, 2004; El-Hinnawi, 1985). While there are still concerns about discerning the complex causal linkages between climate change and migration (Black, 2001; Hulme, 2008; Gray & Bilsborrow, 2013; Hugo, 2011; United Nations Task Team on Social Dimensions of Climate Change, 2011), there is an increasingly ‘*strong consensus*’ amongst the scientific community that climate change is impacting mobility flows across the world (Adger, et al., 2014; Foresight, 2011). The Inter-Governmental Panel on Climate Change (hereinafter IPCC) has identified human migration as *the single greatest impact of global warming* in its very first Assessment report and continues to develop sound scientific knowledge on the linkages between climate change and human mobility (Intergovernmental Panel on Climate Change, 1990; 1995; 2007; 2007b; 2013).

Due to the inequitable nature of climate change, there is a rational basis for expecting that the management of climate migration would need some form of multi-party global cooperation (Giovanni, et al., 2016; Bettini, 2017). Accordingly, a large body of literature and advocacy material on climate change migration governance engages with the international and regional responsibility to recognise *climate migrants* as a category for determining immigrant/asylum status (Athambawa, 2014; Harvey, 2002; Brindal, 2007; Biermann & Boas, 2010; Dreher & Voyer, 2015). Kälin and Schrepfer (2012) have pointed out that there has been an overemphasis on the common but differential responsibility principle (hereinafter CBDR Principle) in distributing the economic burden, including the burden of protecting those who migrate due to climate change. Although the strategy of CBDR is a critical tool for climate negotiations, it has not been conducive towards attracting an international consensus for protection.

Meanwhile, a growing number of people displaced due to natural disasters continue to be in legal limbo. Kalin maintains that we need to shift our focus to national engagements and analyse how to cover the needs of those migrating from a human rights perspective. However, we know very little about national and sub-national engagement with climate migration and this is where the current thesis becomes highly relevant (Kälin & Schrepfer, 2012).

In this thesis, I have analysed the perception, framing and assistance that climate change migrants receive from the state of Assam in India, while also explaining the reasons for the differential nature and deficits in protection. The thesis is thus part exploratory and part explanatory and asks two crucial questions: *First*, what are the normative frameworks available for protecting the rights and status of people migrating due to climate change related hydro-metrological changes? In answering this question, I establish four policy paradigms (thematic areas) based on international policy recommendations and the central government's perception of climate change migration. Chapters 4 and 5 of this thesis look at specific programmes and analyse their delivery in the state of Assam.

The *second* question answered in this thesis is why the delivery of assistance by the state is inadequate and non-uniform? The concern can be dismissed by stating that the inadequacy is due to the absence of a convention on climate refugees. However, I would come to show that this is far from true, the governments at the National or Sub-national level do not see a climate change migrant falling in a legal vacuum. Instead, the governments are persistently questioning the need for having an international agreement to manage, what is mainly internal mobility. Yet despite a robust sympathy and innovativeness from the point of governance towards people migrating due to climate change, the state protection is inadequate and non-uniform, and it raises the question – why there is an inadequacy? For answering this question, I engage with three variables – institutional perception, political stimulus, and demography and explain why there is a differential delivery of the programmes identified in chapters 4 and 5.



Based on interviews with senior state and central government officials, group-discussions, and engagements at the block and village level, this thesis makes three critical arguments. First, the sub-national government perceives climate-induced migration as profoundly related to the broader developmental and welfare agenda of the state. In doing so, the elite actors in the state of Assam do not see the lack of an international agreement or specific national strategy on climate migration as an administrative vacuum.

The second argument presented in the thesis is that the street-bureaucratic actors do not share the perception and framing adopted by the elite officers of the state. At the street-level of policy implementation, the tasks can be bifurcated into broad categories of procedural action, service delivery and evaluation. The implementation of a program requires a chain action from the procedural act of enumeration of beneficiaries (or survey of land data) towards the provision of benefits (service delivery) towards evaluating program progress/penetration. However, it is not necessary that every street-level actor in the chain of responsibility understands how their action (or inaction) can influence the level of protection and support that a climate change migrant would effectively receive from the state. For example, an actor who is engaged with a clerical task such as Land survey would not necessarily see their action of enumerating land-data to have any bearing on the task of the Development Officer in charge of enumerating beneficiaries for a land-compensation project. Instead, the routine actions are complexly independent, while being interdependent, leading to a systematic production of absurdity, either due to the paucity of action or the deliberate inaction in sub-national governmental departments.

Finally, the thesis, questions the systematic production of marginality by analysing the programmes that are meant to reduce vulnerability. I have come to the conclusion that the demographic factors that contribute to an increased susceptibility to forced displacement also continue to negatively influence the performance of the relevant schemes, thus resulting in an inadequate and non-present state.

## 1.1 Background

In 2011, I was a part of the Nansen Conference inaugurated by HRH Princess Mette-Marie of Norway at the Peace Palace in Oslo. The conference chairs and attendees included highly prominent diplomats, policymakers, and academics.<sup>1</sup> The Nansen Conference was an acknowledgement of the humanism of the famous explorer and humanitarian Fridtjof Nansen, who was the pioneer of the international surrogate protection system for displaced persons. It was a reminder to the international community that managing displacement due to environmental change requires a more profound commitment towards migrant communities.

The conference resulted in the Nansen Initiative – an inter-governmental consultative process led by Norway and Switzerland – to initiate a policy dialogue on climate change migration. The agenda of the initiative was to adopt principles on environmental mobility that have similar functional advice as the Guiding Principles on Internal Displacement. During the conference, it came as a surprise to me that the Indian government had not sent a delegation of diplomats or policy experts despite the high-profile nature of the conference. In the past few years, while the Nansen Initiative has undertaken several regional consultations in all the primary geographical areas, including South-Asia the Indian government has remained absent from this process.

The continued absence of India is intriguing for several reasons. (a) India faced one of the worst scenarios of internal displacement due to natural hazards in 2016 alone. An estimated 2.3 million people were freshly displaced due to hydro-metrological disasters (EM-DAT, n.d.). (b) India has a high dependence on ecosystem services, which makes it highly vulnerable to climate change and forced displacement scenarios (O'Brien, et al., 2004; Brenkert & Malone, 2005). (c) India shares a wide migration-corridor with Bangladesh, which is described as a climate migration hotspot (Lu X, et al., 2016). (d) Finally, studies have identified group-based resource conflicts occurring

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<sup>1</sup> The conference was hosted by Jonas Gahr Støre Minister of Foreign Affairs (Norway) and Erik Solheim Minister of the Environment and International Development (Norway). The sessions were chaired by prominent policy actors like Kristalina I. Georgieva, European Commissioner for International Cooperation, Humanitarian Aid and Crisis Response, Rajendra K Pachauri, Chair of the Intergovernmental Panel on Climate Change (IPCC), and António Guterres, United Nations High Commissioner for Refugees

in regions of India due to environmental migration and the resultant demographic changes (Slettebak, 2013; Kumar, 2017; Panda, 2015).

On the other hand, India, with a population of 1.3 billion, is one of the most prominent countries in the climate change negotiations under the United Nations Framework Convention on Climate Change (hereinafter UNFCCC). The development pathways adopted by the country will substantially alter the global carbon mitigation target. In the words of India's long-standing climate change negotiator and retired diplomat, Shyam Saran, *'India's choices have the potential to destroy its own economy or the whole world.'*<sup>2</sup> Due to India's increasing carbon emissions, an international academic and policy fixation on the question of energy security and energy pathways in India is palpable.

At the same time, two-thirds of the Indian population still resides in its villages which are heavily dependent on ecosystem services; thus, the choices that India has are in fact limited. It can either ignore the global concern and continue developing its business as usual scenario, increasing its massive carbon footprint, which would adversely affect the ecosystem all across the world (including India's own fragile ecosystem). It could assume low-energy pathways, which might be conducive to stabilising the country's energy footprint but might not be sufficient to achieve the short-term developmental targets. Alternatively, it could ignore most of its vulnerable poor population in a bid to reduce its carbon emissions and assume the moral high ground in climate negotiations. Whichever path it chooses, it is perceptible that the people in India will continue to move out of the fragile ecosystem either to adapt or to survive.

My thesis is concerned with the movement of people due to climate change related chronic disasters and how governments are currently responding to it. Knowledge of the present situation is essential to evaluate the policy options and guide future scenarios.

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<sup>2</sup> In a private conversation with Mr. Shyam Saran at Indian Institute of Science, during a talk organised by the Centre for Sustainable Energies in 2009.

## 1.2 Research Gaps

The research on climate change migration has evolved from the security study narrative surrounding national security (White, 2011; Homer-Dixon, 1994) to a more nuanced perspective of human security and adaptation (Bhattacharyya & Werz, 2012; Campbell, et al., 2007; Elliott, 2010; Bettini, 2013). Its conceptualisation as a form of climate change adaptation strategy has further been critiqued for its neoliberal roots (Felli, 2013), for obscuring the attempts at climate change mitigation (Methmann & Oels, 2015), and for undermining the question of justice and humanitarianism (Giovanni, et al., 2016).

However, the literature on the governance of climate change related migrations is sparse and compartmentalised into isolated pockets of international relationship scholarship (Betts, 2012). The scholarship in the area can be traced to studies analysing the existing international normative standards (Biermann & Boas, 2008; Hugo, 2010; Warner, 2010; Kalin, 2012; McAdam, 2011; Mcinerney-Lankford, et al., 2011) and those engaging with changes in functionality of the international organisations such as United Nations High Commissioner for Refugees (hereinafter UNHCR), International Organization for Migration (hereinafter IOM) and United Nations Development Program (hereinafter UNDP) (Hall, 2011; Nash, 2017; Giovanni, et al., 2016). There is hardly any scholarship analysing the national and sub-national policies on climate related mobility. This gap is regrettable as migration governance is inherently political; it involves states and sub-state actors conferring rights to (or recognising the rights of) the migrants.

The current thesis contributes towards filling this gap in the literature by analysing the complex and multi-level dynamics of the governmental response given to people migrating due to climate-change related disasters.

## 1.3 Choosing Assam

I chose the state of Assam in the North-East region of India to understand the institutional, political and social dynamics in protecting climate change migrants. Assam is an intriguing state. It has often been described in the security studies literature as a region facing conflict due to resource constraints caused by

environmentally motivated migration (Homer-Dixon, 1994; Reuveny, 2007; Swain, 1996; Suhrke, 1997). While it cannot be authoritatively suggested that Assam is, in fact, a classic example of climate change migration leading to conflict, it is known that the ethnically motivated conflicts in the state are recurrent and have a fluid agenda. The political and social narrative attached to these conflicts identifies religion, tribes, nationality, cross-border movements and resource scarcity, as underlying reasons (Aggarwal, 1999; Baruah, 1999; Baruah, 1986; Hazarika, 1993; Darnell & Parikh, 1988; Barbor, 2008; Baruah, 2003).

Assam in its current situation shows a *very high* vulnerability to climate change (Ravindranath, et al., 2011). In the 2011, Ravindranath *et al.* analysed the grid-level vulnerability of the entire north-east of India and concluded that every district in Assam shows a *high to very high* current vulnerability to climate change primarily due to its dependence on ecosystem services for livelihood. It is also known that the state of Assam shows a high index of inter-state mobility and out-migration. In the 2011 census, the state reported a 53% increase in net out-migration. The mobility depicted by the 2011 census considered cyclic and permanent relocations for economic reasons (Rajan & Bhagat, 2017; Census India, 2011). The state also witness massive amount of temporary forced displacement due to annual floods, and long-term displacement patterns caused by the flood erosion and ethnically motivated conflicts (Assam State Disaster Management Authority, 2015; Assam State Disaster Management Authority, 2012; EM-DAT, n.d.; Das, et al., 2005). Additionally, the state of Assam shares an international border with the Republic of Bangladesh which is ascribed in as a ‘climate migration hot-spot’. And the narrative of disaster migration in the state very much tie into the fuzzy political notion of illegal border migration from Bangladesh.

In the backdrop of this information, Assam – a border states – with its demographic plurality, geographical sensitivity, economic vulnerability, and administrative complexity becomes a highly fascinating area to study how governments respond and govern climate change related migrations.

## 1.4 Conceptualising Climate Change Migration

The phrases climate change migration, climate migration, climate mobility and displacement due to climate change or displacement due to hydro-metrological disasters are used in a colloquial sense throughout the thesis. The purpose of the thesis is not to establish a causal relationship between climate change and migration or to challenge any existing theory on climate migration as a form of displacement or adaptation. Instead, the focus is on understanding how the bureaucratic actors governing an ecosystem with a high current vulnerability to climate change conceptualise, frame and respond to various patterns of migration that can be loosely associated with changing weather patterns.

The thesis treats climate change migration as a '*wicked problem*' (discussed in more details in section 2.3 of this thesis). I accept that the actors in my area of inquiry can define and understand the problematic in multiple ways. For the current thesis the bureaucratic view on migration as a result of climate change is more critical than a definitive scientific study establishing the climate change and migration linkage. It is accepted that this framing could be an informal internalisation of international concerns about climate change migration, or even a form of escapism to disperse the responsibility of massive displacement during hydro-metrological disasters by blaming it on the global warming. Nevertheless, the perception and belief that an elite officer holds with respect to the role climate change plays in influencing hydro-metrological cycles and in exacerbating migration is essential to discern the policy choices that the government may adopt.

Climate migration is thus defined in this thesis as patterns of movement witnessed in the state of Assam along the Brahmaputra Valley. These movements can be adaptive or for survival; they can be cyclic, permanent or temporary; they can be out of the state or within the state territory; and they can be voluntary or forced. However, in all cases they are intrinsically related to the morphology and flooding pattern of the Brahmaputra river.

## 1.5 Aims and Objectives

The research asks two crucial questions. First, how does the sub-national government perceive and frame climate-change related migration? This perception and framing is essential to understand the choice of policies, methods and governance tools that the sub-national actors prioritise when dealing with complex issues like climate change migration.

Climate change and migration have a complex and questionable nexus (Nicholson, 2014; White, 2011) that cannot be disentangled from a non-exhaustive list of other factors such as unequal access to resources, gender inequality, colonial history, structural indifferences, political economy, etc. (Baldwin, 2012; Baldwin, 2017). The entanglement of climate change induced migration with historical, social, structural, physical, economic and cultural aspects of societies makes it a wicked problem for governance. It creates difficulties in creating simplified narratives and definitive causal connections necessary for a uniform governance policy (Rittel & Webber, 1973). Instead it allows the elite actors of the state bureaucracy to play a vital role in setting varied and differential policy agenda to respond to people migrating due to climate change. These agendas, however, are profoundly influenced by the personal beliefs and priorities of the senior bureaucratic officers (Mintrom & Norman, 2009; Satzewich, 2007; Olsson & Hysing, 2012).

It thus becomes necessary to understand how the elite actors in the region define, understand and frame the problem. Their understanding of climate migration provides the setting in which to focus on how the government is currently responding to the people and communities already migrating due to climatic change. This question is answered by way of elite interviews, and by analysing the place for climate migration in the multi-level climate policy of India and the State of Assam. Four policy areas are identified and matched with the government schemes and special programmes that the elite actors consider useful in mitigating forced displacement, enabling voluntary adaptive movement, and providing relief compensation to households that are forced to relocate. I define the policy areas in the thesis as: (a) enabling policies, (b) mitigating policies, (c) relief policies, and (d) compensatory policies. The enabling and mitigation

policies focus on economic, social and structural adaptation to climate change. The schemes matched with these policy areas for the current thesis are the Fundamental rights to freedom of movement and residence under Article 19 of the Constitution of India, the National Rural Employment Guarantee Act of 2005, and structural enhancement policies adopted by the Central government of India from time to time to reduce flood vulnerability in the state. Under the relief and compensatory policy thematic areas, I engage with the Disaster Management Act of 2005, the Flood Operational Relief Manual of 1976 (for the state of Assam), Indira Awas Yojana (Central government scheme), and the Chief Minister's Special Assistance Fund (State of Assam policy). These programmes are analysed in regard to their potential normative synergies and implementation output to understand the adequacy of the protection response.

The *second* question answered in the thesis explains why there is an uneven response to people migrating due to climate change. Often policies do not translate into implementation, and the results of welfare schemes remain skewed. Researchers have always remained curious about the factors that lead to implementation gaps.

In climate change research, there is a welcome growth in scholarship on the implementation of climate change adaptation models recently (Dupuis & Knoepfel, 2013). As migration is, to an extent, also a form of adaptation strategy, these works are well worth mentioning. Keskitalo (2010) has suggested that political engagement concerning climate change adaptation lacks concrete actions and instead focuses more on formulating guidelines, or funding climate impact research. Thus, creating facades of governance and governing bodies with no real responsible function towards the communities needing support. Similarly, Biesbroek et al. (2013; 2010) and Ford et al. (2011) remark that while adaptation has appeared on the political agenda in many countries, implementation has rarely occurred, making the adaptation models little more than *empty shells*, and resulting in an implementation deficit.

However, this construction of adaptation fails to account for the complex nature of policy-making and policy implementation (Wellstead, et al., 2013). Adger et al. (2007) examined the barriers that limit adaptation policy and identified several factors,



notably, the uncertainty of the available scientific knowledge, which prevents decision making (Wilby & Dessai, 2010); the fragility of ecosystems, which creates non-certain forms of policy intervention (Hulme, 2005); the lack of economic resources (Figaj, 2010); the weakness of state institutions, which are unable to design and implement public adaptation policy (Keller, et al., 2008; Yohe, et al., 2006); and social limits that might prevent adaptation responses in specific contexts (Kragt, et al., 2013; Mertz, et al., 2009; Adger, et al., 2009).

Influenced by this literature, I have identified three variables for analysis – institutions, political stimuli, and the demography of the areas which are at the margin of geographical fragility.

## 1.6 Arguments

Through this thesis I make three arguments; *first*, the sub-national government perceives climate-induced migration as deeply related to the broader developmental and welfare agenda of the state. In doing so, the elite actors in the state of Assam do not see the lack of an international agreement or specific national strategy on climate migration as an administrative vacuum. The elite actors in the state identify climate change as a reason for increased migration, and also a constraint to achieving welfare policy targets in a timely manner. The assumption of climate change as a constraint is not backed by any scientific evidence but is instead based on the experience of erratic flooding pattern since 2008. The deficit in achieving policy target (especially in the recent past) does instigate some of the state actors to view climate migration through a humanitarian lens. However, at the same time the state does not strictly construct migration as a humanitarian crisis or views a migrant as worthy of undisputed state pity.

The *second argument* in the thesis is that the street-bureaucratic actors do not share the perception and framing adopted by the elite officers of the state. The routine action of administration such as land-data survey and enumeration of citizens into register data, can adversely affect people who are forced to relocate by determining the status of their rights viz-a-viz the state. However, the front-line actors who are responsible for completion of these daily task of administration do not always see how their action

(or inaction) can influence the level of support a climate-change migrant can receive. Particularly in the scenarios where the synergies between the specific task of a street-level actor, a government scheme and a potential benefit for migration management is hidden, the street-level bureaucrats would overlook such connection. And instead stumble towards making a discretion to delegate in the name of the 'due process'. On the other hand, the individual task of the street-level actors may be conventional thus being contradictory, to the newly framed elite agenda leading to an incessant production of absurdity at the street level of bureaucratic action.

It is often pointed out in public policy research that the acceptance of organisations as a mechanical entity performing a mandated task fails to explain the reasons for non-uniformity in implementation (Lipsky, 2010). As Eugene Bardach once observed, *'even the most robust policy would tend to go awry. The classic symptoms of underperformance, delay, and escalating costs are bound to appear'* (Bardach, 1977). In the managerial literature, much importance is attributed to leadership style and perceptions of the elite actors in organisations (Behn, 1989; Meier & O'Toole, 2002; Denhardt, 1993; Riccucci & Saidel, 1997). However, most of these studies are limited to an analysis of agenda implementation in private-sector organisations, where employers are not constrained by bureaucratic civil service rules and regulations. In the public sector, the perception and framing of the elite bureaucratic actors has mixed results on policy implementation and outcomes. For example, Robert Behn (1989) showed positive implementation result at a macro-level when the goals and synergies were clearly identified and communicated by the agency leaders.

A few earlier studies have argued that bureaucracies discourage individual performance and are inherently inept in achieving welfare goals (Hecl, 1977; Kaufman, 1981). These studies have highlighted the complex nature of front-line actors in bureaucratic systems and have argued that the Street-level bureaucratic actors are not affected by either the elite perception or management practices (Lipsky, 2010). The empirical research, although limited, supports this conclusion and suggests that front-line practices are mostly stagnant in time and unable to accommodate changing circumstances (Meyers & Dillon, 1999; Meyers & Vorsanger, 2007; Riccucci, 2005).

Jodi Sandfort (2000), in her work, has shown that the collective beliefs or schemas of the front-line staff have a powerful influence on implementation.

The *final argument* made in this thesis questions the systematic production of marginality. By analysing the programmes that are meant to reduce vulnerability, I have come to the conclusion, that the demographic factors that contribute to an increased susceptibility to forced migration also continue to negatively influence the performance of the relevant schemes, resulting in an inadequate and non-present state. In chapter 8 of this thesis, I revisit the performance of the schemes in the most fragile geographic regions of Assam – the river-islands (termed *char* or *chor* in vernacular language). I analyse the performance of developmental and welfare programs in the light of the demographic composition and social vulnerability of these areas to highlight the continuation of victimisation and presence of forced mobility in these islands.

### 1.7 Thesis Outline

The thesis is divided into nine further chapters. **Chapter 2** of the thesis reviews the literature on climate change induced migration. I treat climate change migration as a wicked administrative problem and outline the synergies between the policies on adaptation, risk-reduction, and migration governance. I look at the question of governance from the standpoint of public policy and administrative operationalisation, an area that has not been explored so far and that to me seems fundamental for creating any future sound policy on climate change induced migration.

In **Chapter 3** I discuss the research methodology adopted for this study. This is also where I introduce the reader to nuances of the administration in the State of Assam. The chapter begins by identifying the research questions and specific policy context within which these questions will be answered. The policy context itself is a brief overview of the answer to one of the contextual sub-questions – What is the framework? I categorise policy into three thematic areas – Enabling Policies, Response Policies and Compensatory Policies before discussing my independent variables – institutional ability, demography and politics. The chapter then introduces the reader to the eight select districts of Assam where this study was conducted and outlines the

methodology used for gathering and analysing the data. Finally, there is the question of ethics while working in a conflict-prone region, the discussion of which concludes this chapter.

**Chapter 4** and **Chapter 5** of the thesis give the descriptive detail of the policy and institutional framework in place in the state of Assam.

**Chapter 4** is divided into two thematic areas: ‘enabling policy’ and ‘mitigating policy’. Each thematic area is explored in regard to its legal premise and operational premise, and the synergy it has with the governance of climate change migration. The chapter utilises the data on D-voters, landholdings and the performance of the Mahatma Gandhi National Rural Employment Guarantee Scheme to evaluate the state’s effort in protecting the constitutionally guaranteed right to movement and settlement for communities living in vulnerable areas. The D-voter data, which is highly securitised, concerns the sub-national perception of migrants as ‘illegal Bangladeshi nationals’ and the relation a migrating person or their family can hold with the state. The chapter discusses how the functioning of the D-voter list undermines the fundamental enabling right towards freedom of movement and residence, thus, restricting choices for adaptation. The land-holding data in the chapter provides an overview of ownership rights and residential rights in the state, while the MGNREGA data demonstrates the complexity in regard to livelihood diversification at the district level.

**Chapter 5** adopts a similar framework and analyses the operationalisation of the relief policies and compensatory policies. The chapter uses data on relief supply and compensation to highlight the insufficiency of the process. These two chapters provide an answer to the contextual sub-questions of this thesis, i.e., *what is the institutional framework available in the state of Assam to respond to climate-change induced migration?* And, *How does the state of Assam respond to climate change migration?*

**Chapter 6** examines the influence of sub-national institutions on the governance of climate migration. The chapter considers the element of bureaucratic perception and problem framing at the sub-national level. It argues that it is not necessary for the sub-

national government to frame the problem in precisely the same manner as the central government. The variation in framing leads to a variation in the delivery of programmes. A further layer of complexity is added by the perception of the street-level actors. It is also shown in this chapter that the street-actors do not associate climate change migration with the welfare programmes that they have to routinely deliver.

**Chapter 7** analyses the impact of politics on the perceptions and actions of the street level actors. In this chapter, I engage with the proposition of citizenship and belonging, which determines the protection the state offers to migrants. The question whether a migrant is perceived as a citizen or an illegal settler is intensely tied to the political narrative of the state. And in turn the identity politics within the state complexly influence the protection outcome a climate migrant would receive from the government.

In **Chapter 8**, I return to analysing the perception of the state of certain classes of people as more vulnerable to forced migration and entrapment, and I attempt a limited analysis of how the state's view of religion, ethnic minorities and gender impacts the protection outcome in geographical areas that are physically more vulnerable and often occupied by minority communities.

**Chapter 9** is the concluding chapter, here I further the idea of climate change victimisation. I reflect upon the similarity of factors that influence an inadequate response towards climate change migration, and the factors that constitute vulnerability to climate change in the first place. The chapter also provides a set of recommendations which were shared with the state of Assam to help strengthen their current administrative response towards climate change related migrations. The final part of the chapter sums up the contribution of this thesis while ruminating on its shortcomings and future avenues for research.

## Chapter 2 Understanding Climate Migrations and its Governance Paradigm

In the past few years, there has been a tremendous increase in research on climate-change induced migration across several disciplines, including security studies, migration studies, human geography, and law (Zetter & Morrissey, 2014; Warner, et al., 2013; Black, et al., 2008; Warner, 2011; McAdam, 2012). This development in systematic inquiry into the nature of climate change related migrations has prompted high-level policy outcomes at the international level. For example, in 2010, the United Nations Framework Convention on Climate Change adopted Article 14(f) in its Cancun Adaptation Framework, with the aim to encourage member states to *'formulate measures to enhance understanding, coordination and cooperation regarding climate change-induced displacement, migration and planned relocation at the national, regional and international levels where appropriate'* (1/CP.16 para 14(f) in UNFCCC 2010). Similarly, the Durban Platform for Enhanced Action (2011) and the Warsaw Mechanism for Loss and Damage (2013), led to the creation of an internal Task Force on Displacement as part of the UNFCCC Executive Committee on Adaptation (Decision 1/CP.21, paragraph 49).<sup>3</sup> The Taskforce, which started its operationalisation in 2017, aim to recommend *integrated approaches to avert, minimise and address displacement related to the adverse impacts of climate change*.<sup>4</sup>

However, these developments have been on an international governance level and there is little knowledge about how the governments who are at the forefront of climate-change related migration and displacement respond to the problem nationally and sub-nationally. In the following chapter, I will analyse the existing literature on climate change-related migration and scrutinize the various governance approaches, which are proposed in order to appropriately respond to climate change related

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<sup>3</sup> Report of Conference of Party on its 21<sup>st</sup> Session held at Paris, FCCC/CP/2015/10/Add.1, dated 29<sup>th</sup> January 2016. Available at <http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf#page=8>

<sup>4</sup>Terms of Reference for the Task Force on Displacement, available at [http://unfccc.int/files/adaptation/groups\\_committees/loss\\_and\\_damage\\_executive\\_committee/application/pdf/tor\\_task\\_force.pdf](http://unfccc.int/files/adaptation/groups_committees/loss_and_damage_executive_committee/application/pdf/tor_task_force.pdf)

migrations. To determine the paradigm of my inquiry, I break the existing research into *process narrative* and *context narrative*.

For this thesis the *process narrative* is the literature that helps understand what climate change migration is and who climate change migrants are. This narrative stem from human geography and vulnerability studies. The *process narrative* determines the causal linkage between climate-change and migration by relying on observational research and household level data on migrant decision making over temporal and spatial measurement scales. The *process narrative* aims to identify and define what climate change migration is and who the climate change migrants are.

The *context narrative*, in the thesis, examines the ‘normative frameworks’<sup>5</sup> that regulate migration. It helps us to understand the legal and *institutional context* within which climate change mobility is governed. *Context narrative* therefore, focuses on how climate-change induced migrations must be governed. The *context narrative* does not provide any grand theory on climate change migration nexus. Instead, the *context narrative* borrows the definitional elements of the *process narrative* and identifies the international, national and sub-national policy areas within which mobility issues could be managed in future.

The third part of this chapter will introduce the reader to ‘*wicked problems*’. Some of the most difficult policy problems of the modern era have been described as complex, intractable, open-ended and ‘wicked’. The thesis considers climate change migration as a *wicked administrative problem* due to its multiple causalities, interlinkages with other social and economic aspects of development, and the solution complexity. In the section 2.3 I reflect on how the acceptability of climate change migration as a wicked problem allows thinking beyond the limited definitional premise of the *process and context narrative*. This allows greater reflexivity and understanding of the perceptions, value-judgements and organizational strategies of those at the frontline of response.

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<sup>5</sup> The phrase *normative framework* is used here in as a legal connotation to indicate the statutory legal frameworks, legal principles, laws and statutory norms which govern migration at national, international and regional levels.

Section 2.4 highlight India's sensitivity to climate change-related migration and discuss the Indian central government's position. The section considers how the government of India perceives and frames the governance space to respond to climate-change related mobility within its borders. Using the analogy of *wicked problem* from the earlier section, in 2.4 I specifically identify how administrators in India increasingly associate internal migrations to hydrometeorological changes which are exacerbated by climate change.

The fifth part of this chapter discuss the state of Assam, which borders the Republic of Bangladesh. The *process narrative* literature often refer Bangladesh as a Climate-migration Hotspot. Borrowing from this assumption the *context narrative* suggest an increased flow of cross-border migration from Bangladesh towards north-eastern regions of India which would eventually lead to exacerbation of the existing ethnic violence in the region (Shrivastava & Heinen, 2005; Suhrke, 1997; Reuveny, 2007; Swain, 1996). In section 2.5 I analyse the studies concerning climate vulnerability of Assam and the influence of such vulnerability on internal migration. I also scrutinize the literature on cross-border international migrations occurring in the region and their influence on migration governance narratives.

In section 2.6, I evaluate the dynamics of the multi-level climate governance in India, pointing to the lopsided concern with mitigation and energy efficiency. I note once again that this attachment to energy security has devoid India from a meaningful discussion on how it governs and protects the right of those who are forced to migrate due to climate change. And in the absence of a scholarship one has to look at other disciplines for understanding how the Indian government perform and respond to urgent and everyday crisis. For this purpose I use the recent ethnographic material elaborating the operationalisation of street-level bureaucracy in India. The ethnographic accounts provide a rich narrative of everyday mundaneness, it allows the reader to grasp the nuances and identify structural gaps which result in policy and project failures. And hence discussion of this work becomes vital to understand *what it is* and *how it works*. It then leaves me with the question of *why it is what it is*, and



*why it works the way it does* – both of which I humbly try to answer through my own research.

### **2.1: Process Narrative: Climate Change Migration Nexus**

The neoclassical theories of migration place economics and development at the heart of the migrant decision-making process. The variations in the environmental conditions are considered minor influences that are not significant in most of the 20<sup>th</sup>-century migration studies literature (Salvatore, 1981; Todaro, 1969; Vishwanath, 1991; Johnson & Stark, 1991). Piguet (2013) views the absence of ecological consideration in determining migration decisions an imposition of the Western-centric idea of technological progress. The economic progress in the liberal and neo-liberal approaches to development is independent of environmental constraints. Therefore, ecosystem dependence and environmentally motivated displacements are considered primitive form of migration.

However, the literature on security studies during the late 1980s, views environmental dilapidation as a direct causal variable for migration (Homer-Dixon, 1994; Mathews, 1989; Campbell, et al., 2007). Myers and Kent (1995) in their book *Environmental Exodus* suggested that billions of people may become ‘refugees’ by 2020 due to environmental degradation across the world. Most of these numeric predictions are however too simplistic, and exaggerated to arouse a sense of alarm using a Malthusian dependence paradigm.

Two different perspectives thus appear in the research on climate change migration. The *minimalist view*, which is based on the neoliberal and structuralist paradigm, sees environmental change as one of the many factors contributing to migration, and the *maximalist view*, which is based on a neo-Malthusian-security studies premise, which considers environmental changes to be a direct causal factor in migration and displacement. The maximalists extract the environmental variable from a cluster of other causal factors and provide a hyperbolic projection of the number of expected future environmental refugees who will act as a security threat to the global west (Lonergan, 1998; Mathews, 1989; Reuveny, 2007; Jacobson, 1988). These studies create a sense of alarm and are partly responsible for pushing the climate change

migration agenda into the climate change negotiations paradigm (Elliott, 2010; Boas, 2014). The security narrative acts as a bargaining tool in international negotiations, and several developing as well as developed countries employ it to negotiate a space for binding obligations (Boas, 2014).

The minimalists, by contrast, view the environment as a contextual factor, which manifests itself along with other factors that are responsible for migration decisions (Bohra-Mishra & Massey, 2011; Warner, et al., 2012; Black, et al., 2008; Foresight, 2011). The minimalist deductions regarding climate mobility has increasing influence on the present normative policy paradigm. The substantial and procedural responses to migrations due to hydro-metrological disasters is guided by the minimalist views. The minimalists, through a multi-causal approach, identify the role of climate change in influencing household migration decisions, and in the process, expose the social and structural vulnerabilities along with migrants' individual choices in determining mobility patterns.

A surge in observational studies using minimalist approaches over the last decade has led to a general academic consensus that climate change induced migration is a complex manifestation of geographic, economic, social, cultural, and political processes (Adger, et al., 2014; Jager & Kok, 2007; Black, et al., 2008; Foresight, 2011). There is little evidence to suggest that migrants perceive climate change as a direct causal factor in their relocation (Campbell, 2010). Climate change risks are aggregated at the household level, and families consider economic factors ahead of environmental factors in their migratory decisions (Faist & Alscher, 2009, pp. 22-25). Families engage extensively in in-suit adaptation within their places of habitual residence before choosing to migrate (Foresight, 2011).

Communities in geographically vulnerable areas persistently undertake cyclic labour migration to urban centres as a means of gathering economic resources. In the process, they develop strategies to live with re-occurring disasters. (Poncelet, 2009, p. 3; Adger, 1999; Findlay & Geddes, 2011). Households send one or more of their able-bodied members on a temporary or cyclical basis to diversify their family livelihood options while also maintaining ties with their homeland (Bohra-Mishra & Massey, 2011;

Warner, et al., 2012; Laczko & Aghazarm, 2009). These cyclic migrations assist migrant sending families to adapt to their changing environment although they may not radically improve their living conditions (de Haan, 2000, p. 14). Well-managed cyclic migrations among communities living in seasonal flood-prone and drought-prone areas provide steady remittance funding for local development.<sup>6</sup> Furthermore, they help to establish and maintain a social network that is resourceful in assisting other community members to migrate in case of need (Faist, 2000). Studies have also shown that migrations are short-distance and localised within national boundaries (Irianni, et al., 2009, pp. 13-17) or follow an existing migration corridor.

In the case of displacement caused by the sudden onset of a disaster, victims migrate over a short distance to the nearest safe area and choose to stay with family and friends (Hugo, 2008; Bardsley & Hugo, 2010; Castles, et al., 2014). Once the disaster recedes, they prefer to return and rebuild their lives in their place of habitual residence (Yun & Waldorf, 2016; Button & Oliver-Smith, 2008; Perch-Nielsen, et al., 2008).

Thus, the manner in which climate change migrations are perceived will influence the policy response towards it. If a government views climate migration as a mono-causal event from a maximalist perspective, they would tend to adopt a Malthusian and security-centric policy paradigm. Whereas if the government's view climate migration as a multi-causal event, it would exhibit a minimalist complex understanding of inter-linkages between climate-change, development, and migration.

**Table 1: Issue Location based on Causal Relation**

Process narrative	Understanding of Migration pattern	Issue location
<b>Mono-causal relation</b>	Migration as direct impact of climate change-related disasters which can lead to group-based violence over resource sharing	National Security issue
<b>Multi-causal relation</b>	Migration as aggregation of individual choices, ability, structural, institutional and geographical constraints	Human Security Issue

<sup>6</sup> Recently the State of Assam Disaster Management Authority mobilised its resources to recognise the role of remittance from cyclic migration in improving the household living conditions, to formally include remittance income as a strategy for the state plan on adaptation.

It is well worth noting that the compelling imagery of ‘swarms of migrants’ invoke the citizenry's deepest fears regarding incoming migrants, especially in the developed world, which is increasingly securing its borders against all form of migration (White, 2011). However, how appropriate is this formation in context of climate migrations? In the light of the observational research, scholars have highlighted that nations need to reassess their views on climate change migration and distance themselves from the national security narrative (Elliott, 2010). As most of the environmentally motivated migration from the vulnerable areas are short-distance and within national borders (Findlay & Geddes, 2011). For example, in India, every year approximately 20 million people migrate from disaster-prone rural areas to urban centre which offer better livelihood opportunities (Deshingkar, 2006). Similarly, in the case of migration due to sudden onset disasters, it is seen that communities migrate only temporarily to safer locations and return as soon as the disaster recedes to rebuild their lives. In regions where there are repeat disasters and lack of governmental support in rebuilding post-disasters, communities do engage in permanent relocation as a long-term strategy. For example, in the case of the communities in New Orleans, affected by Hurricane Katrina, it was observed that marginalised groups constituted the majority of permanent out-migrants from the city (Squires & Hartman, 2006; Tacoli, 2009). However, the cases of permanent relocation is also geographically restricted and households chose to migrate within their own country.

## **2.2: Context Narrative: Responding to Climate Change Migration**

The development in policy literature on climate change migration was prompted by the national security context following the development in the securitization literature discussed above. However, over the years human security aspect of climate migration has become highly prominent with the growth in understanding on climate migration pattern. Legal scholars, writing on climate migration, have long held the opinion that the universal international norms for respecting human rights provide a compelling rights paradigm to ensure protection and support for those displaced due to an imminent natural disaster. For example McAdam (2011; 2012), in her work on complementary protection under international law, strongly suggests the availability of *jus cogens* norms, including the right to protection and preservation of the right to

life and dignity, the norm regarding statelessness, and the principle of non-refoulement, which puts a legal responsibility on nations to respond to displaced people. Similarly, Kalin (2012) holds the opinion that even when there is an absence of a focused international agreement on the status of climate change migrants, the national governments are not absolved from their responsibility to protect people displaced within their national borders. Soft-instruments such as the Guiding Principles on Internal Displacement provide practical advice to governments to mitigate and respond to instances of forced displacement, including development project related displacement (Cohen, 2013).

However, the modalities of the protection regime are subject to several compelling and often competing narratives. Due to the inequitable nature of climate change it is vehemently argued that the responsibility to protect climate migration should be shared internationally in an equitable and ethical manner. Most legal scholars use a common but differential responsibility principle to suggest creation of new international response and protection mechanism under the UNFCCC. While few other uses the premise of ethics and moral justice to rationalise an extended interpretation of the humanitarian regime to provide refugee-like status to a climate change migrant.

However, as most of the climate change migration is internal it is necessary that a dialogue should be initiated at the national and sub-national levels of governance. International consultative processes like Nansen Initiative tries to engage with national governments at a regional level and recommends strengthening existing human rights mechanisms, while simultaneously intensifying development measures to mitigate and manage climate displacements as part of the national welfare strategies (Kälin, 2012; Nansen Initiative, 2011). The human rights discourse and the development discourse while complimentary have differential rights- connotation. The human rights discourse bestows the citizen with a right against the state (government) and makes it a mandatory requirement for the state to provide protection of the human rights which would be violated in case of displacement. Human rights regime as I would discuss in the succeeding sub-section is available to everyone and anyone who is displaced. On the other hand, the developmental discourse has no specific legal expectation, instead

it is merely a directive principle for state policy. It encourages state to adopt a progressive development pathway with the expectation that state would give due care in developing environmentally fragile areas. However, more often the developmental state is limited to the Urban centres and stimulates out-migration from fragile rural areas to more prosper cities.

### *2.2.1 Human Rights Discourse*

All displaced persons, whether internal or international, are entitled to the fundamental human rights. The reason for displacement or indeed the nature or duration of the displacement is immaterial. These rights include the right to life (Art 6, ICCPR; Art 6 UNCRC); the right to adequate food (Art 11 ICESCR; Art 14 CEDAW; Art 5 CERD); the right to water (Arts 11 and 12 ICESCR; Art 14 CEDAW; Art 28 CRPD; Art 24 CRC); the right to health (Art 12 ICESCR); and the right to shelter (Art 11 ICESCR). It has been argued in some places that the right to movement is also a fundamental human right, recognised under Article 13 of the Universal Declaration of Human Rights (Mcinerney-Lankford, et al., 2011; Zetter, 2011). However, the national legislative systems of democratic countries usually provide the guaranteed right to freedom of movement only to the citizens and recognised aliens. Thus, undocumented migrants or those unable to prove their citizenship status are at a higher risk due to a restricted right to movement (Connell, 2015). It begets the question if the rights of undocumented aliens and non-citizens are recognised in the case of sudden displacement, such as that caused due to floods, cyclones, sea-surges, earthquakes or landslides? McAdam (2011) has used the principle of non-refoulment to show that the right to the protection of life is an international legal obligation and thus governments must respond to people who are fleeing disaster in order to survive. Thus, in the absence of a targeted framework at the international or national level for the protection of climate change migrants, the human rights framework and the constitutionally instituted fundamental rights remain relevant.

In the Indian context, upholding the international legal norms is considered sacrosanct by the judicial system. By virtue of Article 32 of the Constitution of India the Indian judiciary is, within its constitutional limits to use the international law, as an

authoritative source of legal rights and obligations (Government of India, 1950). As I will discuss in greater detail in Chapter 4, the Constitution of India, the Supreme court decisions on the scope of the right to life and the international human rights norm provide a broad ambit for the narrative framework within which freedom of movement, development and compensation for loss of property are *adjudicable*. These legal prescriptions apply to a person displaced due to climate change in a similar manner as it would apply to a person displaced due to internal violence or development related projects.

It should be noted briefly that the judicial decision in the *Olga Tellis Case*<sup>7</sup> laid the foundation for livelihood to be considered an integral part of the right to life in India creating a necessary obligation for the state to provide employment to its citizens. Similarly, in *Francis Mullin vs. Union Territory of Delhi*<sup>8</sup> the apex court held that the right to adequate shelter was part of the right to life. The fundamental rights framework and the legal prescriptions in India sufficiently internalise the international legal norms and can provide complementary protection for environmental displacement.

However, it has been seen that climate change will disproportionately affect those who are already at the margins of society (Stern, 2007). Therefore, a pro-active mechanism related to disaster risk reduction is an essential element for the mitigation of disaster-induced forced displacement. Although it is not discernible whether either the human rights approach, inclusive of the development approach, or the targeted disaster risk reduction policy will in any way reduce the instance of out-migration from geographically vulnerable areas, it is argued that the focus should be on the reduction of forced and involuntary forms of migration while promoting voluntary migration as part of an adaptation strategy.

### ***2.2.2 Development Discourse***

In the development discourse, disaster risk reduction (DDR) policies are well-established development strategies that address all forms of hazards at the grass-root level (Wisner, et al., 2004). DRR is defined by the UNISDR as *'the concept and*

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<sup>7</sup> *Olga Tellis and Ors. Versus Bombay Municipal Corporation & Ors.*, 1985 SCC (3) 545.

<sup>8</sup> *Francis C Mullin Versus Administrator Union Territory of Delhi*, 981 AIR 746, 1981 SCR (2) 516

*practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events'* (United Nations Office for Disaster Risk Reduction, 2009). DRR policies and strategies view disasters as socio-economic and political in origin, reflecting a school of thought established in the 1970s (Torry, 1978; Hewitt, 1983; Lewis, 1999; Wisner, et al., 2004; Gaillard, et al., 2007).

DRR strategists consider the broader social, political, environmental and economic environments in which a hazard is situated (Alexander, 2000; Weichselgartner & Obersteiner, 2002). The DRR strategies are built around a community's ability to reduce their own disaster risk, and specifically identify those directly impacted by hazards (Wisner, et al., 2004). Grassroots strategies are conjoined with top-down policies to ensure sustainability of the project (Anderson & Woodrow, 1989; White, et al., 2005; Fraser, et al., 2006).

Disaster risk reduction strategies have formed part of the mainstream policies in India for over a decade. After the 2004 Indian Ocean Tsunami, the Central government of India formally adopted targeted legislation – the Disaster Management Act of 2005 – with a clear aim of mitigating disaster risks and reducing disaster vulnerability. The act has been internalised vertically throughout the governance apparatus in India. Thereby it is mandatory for the level of governance to have a clear outline of their respective roles in preventing, mitigating and responding to disasters. In the state of Assam, this policy has been thoroughly internalised and a disaster management authority has been constituted at every district level since 2013.

I will discuss the structure of these formations in more detail in Chapter 4 and Chapter 7. However, it should be briefly mentioned here that the state of Assam treats disaster management as a critical policy of governance in the state. The Chief Secretary of Assam has been a driving force in creating the State Disaster Management Authority and ensuring that all the vertical and horizontal departments of Assam incorporate disaster management policies for foreseeable hazard situations. For Assam, these



foreseeable situations are floods, cyclone winds (locally known as Bordisella), earthquakes, landslides, wild-fires and ethnic violence. The Disaster Management Plan of the state is a comprehensive document that earmarks the expected response of each government agency vertically as well as horizontally. The Districts and cities within the state have their own disaster management plans, and most of the village panchayats have formulated localised plans with the assistance of the State Disaster Management Authority at the time of writing of this thesis.

However, there has been some reluctance in regard to combining disaster management with climate change adaptation strategies. The disaster management as a thematic issue of action was formulated in the 1970s and by the time the initial negotiations under the UNFCCC process started, disaster management had already been refined in terms of the actions, procedures and expected outcomes. Therefore, it has been challenging to integrate the distinct sets of actors and institutions at the different levels of structural development (Schipper & Pelling, 2006). However, in Assam, the government has adopted an ‘all hazards – all agencies approach’, which allows agencies to plan their disaster management and climate change adaptation approaches holistically.

The second problem, which is more relevant to the current thesis, is that disaster management strategies are not sufficient to respond to slow-onset climate change migration. While the process can be integrated with adaptation to reduce forced mobility and provide immediate assistance to those displaced in a situation of hazard, it cannot predict or manage gradual displacements, or indeed provide compensation for loss of habitat. Therefore, it becomes necessary to integrate disaster management approaches with human rights approaches and some form of nationally available compensation mechanism. The combination of these policies would act to reduce instances of forced mobility, ensure the right to freedom of movement out of a fragile ecosystem and provide compensation to people who suffer loss of land and livelihood due to climate change-related threats. However, whether a government would utilise these synergies between the human rights values, disaster risk reduction strategies and climate change migration depend a lot on the way in which migration is conceived by national and sub-national entities. As discussed in section 2.1 if a government views

climate change migration as a security issue it is more likely to invest in border management practices and bipartisan agreements that explicitly target climate change refugees. On the other hand, when a country views climate change induced migration as a multi-causal developmental issue, the governance system acts to rationalise migration as part of the broader welfare and development discourse.

A downside of treating mobility as part of the development discourse is that the prospect of abandonment of the migration governance discourse is high. In the development discourse, there are a multitude of synergies that need to be considered and these synergies can often compete. The way in which national and sub-national actors frame the migration agenda dictates the value placed on different and often competing developmental discourses. Referring to Table 1 in section 2.1 of this chapter we can expand the government responses based on how they perceive climate migration. For example, if Climate Migration is a security issue the state would tend to invest in border protection mechanism whereas if the state view climate migration as a human security issue they would instead invest in the developmental discourse. Table 2 provides an overview of the issue location and policy responses that a government may adopt.

**Table 2: Policy formation based on issue location**

Issue location	Explanation	Policy response
Climate Migration as a Security Issue	Host country perceive climate change migration as a border security concern	Strengthening border protection
	Migrant-sending countries see climate change migration as a reflection of the threat of territorial loss due to sea-level rise	Bipartisan agreement to receive migrants entered with neighbouring countries
Climate Migration as a Human Security Issue	International migration is perceived as a development deficit in home countries	Host country provide development aid to the migrant countries in a bid to reduce migrations
	Internal migration is perceived as a development deficit	Governments strategies development in geographically vulnerable areas in a bid to reduce instances of out-migration

At this point it is important to reiterate that the debate on climate change migration governance is concentrated primarily at an international consultative level. It is not at all clear how the sub-national governments are responding to existing climate change related migrations and how the international negotiations would in fact translate into functional administrative policies at the national and sub-national level. There is a considerable gap in the literature regarding administrative responses to those who move. There are a few recent studies that have aimed at analysing the response operationalisation and changes within the international organizations such as UNHCR, IOM and OCHA. However, no such attempts are made at the local level and the sub-national administration's perspective is mostly missing from the literature on climate change migration.

The lack of involvement from public policy scholars has led to a patchy understanding of the incoherent governmental response towards migrants. While we know that the current migration system is flawed due to substantial implementation gaps, we do not know why those gaps are there. The general observation is that there is a binary relationship between 'non-precise' policies and 'non-working governments' and thus it is necessary to create precise policies and new institutions to respond to the climate migration crisis (Biermann & Boas, 2008; Warner, 2011). However, the creation of new norms or new institutions does not innately alter the circumstances within which the administrative apparatus of governments react. In fact, the new policies are implemented through the already existing old institutions and networks of officials which are often rigidly set in a pattern of behaviour (Lipsky, 2010). Thus, understanding the organisations and their perceptions of climate migration is necessary first step towards achieving a positive protection outcome.

### **2.3: Administration of Complex Issues**

In the public policy complex, open-ended and intractable problems are 'wicked problems'. These are the areas where both the nature of the problem and the preferred solution lie in a fluid space, requiring continuous reconsideration. Pressman and Wildavsky (1984) argue that success in solving *wicked problems* is an elusive notion, as the required levels of information, goal-clarity and coordination are not achievable.

The problem, as well as its solutions, lie in a shifty domain; and the technical approaches overlook the values, perspectives and lived experiences of the stakeholders involved in the interventions (Rein, 1976; Schon & Rein, 1995). From the discussion on the process and context narrative above, we can see that climate change migration is one such wicked problem whose nature and possible solution are not conclusively known. The framing of climate change migration is done differently by different actors, and despite the visual impact of disasters on human displacement the correlation with climate change is not straightforward.

Rittel and Webber (1973), while discussing the solution to a *wicked problem*, highlight that modern nations are too pluralistic to achieve a clear and agreed solution. Unlike the relatively ‘tame’ or ‘benign’ problems of science, which are definable and verifiable, the emerging issues in social science are ill-defined and interlinked and rely on political judgement and administrative perceptions. Rittel and Webber (1973) elaborate on ten characteristics of a wicked problem that may be present in different combinations and cause the problem to be wicked. Several scholars have found these features to be helpful in explaining the difficulties that arise in the areas of urban planning social policy, and environmental and natural resource policy (Allen & Gould, 1986; Freeman, 2000; Head, 2008). In the following paragraphs, I will discuss the ones that are most relevant to climate change related migration.

The first test of a wicked problem is that the *definition and scope of the problem itself are contested*. In the process narrative of this thesis (section 2.1), I reflected upon the nature of climate change migration as a highly contested premise. Most researchers have come to accept that climate change induced migration is a multi-causal issue, there is no scientific parameters that can determine whether the migration is forced or voluntary. Even when a person living in a fragile ecosystem chooses to migrate voluntarily, such a decision stems from economic compulsion and a lack of resources needed for adaptation and survival (Black, et al., 2008; Bardsley & Hugo, 2010).

The second test of a wicked problem is that there is *no definitive solution* (Rittel & Webber, 1973). In the context narrative of this thesis (Section 2.2), I discussed how the international dialogue on climate change migration is shifting from a security

narrative to a development one. There is no readily available consensus on the nature of international responsibility towards climate change migrants; or indeed a consensus as to what level of administration (international, regional, national or sub-national) should frame and implement a protection policy for climate migrants.

The third test for the wicked problem is that the *solutions to wicked problems are not true-or-false, but rather good-or-bad* (Rittel & Webber, 1973). Unlike in the case of poverty reduction policies, where the measurability of poverty can determine the soundness of a policy in case of climate change migrants there is no quantitative measurement. It is not possible to adopt measurable targets of how many climate change migrants must be protected. In this scenario, the only plausible paradigm is a qualitative awareness of the stakeholder opinions regarding what is a good or a lousy protection measure. The fourth connected characteristic of the wicked problem is that *there is no immediate and no ultimate test of a solution to a wicked problem* (Rittel & Webber, 1973). In case of protection of climate change migration there is no immediate or ultimate target, for number of people needing protection and thus there cannot be an immediate or ultimate measurable solution.

The question that naturally arises is, how should these problems be governed? What are the factors that assist in better governance? What are the factors that lead to a deficit in governance? If at all, are these factors readily identifiable?

Typically, the solutions to wicked problems require a trade-off between competing values, flexibility, reflexivity, a multi-departmental approach, collaboration and resource sharing for success (Kooiman, 1993; Durant & Legge, 2006). The different ways in which a wicked problem can be framed strongly determine the treatment and solution. The preferred solutions tend to be shaped by the way in which the problems are framed or constructed, including the way that leaders and stakeholders mobilise values (Fischer, 2003; Jerneck & Olsson, 2011; Schlager, et al., 2011; Peters, 2005). For example, if the issue of climate change migration is communicated as a national security issue, the relevant policy response will be to identify those groups which are 'outsiders' and enact policies regulating movement of such groups along the international borders. Whereas if climate migration is identified as a development issue

the policy may lean towards strengthening human security aspects, by adopting welfare measures and adaptation laws for increasing resilience to climate change.

However, it is also seen that the institutions tend to be incremental in implementing (and adapting to) a new policy approach (Jones, et al., 1997; Dimitrakopoulos, 2001). To minimise shocks and regularise the new policy into the institutional behaviour in a seamless manner the organisations try to match their problem-perception to the social and political atmosphere of a region (Kaplan, 2008; Hayward, 1976; Norrander, 2000). This phenomenon recognises the political ideologies and promotes competitive pluralism amongst stakeholders (Bohman, 1998; Wood, 2006). Bohman, in his conceptualisation of deliberative administration, highlights the benefits of free and equal participation of all stakeholders, substantial political and procedural equality, including equal opportunities to participate in deliberation, to choose the methods of decision-making, and to set the agenda (Bohman, p. 16). However, the vast differences in social, cultural, and normative perspectives often lead to collective puzzlement and no progress (Hecl, 1994, p. 305). Head (2008) has therefore argued that some wicked problems can only be solved by a significant shift in attitude and behaviour among stakeholders.

So far, only the process literature on climate change migration (section 2.1) has recognised the nested complexity and wickedness in identifying climate change migrant. The literature on normative frameworks and institutional responses to climate change migration is rudimentary and does not acknowledge the wickedness and multi-level administrative complexity that migration governance entails. For the existing normative literature (*context narrative discussed in section 2.2*), the national governments are the primary stakeholders, and international recognition of climate migrants as a category of asylum seekers is the zenith for humanitarian law and legal ethics in a warming world.

Thus, this thesis becomes relevant for its contribution in taking the discussion further by deliberating how the profound and complex sub-national governance systems influence the level of protection a climate change migrant could receive from its state.

## 2.4: The Indian Paradox: The Elephant in the Room

At this point, I would like to reflect on the Indian government's perception of climate change migration. Every year millions of people are displaced due to hydro-metrological disasters, primarily in the states of Bihar, Uttar Pradesh and Assam (EM-DAT, n.d.). However, unlike the neighbouring countries of Bangladesh, Maldives and Nepal, India's participation in the academic or policy debate on climate change migration has been insignificant. The Indian government has not raised the issue of climate change migration at the UNFCCC, it has not engaged with the high-level consultative process under the Nansen Initiative;<sup>9</sup> and it has not held any on-record conversation with either the International Organisation for Migration, United Nations High Commission for Refugees, Office of Coordinator of Humanitarian Affairs, or International Labour Organisation.<sup>10</sup>

Ingrid Boas discusses India's absence from the international discussion on climate change migration in her doctoral work. She asserts that while the Indian government is not occupied with the concern of cross-border migration, it does consider internal climate migration as an issue of human and livelihood security (Boas, 2014). Boas, in her work, reports that the Indian officials consider the securitisation of climate change migration to be a western construct. Climate migration debate are thus not motivated by the issue of human or migrant well-being but instead are used as a tool in the divisive politics of negotiations at the UNFCCC. India feels cajoled into assuming binding mitigation responsibility due to its geographical proximity to potential migrant-sending nations, like Bangladesh and Maldives (Boas, 2014).

My interview with the Joint Secretary to the Ministry of Environment and the chief UNFCCC negotiator of India, Mr Ravi Shankar Prasad, reveals a similar position. The Ministry of Environment and Climate Change in India does not consider migration to be an environmental issue, but rather an internal human security agenda. And when asked to identify the appropriate ministry, references were made to the local state

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<sup>9</sup> In a private email communication with Professor Walter Kalin, who chaired the Nansen Initiative, I was informed that the invitation to engage in the South-Asian consultations had been sent to the Ministries in India, but no response was received.

<sup>10</sup> These UN organisations are at the forefront of the climate change migration debate due to their experience in handling varied forms of forced and voluntary migration.

government, and the Ministry of Rural Development (Jt. Sec. Ravi Shankar Prasad, 2016).

Despite having a significant international migration corridor with Bangladesh, the central government of India does not treat climate change migration from Bangladesh as a security threat. In its bilateral agreement with Bangladesh, the issue of ‘irregular immigration’ is a trifling political narrative; it is never wholly denied nor fully accepted by the Central Government of India. Instead the focus of India-Bangladesh relationship is the partnership in the Bay of Bengal and the geopolitical connection to the ASEAN region (Kumar, 2018; Ministry of External Affairs, India, 2016; Chatterjee, 2016). India has also assumed the role of a development-partner of Bangladesh. And for the Ministry of Defence in India, international security concerns on India-Bangladesh border are triggered by the rise of Islamic extremism in Bangladesh, not by environmental migration (Ministry of Defense, India, 2017).

On the other hand, India classifies internal migration caused by slow-onset environmental stress as a livelihood issue, while that caused by sudden-onset disasters as a humanitarian relief issue. In Chapters 4 and 5 of this thesis I will discuss the detailed provisions of initiatives adopted by the Central government of India, namely the Mahatma Gandhi National Rural Employment Guarantee Act, The Disaster Management Act of 2005 and The Indira Awas Yojana (IAY – Rural Housing Scheme). These schemes were legislated with the intention of providing guaranteed livelihood opportunities, mitigating and managing disasters, and providing affordable housing. The policy documents do not have any direct mention of governing (or responding to) climate migrations. However, the administrative documentation and rules of procedure within these policies, prioritize ‘flood-victims’, ‘erosion-affected families’, ‘landless households’, etc for implementation. Furthermore, the government of India and the state of Assam have accepted explicitly in its national communication to the UNFCCC secretariat (2<sup>nd</sup> National Communication, 2012) and in the interviews conducted during this research, the synergies the above stated programs have with managing climate induced mobility (Jt. Sec. Ravi Shankar Prasad, 2016; Jt. Sec. Jishnu Baruha, 2016; Chief Minister Tarun Gogoi, 2016).



The state in India believes that a climate change migrant is a dynamic actor who, and as an Indian citizen, has the freedom of movement, residence and gainful employment. *'Targeted schemes like MGNREGA and IAY are to assist rural communities and those below the poverty line to (enable them to) overcome their vulnerability to natural hazards, including climate change-related hazards. We (the state) have always been aware of the vulnerability... today it is climate change, before it was water pollution... common people in the country depend on the ecosystem, even today, so if it gets affected, people get affected... we (the state) try to help within its means'* (Chief Minister Tarun Gogoi, 2016).

Based on my initial assessment of the Indian state it appears that the state recognises several layers of migration. There is the voluntary adaptive migrant who is a dynamic actor and require minimal support from the state. The state as a paternalist entity would assume the enabling role and provide welfare support in case such is asked from the citizen. Then there is the question of visible forced displacement of the people migrating due to floods or earthquakes or draughts. These migrants are survival migrants – victim of circumstances – and the state holds a benevolent duty to protect. Thus, the process of relief becomes relevant in managing forced migrations. Then there are displacements caused due to loss of land and permanent damage to place of habitation post-disaster. These migrations are permanent and they require support beyond temporary relief. Here the state expects its administrators to use ingenious approach to prioritise those who have suffered losses and are rendered homeless or landless. And finally there are those who are trapped in their ecosystem and can not afford to move out of their misery. These are invisible people whom the state is genuinely worried about but finds challenging to help either due to political or economic constraints.

The table 3 provides an overview of legislative policies relevant to each layer of migration within India. These policies are not exhaustive but relevant for the current thesis. For example the current research does not take into account the Kisan Bima Yojana (Agricultural Insurance Scheme) and thus, misses out on a financial opportunity which allows Indian farmers to be dynamic actors instead of victims of their circumstance. However, it is also well worth stating that while Kisan Bima Yojana has been in circulation since the very beginning of Indian democracy its penetration

into villages has always been shoddy. And despite a growing body of research which support strengthening the crop and farmer insurance schemes there is a lack of stakeholder interest from the farmers, the state as well as private entities to implement the schemes.

**Table 3: Policy intervention based on Migration type**

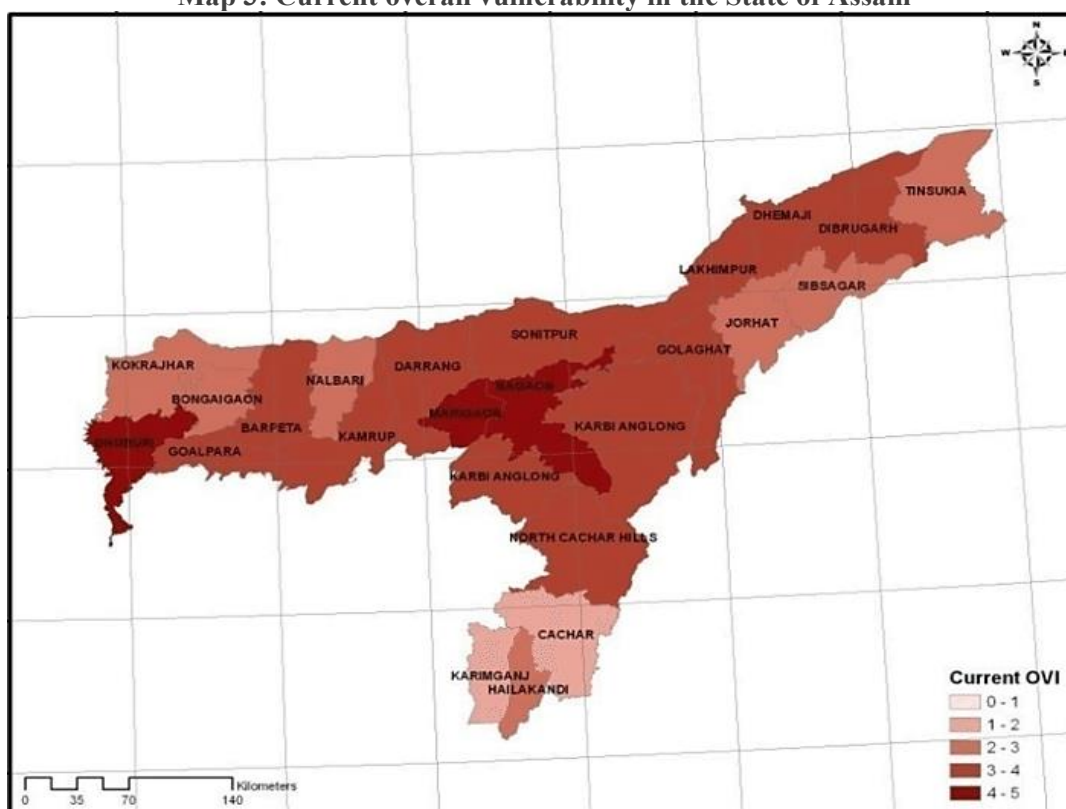
Migration	Explanatory scenarios	Policy intervention	Legislation
<b>Voluntary adaptive migrations</b>	Households living in fragile ecosystem employ various form of cyclic, and permanent migrations to diversify livelihood options	Livelihood security	Art. 19 Constitution of India and MGNREG Act
<b>Forced displacement</b>	Temporary relocation due to disaster used as a survival strategy	Relief	Disaster Management Act and CM Relief Fund
	Permanent displacement due to loss of habitat	Compensation for loss and damage	State level policy on compensation
<b>Evacuation</b>	Temporary assisted migration out of disaster zone for trapped population	Relief	State and Central level policy on assistance
<b>Entrapment</b>	Households are trapped in a collapsing ecosystem with no economic resource to move out of their fragile ecosystem	Assisted and Planned Relocation	District Authorities have the power to initiate the relocation process under the Land Laws of the state
		Intensive and targeted implementation of policies on Livelihood security, Relief and Compensation	

## 2.5: Differential Dilemma of Assam State

As climate change impacts are non-uniform, some states in India are more at risk due to their high vulnerability to climate change. Ravindranath et al. (2011) conducted a village-level analysis of the vulnerability of the north-east of India. It is the only available comprehensive study that has determined the vulnerability, through ecosystem dependence and economic capacity, in the region. The study concludes that the state of Assam has a high to very high overall current vulnerability towards shifts

in weather patterns throughout all the districts, except for the districts of Cachar and Karim Ganj in the Barak Valley, where the overall current vulnerability to climate change is low. The severity of their vulnerability is due to the states' high dependence on the ecosystem, including the dependence on forests for produce and on monsoon rains, for agricultural activities (Map 1 below).

**Map 3: Current overall vulnerability in the State of Assam**



Scale: very low (0) to very high (5)

Source: Ravindranath et al., 2011

Subsequently, several recent studies have highlighted the climate vulnerability of Assam, by highlighting the impact of climate change on its hydro-metrological cycles and flood pattern (Das, et al., 2009; Bhatt, et al., 2013), and analysing the effect of environment on the socio-economic conditions of Assam (Watmough, et al., 2013; Watmough, et al., 2016). While these studies have not consider migration scenarios it can be seen that cyclic migrations due to socio-economic conditions (which are

complexly linked to environmental changes) is unusually high in Assam (Rajan & Bhagat, 2017).

The 1991 census of India provides details of migrations occurring due to natural calamities like floods and droughts and places Assam as the state with the most displacements within India. While the national average was 5 in every 1000 people, the state of Assam had a displacement rate of 51 individuals in every 1000. The subsequent census in 2001 does not provide data on migration due to natural calamities, and the complete set of 2011 data on migration (D-series) had not yet been released at the time of writing this thesis. The 2001 data for the state of Assam, however, shows that 3% of the population born in Assam have moved elsewhere in India, while 25% of the people born in Assam have migrated within the state.<sup>11</sup> The state census series of 2001 classifies the primary reason for migration as ‘other’ (39.5%) and marriage (37%). Purely economic migration relating to work/employment and business accounts for only 7%.<sup>12</sup>

Migration classified as ‘other’ in 2001 census is primarily a combination of displacements due to natural disaster and those due to group-identity violence (Deputy Commissioner Kamrup (M), 2016). It is also worth reminding that the linkage between environmental disasters and migrations are complexly constructed in the State. The security study uses the state of Assam as an example of region that have group-based violence due to environmental collapse (Swain, 1996; Reuveny, 2007). There is a strong political narrative that most of these migrations were in fact triggered by resource marginalisation and the forced environmental degradation of areas habituated by Bengali Hindus in the Sylhet region of Bangladesh (Van Schendel, 2004). Those who migrated are identified as illegal settlers in India, whose status as Indian citizens is questionable. I will discuss this in more detail in chapter 7. However, to briefly summarise here, the political parties in Assam strongly associate the term migration with alleged ‘illegal Bangladeshi’ migration, which has resulted in a change in the

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<sup>11</sup> Calculated from census series table D1- migrant population enumeration based on place of birth. Census data 2001, available at <http://www.censusindia.gov.in/DigitalLibrary/MFTableSeries.aspx>

<sup>12</sup> Calculated from D-series data, table D3- Migrants by Place of Last Residence, Duration of Residence and Reason for Migration. Census Data 2001, available at <http://www.censusindia.gov.in/DigitalLibrary/MFTableSeries.aspx>

state's political demography. In the security studies literature, Assam is projected as a state facing conflict, due to resource-driven group conflicts and the problems of environmental disasters, like flood erosion, which only add fuel to this conflict.

While there is no reliable documentary evidence<sup>13</sup> to suggest that migrations in Assam are from Bangladesh, this cannot be dismissed entirely, as Bangladesh and India do share one of the most significant international migration corridors (Al Faruque, 2013; Kumar, 2006; Ghosh, 2016). Recalling the earlier discussions in section 2.3 of this chapter, migrations in Assam are a wicked problem, the solution to which is highly contested. Owing to the difficulty in determining a uniform definition for a wicked problem it is likely that the perceptions of the central government may not completely align with the perceptions of the state government or its functionaries. Also recalling the limited discussion in section 2.4, the central government of India perceives the problem of migration to be a developmental issue and thus that is the primary direction that the sub-national state government must adopt. However, this study has found that the understanding of the state of Assam regarding climate change migration has layers of developmental, political and security issues.

As I will be discussing in more details in the later chapters, the Assam Movement forms the political landscape of the state. The Movement which was charged by the issues of identity and belonging saw Bengali-speaking ethnic and religious minorities as *outsiders* and a threat to Assamese language and culture (Van Schendel, 2004; Misra, 1987). The decade of 1980s when the Movement was at its prime there were violent disruptions, massacres, accession demands for a free Assam, and imposition of President rule in the state (Barpujari, 2011; George, 1994). The Movement led to Assam Accord of 1985 which was a peace agreement between the Indian Central Government and the leaders of Assam Movement (GoI, 1985; Choudhury, 1985). The promises made in the Accord led to formation of Autonomous Territorial Councils in tribal dominated districts, enactment of Immigration Detention (and Deportation) Act

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<sup>13</sup> In Chapter 7 of this thesis I have questioned the systematic flaws in determining 'illegal foreigners' who have allegedly migrated from Bangladesh. Considering the structural faults and procedural errors, it cannot be authoritatively said that people are migrating illegally across India-Bangladesh border. At the same time, the fact that the border had non-existent physical barriers until 2012 also make it one of the most fluid border-regions in the world.

and a continued discounting on issues of citizenship, identity and belonging in the state (Baruah, 2009; Singh, 1984; Roy & Singh, 2009; Nath, 2003).

Over the years the identity struggles have become more fluid on religious and ethnic lines in deciding of who is an *'outsider'*. In Chapter 7 of my thesis I would be discussing the irregularity in determination of citizenship rights and how it impacts communities right to move out of fragile ecosystems. It is well-worth mentioning here that up till 2016 the existing migration narrative in the state oscillated between blaming the 'ethnic Bengali' to blaming the 'Bengali Muslims' for the state's deficiencies in governance. However, in May 2016, just after the completion of the fieldwork for this stud, the Hindu nationalist party – Bhartiya Janata Party – came into power in Assam and this political shift can reflect negatively towards the protection response provided to Muslim minorities, irrespective of their Bengali or Assamese ethnicity.

## **2.6: Multi-Level Climate Governance and Place for Climate Migration Policy**

In the last few years there has been a rapid increase in the number of scientific studies undertaking the vulnerability assessment of several states in India. These studies have highlighted that a continued high dependence on environment for food and livelihood activities make India particularly vulnerable to climate variability and changes (Brenkert & Malone, 2005). The Data-sets on migration due to natural hazards puts India as one of the most displaced country with almost 2.3 million people displaced every year due to disasters (International Displacement Monitoring Center, 2017; International Displacement Monitoring Center, 2017a; EM-DAT, n.d.).

Despite India's record of disaster induced displacement and sensitivity to climate change, climate change related migration or disaster induced displacement is not directly confronted in the National Climate Change Action Plan. The plan, which was adopted in 2008, does not mention migration, displacement or mobility governance but instead lays out eight action areas with a focus on energy security and vulnerability reduction while promoting sustainable habitats and forestry management practices (Prime Minister's Council on Climate Change, 2008). This absence of a direct reference to mobility in the National Climate Action Plan is in line with the senior

bureaucratic attitude that migration is a developmental issue (discussed in section 2.4). Similarly, in its Second National Communication to UNFCCC in April 2012, the Indian government considered increased climate change related mobility to be the result of the developmental deficit, and a manifestation of the existing economic vulnerability in rural areas (Ministry of Forest, 2012, p. 169).

It is well worth noting here that the academic debate on climate change in Indian context is irregularly focused on the question of energy security. As I stated in my introductory chapter, the fact that India has a substantial collective carbon footprint and significantly high climate vulnerability owing to its small per-capita emission, makes Indian policy on climate change a battle-ground for developmental trade-off and competing mitigation priorities (Atteridge, et al., 2012; Dubash, 2013; Vihma, 2011). There is a considerable concern about India's developmental trajectory and the impact it may have on the global climate budget leading to a robust international pressure for pursuing a low-carbon growth (Raghunandan, 2012; Thaker & Leiserowitz, 2014). This focus on sustainable growth has made India's energy sector and the policies on energy security as crucial area of policy concern. Subsequently, a rich cohort of academic and policy literature evaluating India's energy landscape and the potential for low-energy sustainable growth is available (Sathaye, et al., 2006; Revi, 2008; Ravindranath, et al., 2009; Ravindranath, et al., 2011). These studies focus on energy-pathways, multi-level energy governance and the need to further understand the role of sub-national and non-state actors in India's sustainable energy growth (Jorgensen, et al., 2015; Beermann, et al., 2016; Jorgensen, et al., 2015). At the same time the concerns regarding vulnerability, security and mobility are clustered together in writings on adaptation, resilience development and mainstreaming climate vulnerability into the national policy agenda (Ravindranath, et al., 2012; O'Brien, et al., 2004).

In the event of no uniform national or state policy on climate migration, the primary burden of managing climate change mobility falls on multiple vertically and horizontally placed institutional actors in charge of developmental and disaster risk reduction programs. I say development and disaster risk reduction plans because the Central Indian government frames the issue of climate change migration as something

*'within the governance scope of existing developmental and disaster risk reduction'* strategies (Chief Minister Tarun Gogoi, 2016; Jt. Sec. Ravi Shankar Prasad, 2016). While the academic scholars in the field of climate change have not yet come to evaluate the operationalisation of these development programs, there is a rich body of work in the form of bureaucratic and regional ethnographies which informs us about the execution of the developmental programs in the sub-national setting.

Two noteworthy work on Indian state ethnography emerged at the time I was developing my work. Akhil Gupta released his book *'Red Tape'* detailing his ethnographic adventures from Bidoli district of Uttar Pradesh (Gupta, 2012); And Nayanika Mathur converted her ethnographical study of sub-national bureaucracy in the state of Himachal Pradesh into a book monograph titled *Paper Tiger* (Mathur, 2016).

Gupta starts his work on the premise that the Government of India has a genuine desire to eradicate poverty (Gupta, 2012, p. 6). Based on the enormous institutional and budgetary commitments to poverty reduction strategies in India he suggests that in practice there is anything but a condemnation of the poor to a bare life status. This starting proposition of Gupta has strongly influenced my own methodological choice of accepting that the State in India is concerned about climate migrations although they may project this concern in varied choice of words and definitional forms which do not entirely correspond to the typologies adopted by the international academics discussing climate migration. I do not see why the government of India would not like to assist masses of people and summarily reject their status as victims of climate change. At the same time, I am also skeptical about the nature and uniformity of protection received by those who migrate due to climate change.

However, as Gupta notes in his interpretation of the concept of *homo scare* (Agamben, 1998), despite states efforts, millions are still condemned to perpetual poverty. Gupta describes this phenomenon as – structural violence – where the State despite its own intention to provide a meaningful political and social participation to its citizens in effect condemns them to continued poverty and early death. Through the book, Gupta narrates a rich account of democratic functioning in India, and how these are inflected



by location, gender, caste and class in the ordinary and everyday street-level administration. He gives a descriptive account of the purpose of government forms, the filing systems, and the entire process of listening, translating and transforming what the poor say. Gupta takes the onus of responsibility away from the individual bureaucratic actor within the state and rationalises the absence (or bare presence) of the state by accepting the logic of dispersed-responsibility. Gupta's argument here relies on the lack of internal coherence and agencyfication within the administration, he treats the bureaucracy as a disaggregated array of institutions that operate at different levels, in multiple locations, and with diverse agendas. And because of its disaggregated quality, any perspective on the state is necessarily partial (Gupta, 2012). Therefore, it becomes relevant to study governance in India at a localised level where one can gather some semblance of wholeness from an otherwise disaggregated partial state.

In a similar vein, Mathur in her ethnographic rendition of street-level bureaucracy in India reminds us that the reality of laws is hostage not only to specialisation (such as assigning specific agendas) but also to banalisation (such as everyday paper filing). Mathur evaluates the operationalisation of two of the government's 'sophisticated' and 'specialised' schemes – the Mahatma Gandhi National Rural Guarantee Act of 2005 and the Wildlife Protection Act of 1972 and highlights the distinction between the 'State life of Law' and the 'real life of law'. The book brings forward the argument that a new, sophisticated, and specialised legal system (in this case MGNREGA) may not actually deliver the expectations pinned upon it by its upholders. And it is ultimately the street-level translation and synchronisation of the new legal instrument amidst the existing legal and social norms, which will determine the success of a law (Mathur, 2016).

While the ethnographic examination of government and government institutions at a multi-level of governance is an opulent academic field, such studies have not yet found its way in understanding governance response to climate change. This is, as I mentioned before mainly because of a feeling that there 'must be' an international commitment towards movement which respects the principles of 'equity' and 'common but differential responsibility'. However, while obsessing for international

cooperation, the focus on the reality of protection and sub-national translations of the laws and legal systems is lost. The current work as I would come to show is a step towards finding these translations. While not being an ethnographer I could not boast the work to be a bureaucratic ethnography, it does provide a necessary starting point of evaluating state's perception, presence and translations in geographical spaces which are highly vulnerable to climate change.

## **2.7: Research Gaps**

India is one of the most internally displaced countries (International Displacement Monitoring Center, 2017a) and has a considerable stake in terms of climate change migration. The IDMC estimates that annually close to 2.3 million people are displaced in India due to disasters. Although these numbers are only estimations, it does highlight the enormity of the problem. But we know very little about how India perceives let alone manages the mobility of its citizens. It is quite evident that most of the discussions on climate change migration governance is fragmented, ill-defined and focused towards building international norms of protection. The attempts to involve national governments have been limited, for example, the Nansen Initiative (which is the only regional high-level consultative process) misses out on inputs from essential countries like China, India and the USA which are not partners in the discussions.

On the other hand, climate change literature on India is heavily concentrated towards the discussion on energy security and sustainable energy growth of the nation. The limited academic discussion on India's response to climate mobility, and Indian government's attitude towards migration in the UNFCCC climate negotiation process gives a broad picture that Indian government at the Center favors a multi-causal perception of climate displacements and views the issue as one following within its development and disaster risk reduction goals (Section 2.4). However, beyond this limited bird's eye view of the central government mentality we know nothing about how the sub-national government respond to climate migrations already manifesting in their jurisdictions.

Three areas come up for analysis: (a) how do the senior bureaucrats working at the sub-national level frame the issue? The framing of the problem is essential in choosing

the most appropriate policies from the wide range of policies available. As stated earlier, the government of India frames climate change displacement as a development issue. However, to synergise development policies with the response to climate change migration, the framing at the central level needs to be communicated and deliberated at the state level. The senior bureaucratic officers employed by the Indian central government are responsible for implementing the national policy agenda. Their perception of climate change and climate change related displacement is thus essential to understand how the state responds. (b) The second area for analysis is, how does the sub-national political behaviour impact the institutional behaviour on the issue? Responses to wicked problems are affected by value judgements and political ideologies exert a strong influence over the value judgements of a society. Therefore, some problems are so complex that their solution may require a complete shift in political and social perceptions. (c) And finally, what role does the demography, the primary stakeholder, play in this whole process? Do those who are at the margins of development and most affected by climate change have a choice to make voluntary decisions? Or to change the political course? Or to influence the institution and senior bureaucracy that are instituted to serve them.

## Chapter 3 Research Methodology

Studies in the field of climate migration, climate vulnerability, climate change adaptation and disaster risk reduction emphasise the need to overcome the knowledge gap regarding how governments function and what factors contribute to a comprehensive and positive response (Warner, et al., 2012; Jäger, et al., 2009, p. 70; Foresight, 2011). However, the knowledge about the institutional handling of this issue is limited and lack engagement with the public policy institutions at the national and sub-national level. My thesis is a step towards filling this knowledge gap. By engaging with bureaucratic officers and senior political leaders who are at the forefront of response needed by climate change migrants I bring pioneering methodologies and operational strategies to the pool of knowledge. I further evaluate these strategies for their effective implementable and replicable function and I identify problem areas which lead to protection gaps.

### 3.1: Research Approach

At the beginning of this thesis, I broadly defined Climate change migration as distress or adaptive migration caused by hydro-metrological events that are exacerbated due to climate change. These migrations can be temporary, cyclic or permanent and can involve a short or long distance. During the field work and subsequently while writing up I treated climate change migration as a wicked problem that requires constant deliberation about the nature of the problem and the appropriate solution, within a space that is perpetually negotiated between competing paradigms. The treatment of climate migration as a wicked problem allowed a more open approach towards accepting bureaucratic formulation and perception of the issue at hand. It allowed me to move beyond the definitional aspect of climate change and migration linkage and accept sub-national terminology, understanding and perception of the problem. For example, the term migrant having a negative political connotation in Assam pushes the governments to use a colloquial expression such as ‘flood-victims’ (*Bard Pidit* in Hindi) or untenured farmer (*Kachhi Maati Kisaan*) to describe families displaced due to flood and flood-erosion. At the same time, the approach also presented the dichotomy of accepting someone as ‘*poor helpless victim of displacement*’ while

asserting at the same time '*the dynamic nature of the migrant community*', often within the same administrative complex.

As the concern of the thesis is to analyse climate migration governance from a public policy perspective and examine why there are inconsistent protection outcomes, the first step is to identify a clear research question. For the present study, the research question is: *What factors influence the variations in the protection offered by the government to climate change migrants?* The primary question can be unpacked into sub-questions that seek to answer (1) the technical question – what are the strategies adopted by governmental institutions to respond to climate change-induced migration? - and (2) the analytical question – why is there a difference in the degree of protection offered to climate change migrants? These questions contribute towards deepening and widening of the existing discourse on climate change induced migration by focusing on how the governments respond to existing cases of climate migration.

### **3.2: Geographical description of the study site**

Of the reasons explained in section 1.3 and 2.5 earlier I choose Assam as the area for my field inquiry. Within Assam there are two river basins – the Brahmaputra River basin and the Baska river basin. I choose the Brahmaputra river basin due to its morphology, geographical vulnerability and higher plurality of demographic and political interests. Brahmaputra is a sedimentary basin that has unstable banks and high episodes of river braiding.<sup>14</sup> The river morphology is characterised by a shallow basin with plenty of tectonic activity and frequent formation of river islands. The river islands though highly fragile are also very fertile in nature and are inhabited by a floating population. Some of the larger river islands like Majuli and Bhashayani Char have survived over decades and have housed permanent settlers in their centres. The people living on the river banks and island banks regularly migrate to nearby village centres for safety during the floods or to diversify their livelihood opportunities.

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<sup>14</sup> River braiding is a natural characteristic of some rivers that have lots of small channels and continually split and join. These are called braided rivers. Braided rivers are wide but shallow and are formed on fairly steep slopes with easily erodible river banks.

### *District Selection*

District is the smallest comprehensive unit of administration in India. Districts are divided into Revenue circles (for purpose of revenue collection), Developmental Blocks (for purpose of project implementation), *Panchayat* (to democratize decision making and implementation agenda), and *Sadar* (for the purpose of civil adjudication). The revenue circles, blocks and panchayats are usually overlapping and inconsistent in their jurisdictional boundaries. For example two revenue circles may share certain villages under a *Panchayat* or Developmental Block. Or an *Anchalik Panchayat* can be spread across two different (at times partial) development blocks. However, a district is a consistent jurisdictional entity with supervisory and managerial power of all the revenue circles, blocks, panchayats and sadar divisions within its geographical boundary (GoI, n.d.; Administrative Reform Commission of India, 2009). The districts are headed by District Commissioners (also called Deputy Commissioners in some states).<sup>15</sup> The District Commissioners (hereinafter DC) are members of either the State Civil Service (elevated usually towards the end of their State Civil Service career to the position of Deputy Commissioner) or they are recruited through Indian Administrative Service (IAS) cohort and elevated in their 3<sup>rd</sup> or 4<sup>th</sup> year of service as Deputy Commissioner. The State selection cadre is open only to the citizens who have a domicile in the state, and thus state cadre Deputy commissioners are usually those born and raised in the state. While the Deputy Commissioners appointed through the IAS cohort can be an Indian citizen from any state of India. The Deputy commissioners are in charge of planning, monitoring, supervision and adjudication of developmental policies. They are also responsible for delegated decision making by framing rules, procedures, and by-laws in delivering legislative mandates (Constitution of India, Art. 253-264).

I selected eight districts based on multiple criteria such as geographical and demographic parity, religious and ethnic distribution across the State. The district selection was also influenced by the personal profiles of the deputy commissioner of the districts. The intention was to maintain a parity between administrative division

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<sup>15</sup> Increasingly Deputy Commissioners are being referred to as Chief Executive Officer, especially in connection to new institutional projects like Smart Cities or Digital India project.

governed by officers appointed through the all India Administrative Service (IAS) cohort and those promoted from the State Civil Service Cohort. This was done to understand if the IAS officers exhibit a pan-Indian outlook against a (assumed) state-centred outlook of the state personals. The table below provides an overview of selected districts.

Two changes were made during the field work from the initial plan - The district of Barpet was replaced by Chirrang due to the non-availability of the D.C. in Barpeta and the district of Bongaigaon was added (as the 8<sup>th</sup> district) due to internal migration of the Rajbangsi Assamese community from Chirrang to Bongaigaon. An administrative change occurred during the field work. The Revenue circle of South Salmara in Dhubri District was converted into a full district of South Salmara-Manikchar vide notification no. GAG (B) 27/2005/262 of 15<sup>th</sup> January 2016. And Majuli which was a revenue circle of Jorhat district during the time of this field work was also converted into full district on 16<sup>th</sup> August 2016 by notification no. GAG (B) 27/2005/PWI/59. However, due to administrative overlap in creation of a new district and its operationalisation the changes do not cause a deviation in the result.

All the selected districts exhibit different levels of flood vulnerability and resilience capacities. In the remainder of this section I reflect upon the aggregated flood vulnerability and inundation of the eight selected districts by using flood vulnerability maps generated from Bhuvan GIS software using Flood Hazard data for the State of Assam. The Bhuvan software provides a pre-populated map data which was collected and aggregated by the National Remote Sensing Centre of the Indian Space Research Organisation. I combine the aggregated map data with qualitative explanation of the district vulnerability recorded during my own survey of the districts.

**Table 4: District Overview**

District	Deputy Commissioner profile	Total popul. (million) (2011 census)	Religious composition (%)			Ethnic composition	
			Hin	Mus.	Ors.	ST (%)	Primary languages
<b>Dhemaji</b>	Mr. Victor Carpenter. Elevated to DC office from State Cadre. Originally from Khasi Garo hill region of Assam State. Retired from service in 2017	0.68	92	5	3	47	Assamese, Mishing, Bodo, Bengali
<b>Jorhat</b>	Mr. Vishal Solanki, IAS. From Maharashtra State assigned to Assam cadre. Mr. Solanki was transferred as Secretary to the Chief Minister in 2016 and in 2017 his request for deputation in home state of Maharashtra was approved	1.09	96	2	2	13	Assamese, Hindi
<b>Morigaon</b>	Mr. Rakesh Kumar, IAS Originally from Haryana. In 2016 was transferred on a lateral position in state secretariat. In 2017 was allowed deputation in Union Territory Cadre on marriage grounds	0.96	47	53	0	14	Assamese, Bengali, Hindi, Urdu dialectical



District	Deputy Commissioner profile	Total popul. (million) (2011 census)	Religious composition (%)			Ethnic composition	
			Hin	Mus.	Ors.	ST (%)	Primary languages
<b>Kamrup Metro</b>	Mr.M Angamuthu, IAS. Originally from Tamil Nadu. In 2018 transferred laterally into secretarial department	1.26	85	12	3	6	Assamese, Hindi, Bengali
<b>Chirrang</b>	Mr. Rupak Majumdar, ACS. Originally from Assam. In 2016 was transferred to secretarial position in Dispur	0.48	67	23	10	37	Assamese, Bodo
<b>Bongaigaon</b>	Mr. Bishwajith Pegu, IAS. Originally from Dhemaji district of Assam.	0.73	49	50	1	3	Assamese, Bengali, Hindi, Bodo
<b>Goalpara</b>	Mr. VKV Srinivasan, IAS. Originally from Andhra Pradesh. On Deputation to Central Ministry of Health since 2016	1.01	34	58	8	11	Assamese, Garo,Rabha, Bengali.
<b>Dhubri</b>	Mr. Nazirul Islam, ACS. Originally from lower Assam region. In 2017 retired from service	1.95	20	80	0	14	Bengali, Assamese, Hindi

Source: Census, 2011; Department of Personnel, GoI

***Legend explanation for the maps***

The flood hazard atlas aggregates satellite data over a period of 18 year (1998 to 2015) by extracting flood inundation imagery and layering them together to provide an aggregated image. Each layer represents maximum inundation caused in a one-year period. Based on the returning period of flood and internal variability of the flood inundation a hazard index was created which maps the whole state into five flood zones – very low, low intensity, moderate, high and very high intensity (National Remote Sensing Center, ISRO, 2016). The following table provides a detail of Flood hazard classification as used in the flood hazard maps:

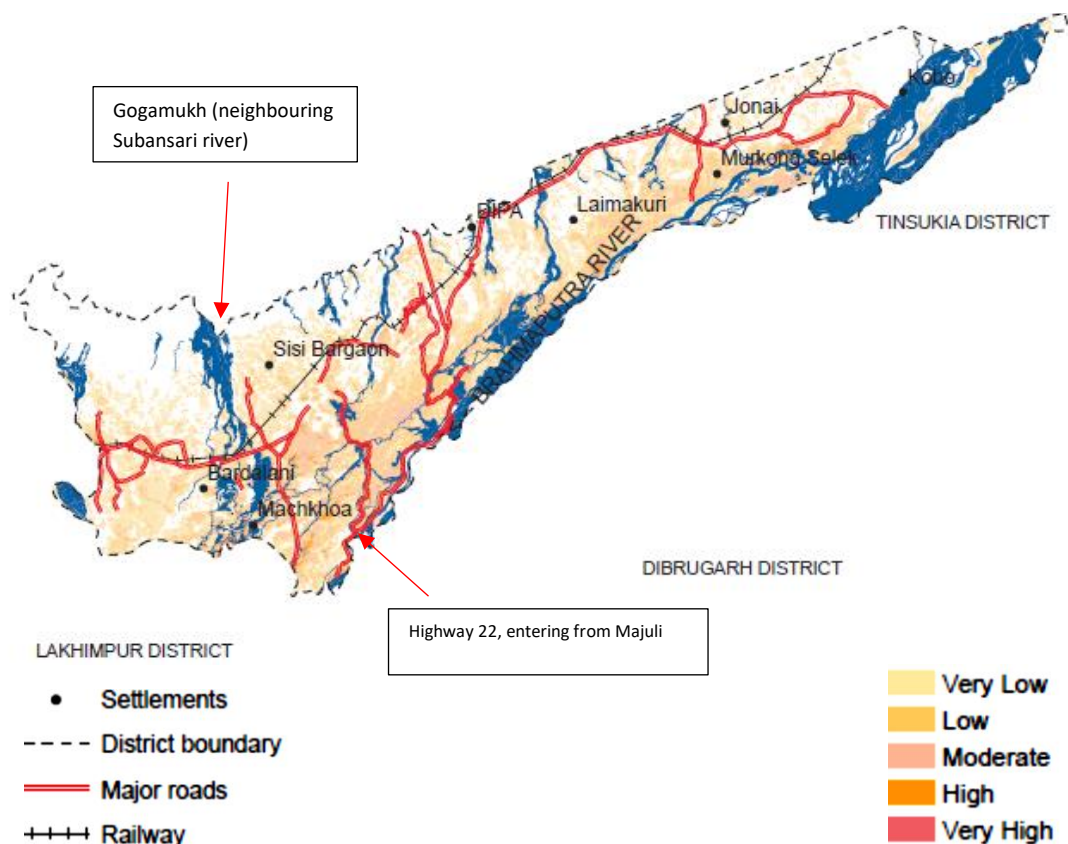
**Table 5: Flood Hazard Classification**

<b>Vulnerability</b>	<b>Number of years the area was subjected to flood inundation between 1998 and 2015</b>
<b>Very low</b>	1 – 4 times (in a period of 18 years)
<b>Low</b>	5 – 8 times
<b>Moderate</b>	9 – 12 times
<b>High</b>	13 – 15 times
<b>Very High</b>	16 – 18 times (almost every year)

### *Dhemaji*

The district of Dhemaji exhibit a zone I flood ranking. 46% of the total land area in the district is susceptible to frequent episodes of flood. *Chang ghar* (raised houses) are built on bamboo silts throughout the district as a response towards annual inundation. Traditional housing architecture of the district is known to enhance the flood resilience of the inhabitants. The following map represent the aggregated flood vulnerability of Dhemaji. It is worth noting that there is one national highway and a wide-gauge train line connecting Dhemaji to the rest of Assam. The national highway no. 52 passes through Gogamukh in northern part of the Subansari river; the state highway 22 joins Dhemaji district to Jorhat via the Majuli island. And the train line passes through the middle of the Subansari river as shown in the map. Both the highways and the rail-route are highly prone to flood inundation, flood damage, and erosion that limits the accessibility to Dhemaji.

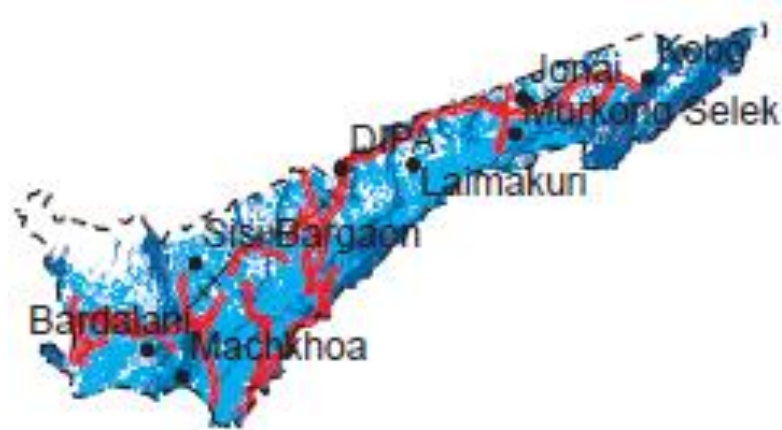
**Map 4: Aggregated Flood Vulnerability Index, Dhemaji**



In terms of absolute aggregated vulnerability of the district the Assam Flood Atlas has estimated 36 villages with a high to very high flood vulnerability, 63 villages are classified

as moderate flood hazard risk, and 159 villages exhibit a low to very low vulnerability on flood hazard. The Map 2b shows the total flood inundation in Dhemaji District during peak flood.

**Map 4b: Flood Inundation Map, Dhemaji**

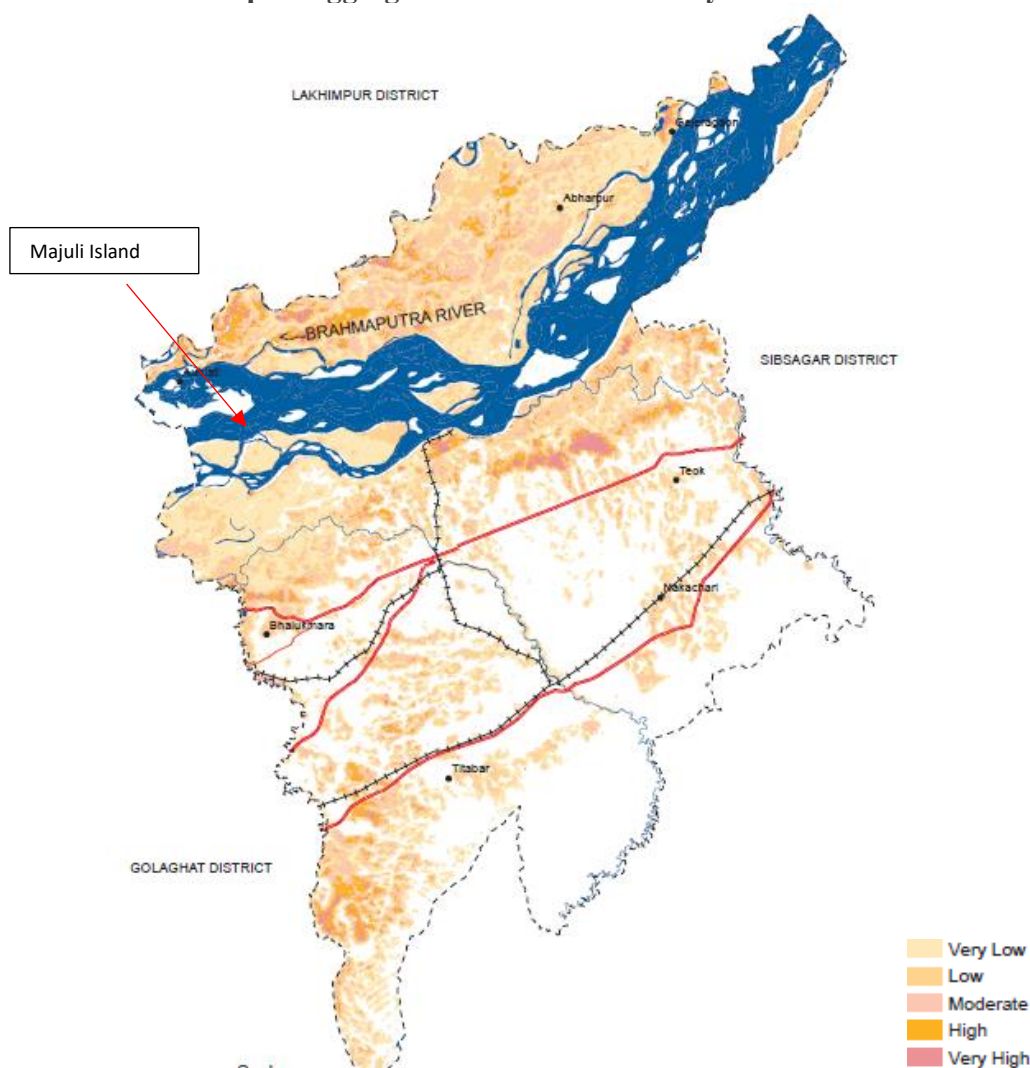


*Source Map 4 and 4b: Flood Hazard Atlas of Assam, 2016 (Maps are not to scale)*

### *Jorhat*

The district of Jorhat is one of the oldest trading metropolis centre in the north-east of India. The district is structurally more advanced compared to other districts of Assam and boast a thriving education and cultural scene. Jorhat has also been home to few of the famous north-eastern political thinkers, freedom fighters, poets, and artist. The (now previous) Chief Minister of the State (Governing from 2002-2016) Shri Tarun Gogoi is from Jorhat and represents the Titabar constituency in the district. While the current Chief Minister Sarbanand Sonowal also hails from the Majuli island which was until 2017 a part of Jorhat District. Despite its flood vulnerability, Jorhat due to its continued importance as a trading centre is one of the migrant-receiving region in this study. The map below depicts the aggregated vulnerability of the district

**Map 5: Aggregated Flood Vulnerability of Jorhat District**



The Flood Hazard Atlas of 2011, list 109 villages lying in a high to very high Flood vulnerability index. A key concern for the Jorhat area is the complete inundation of Majuli Island (A UNESCO site) and related erosion leading to loss of territory, biodiversity and culture. Majuli Island has over 65 fully functional *Sutaras* (old-style cultural houses representing different ethnic communities), it is estimated that at the current rate of inundation and erosion 43 of the historic *Sutaras* can be wiped out of their existence causing a loss of history and culture. The second major concern of the district is the continued survival of biodiversity in the Kaziranga National Park which is a reserved forest area. The map below exhibits peak flood inundation in the district.

**Map 5b: Total Inundation Map, Jorhat**



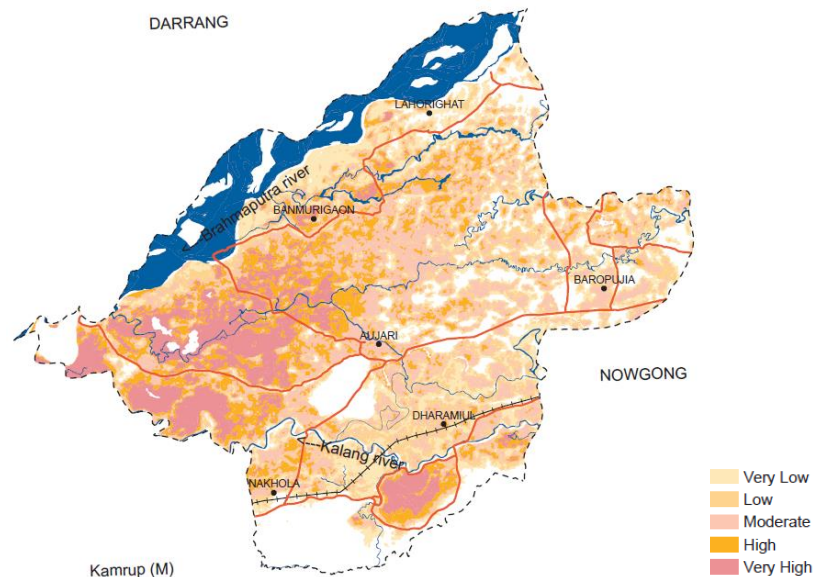
*Source Map 5 and 5b: Flood Hazard Atlas, Assam, 2016 (maps are not to scale)*



### *Morigaon*

District of Morigaon is one of the most severely effected districts in Assam with 1/3<sup>rd</sup> of the total land area of the district falling into high to very high flood vulnerability index. Flood erosion in the Lahorighat Revenue Circle in the district has affected approximately 108 villages leading to a critical problem of forced displacement and unauthorized land-grabbing in the district and its surrounding regions.

**Map 6: Aggregated Flood Vulnerability, Morigaon District**



The National Highway connecting Marigaon to Kamrup Metro is a spectacle of illegal land-occupation by households which were displaced due to erosion and found little to no state assistance in relocation. The Map 4b below shows the extent of peak inundation in the district.

**Map 6b: Annual Flood Inundation, Morigaon**

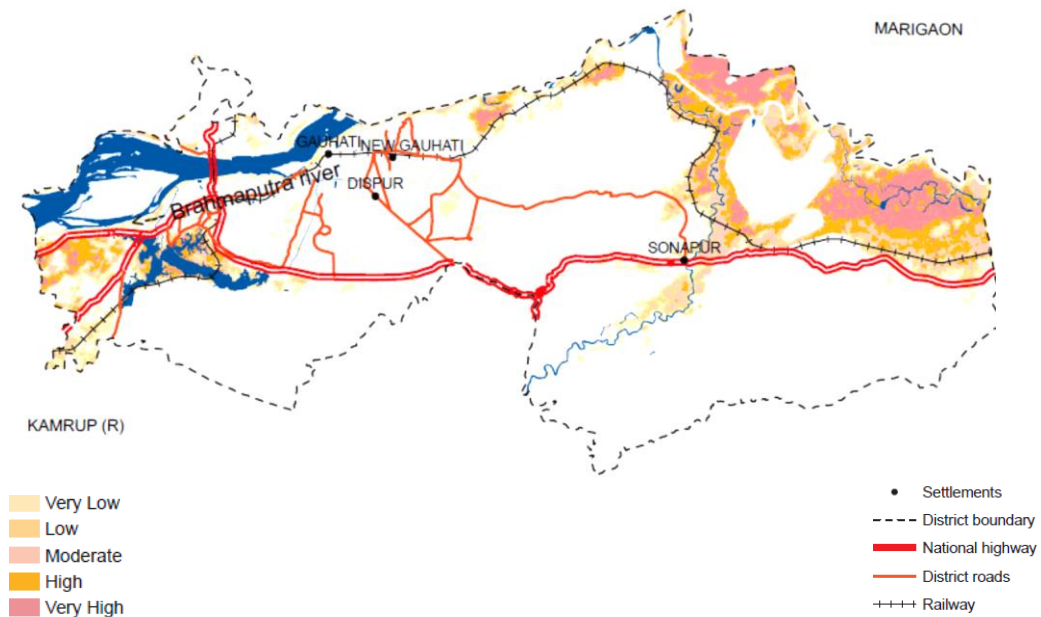


Source Map 6 and 6b: Flood Hazard Atlas, Assam 2016

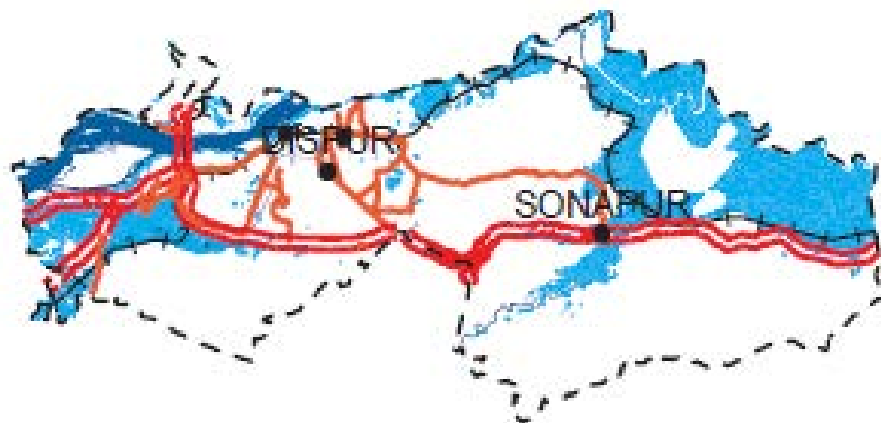
***Kamrup Metro***

Kamrup Metro is primarily an Urban district hosting the Guwahati Municipal Corporation (the only designated Municipality in Assam), the state capital at Dispur, and an upcoming Smart City under the phase I of the Smart City Development Plan of the Indian Central Government. Being Urban in nature the district serves as a migrant host district for not only intra-district migrations within Assam but also for incoming migrants from neighbouring states of Arunachal, Meghalaya, Tripura and Nagaland. The flood atlas has zoned most of Kamrup Metro as falling either in high vulnerability or low vulnerability. This is mainly because of poor drainage system that is unable to cope with the incessant rain and occasional river run-off during the monsoon season.

**Map 7: Aggregated Flood Vulnerability, Kamrup Metro District**



**Map 7b: Annual Flood Inundation, Kamrup Metro**



*Source Maps 7 and 7b: Flood Hazard Atlas of Assam, 2016*

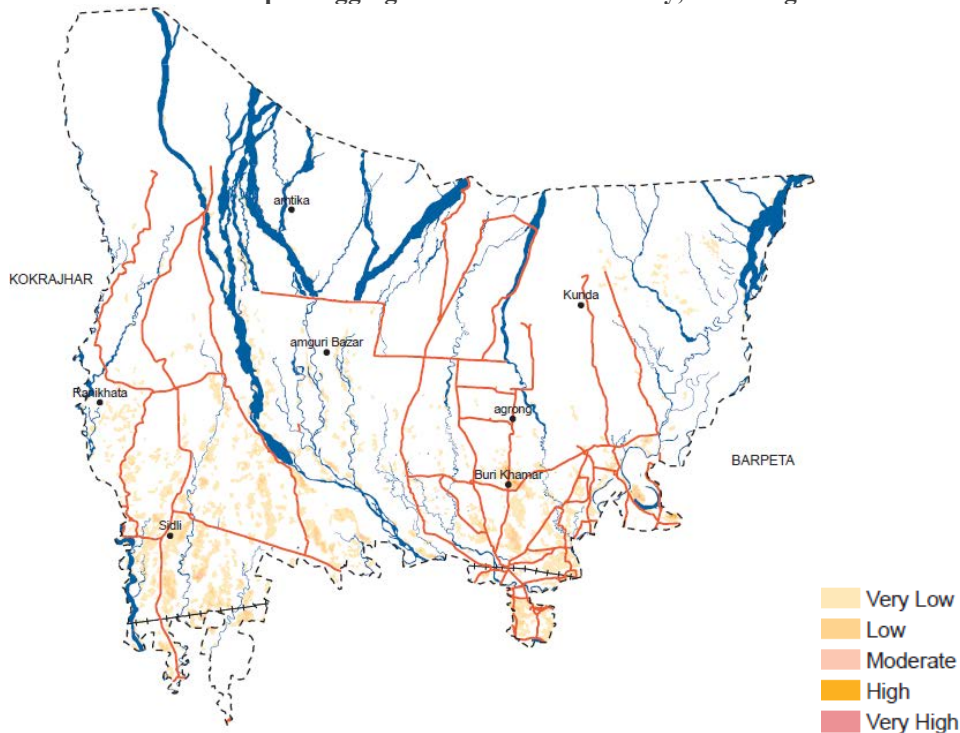


### *Chirrang*

Chirang is one of the few districts in Assam without a very high flood vulnerability zonation. The district was selected for this study due to its geographical and political nuances. It shares a significant international border with the Kingdom of Bhutan in the north and it is part of the Bodoland Territorial Area District (BTDA) along with the districts of Baska, Udalgiri, Barpeta and Kokrajhar. The district was selected in place of Barpeta (where the DC was unavailable) to understand the political dynamic autonomous tribal movements play in effecting the level of protection a sub-state administration can provide to migrants. Hence it is directly relevant to understand how political factors weigh-in on decision making of the executive body. The administrative subject is Chirang is shared between BTDA and the District Commissioner's Office. The BAC handles the revenue and land management, while the DC officer is in charge of implementing state and central government plan agendas.

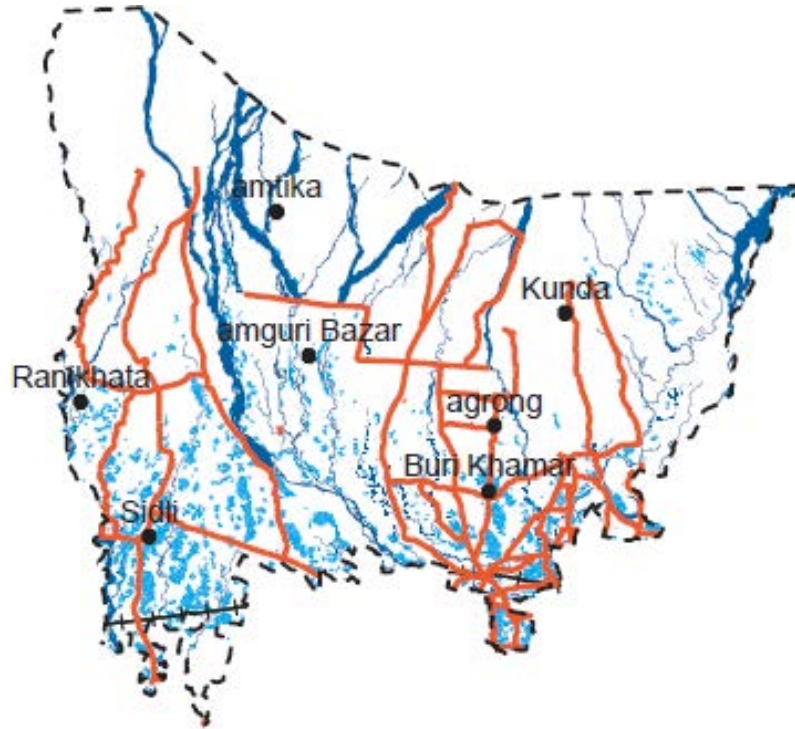
The district despite an elaborate system of river tributaries, does not reflect high flood vulnerability but instead shows out-migrations motivated by the ethnic conflicts and lack of livelihood opportunities.

**Map 8: Aggregated Flood Vulnerability, Chirrang District**



The following map shows the flood inundation during peak flood. As can be seen inundation in Chirrang is not as extensive as in other districts of Assam, this is because of the hill top-ology which allows easy run-away of the rain water during monsoon season.

Map 8b: Flood Inundation, Chirrang District

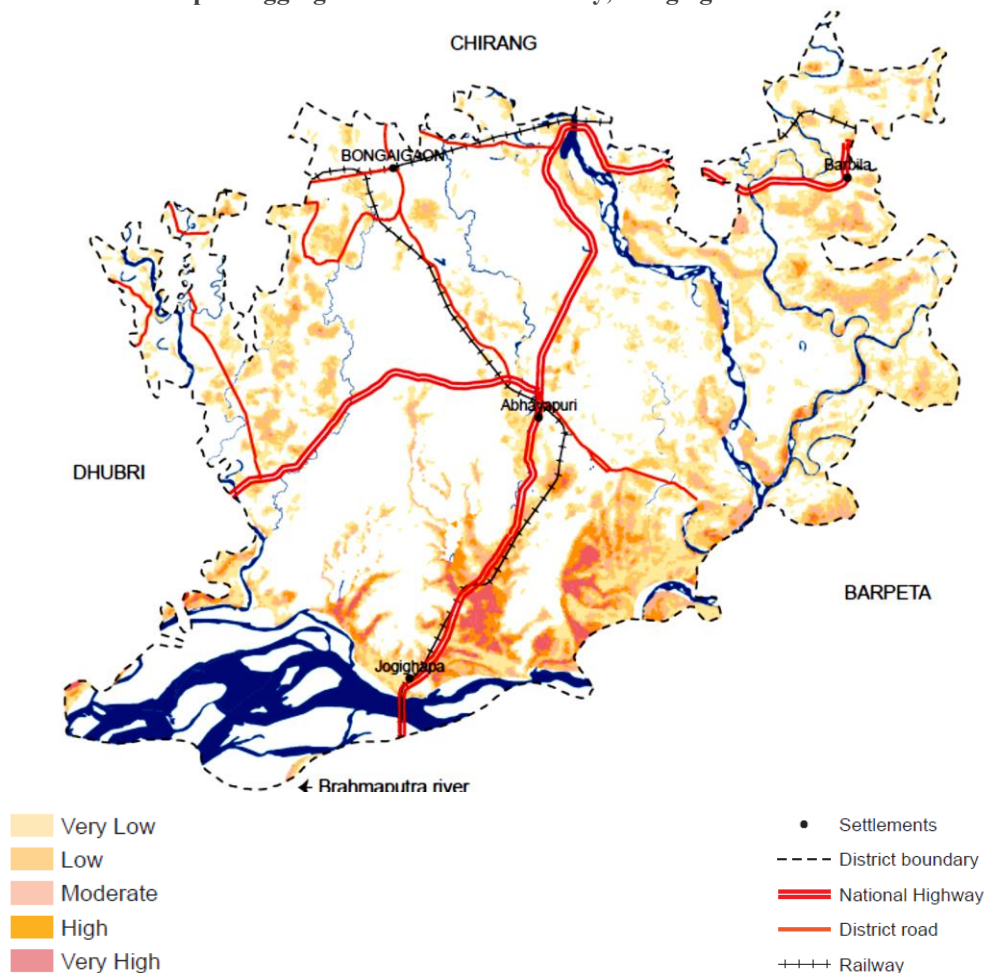


Source Maps 8 and 8b: Flood Hazard Atlas for Assam, 2016

### *Bongaigaon*

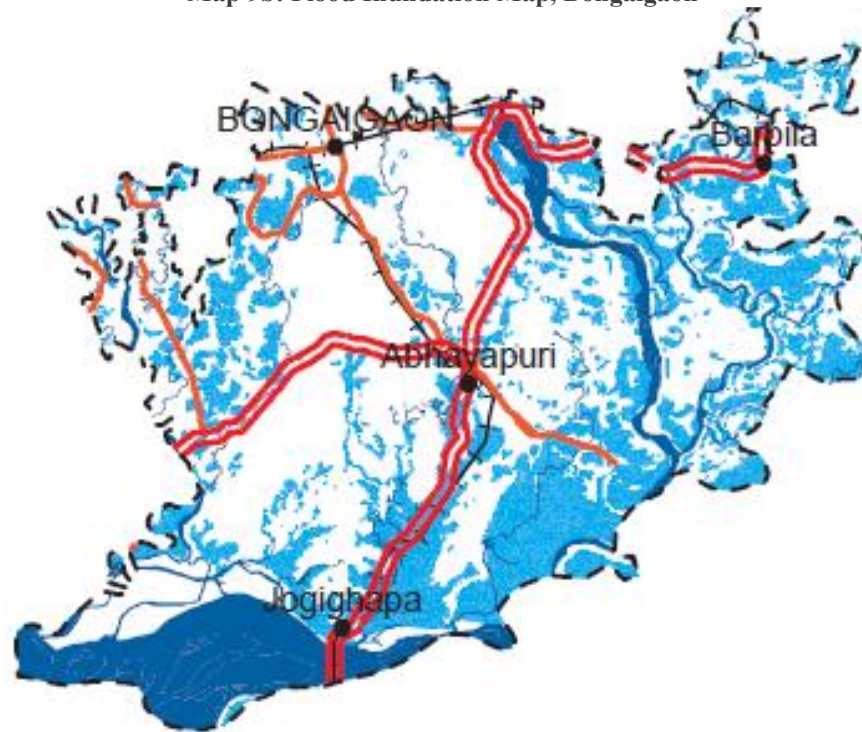
District of Bongaigaon was a later addition to the list of districts selected for this study. The addition was partly influenced by the decision to replace Barpeta and study Chirrang instead. Bongaigaon like Kamrup Metro and Jorhat host a large urban population. Due to oil refining process of Indian Oil and Bharat Petroleum Limited situated in the district, there is a wide base of refinery jobs in Bongaigaon town. The district is primarily a migrant receiving district especially for migrants arriving from Chirang district. The ethnic violence in BTAD in 2012 followed by incessant floods in the same year, led to displacement of communities in Chirrang which are camped in rehabilitation shelters located in Bongaigaon district (Deputy Commissioner Bongaigaon, 2016; Also see sec. 4.1.3 pg 103-105 of the thesis). In terms of flood vulnerability in Bongaigaon there are pockets of high to very highly vulnerable villages, in Boitamari and Srijangram Revenue Circles situated across the Brahmaputra river.

Map 9: Aggregated Flood Vulnerability, Bongaigaon District



The vulnerability is particularly high for the river island villages (*char villages*) which face complete submergence during peak flood. However, due to the presence of relatively elaborate and well-maintained highway system (necessitated by the transportation need of the crude oil refineries in the region) there is a continued possibility to move in and out of the district during disasters.

Map 9b: Flood Inundation Map, Bongaigaon

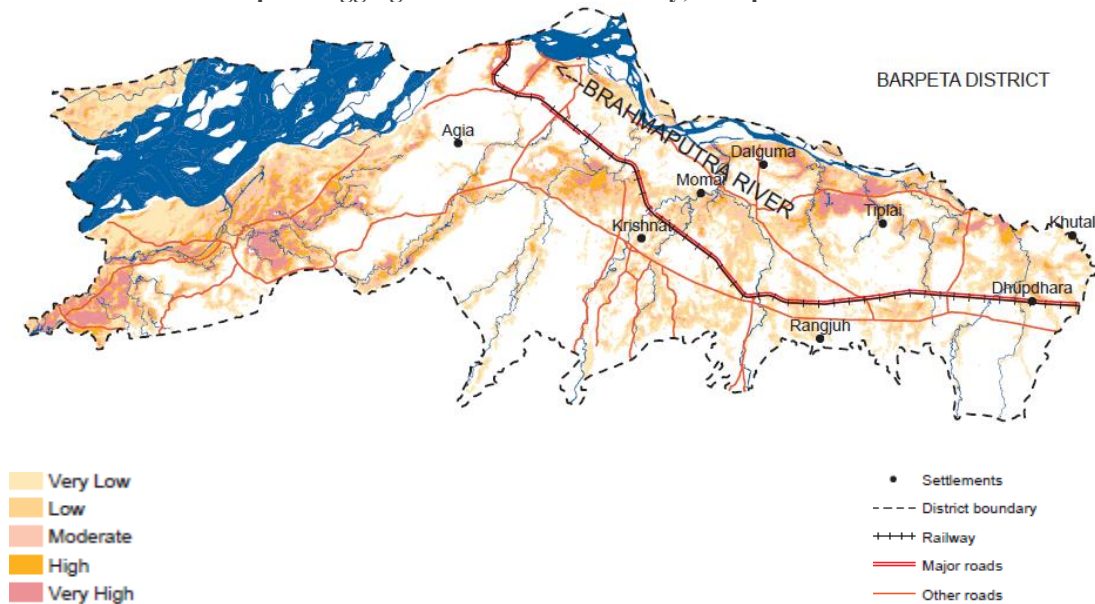


Source Map 9 and 9b: *Flood Hazard Atlas of Assam, 2016*

### Goalpara

Goalpara like Jorhat is one of the old districts with a continued political and trade significance. The district shares an inter-state border with the state of Meghalaya and witness mixed migrations motivated due to lack of employment and those motivated by ethnic conflicts from within the district and from the Kasi Garo Hill region of Meghalaya. All the revenue circles exhibit pockets of high to very high flood vulnerability.

Map 10: Aggregated Flood Vulnerability, Goalpara District

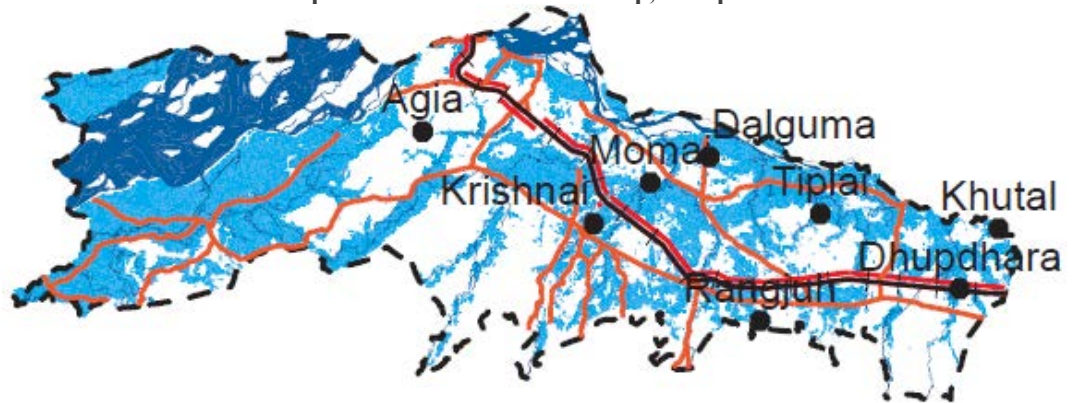


The district has a mixed ethnic and religious composition, a relatively high index of ethnically motivated violence. The violence in the district also have an inter-state spill-over effect with the State of Meghalaya. The Deputy Commissioner of the state consider the violence to be primarily motivated due to land-rights and un-resolved issues of territoriality during the division of Assam and Meghalaya states in 1972 (Deputy Commissioner Goalpara, 2016).



There are 154 villages classified as having high to very high flood vulnerability and the peak flood inundation map exhibit near complete submergence in the eastern region.

Map 10b: Flood Inundation Map, Goalpara



Source Map 10 and 10b: Flood Hazard Atlas of Assam, 2016

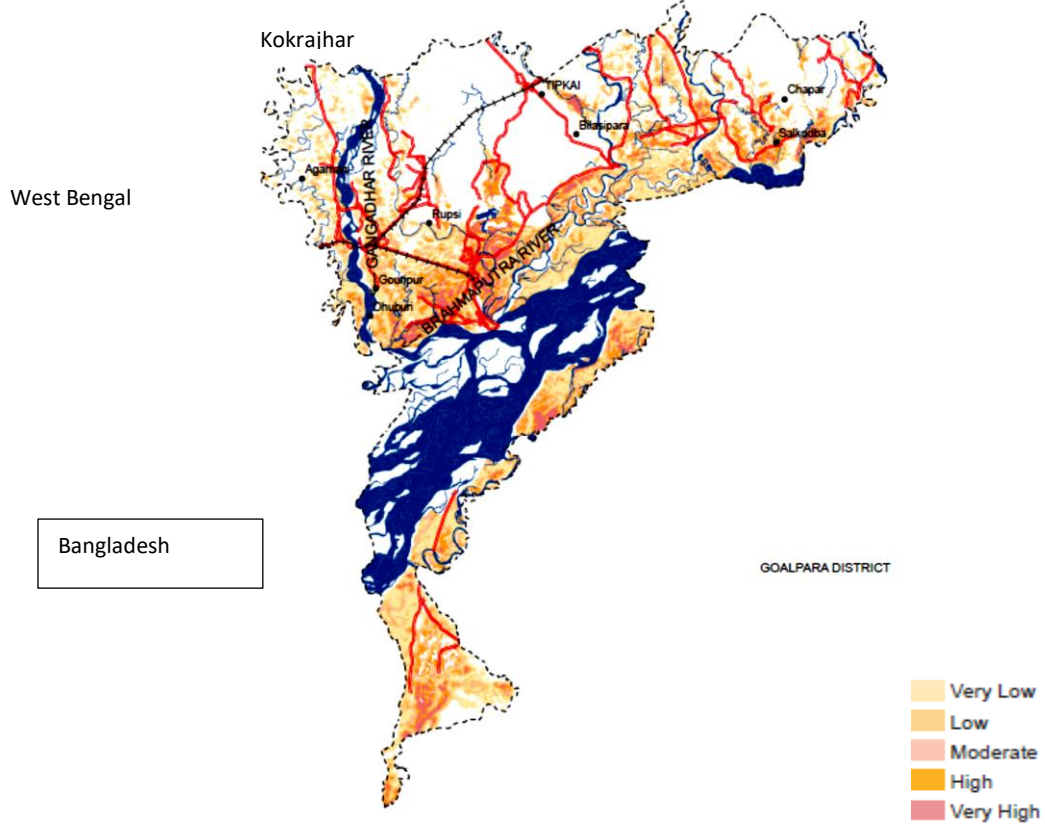
### *Dhubri*

Dhubri is a historically, politically and strategically important district in Assam. In British India the district housed one of the busiest port after Calcutta, a military use airport base (during the world war II) and a medium gauge railway line connecting north-eastern provinces to Calcutta. Post-independence Dhubri became strategically important due to its international border with East Pakistan (now Bangladesh). Historically Dhubri has received waves of in-coming migrants during partition of East and West Bengal, partition of India and later during Bangladesh Independence movement. Since 2012 the border between Dhubri and Bangladesh is completely guarded through erecting of fences, installation of flood-lights and a large presence of Central Reserve Police Force and Border Security Forces. It remains to be an important trading route between India and Bangladesh. The National Highway 31 connects the state of Assam to the rest of India via Dhubri. The only other district connecting Assam to rest of India is Kokrajhar which reals under episodes of insurgency and separatist movement, thus elevating the relative strategic importance of Dhubri.

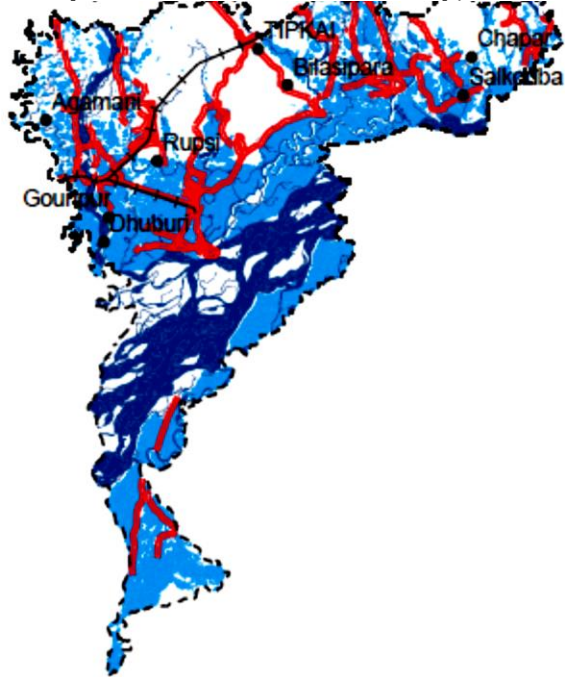
Due to a large presence of riverine islands in the lower Brahmaputra valley the district is particularly vulnerable to floods. Especially the revenue circle of South Salmara and Manikchar (now re constituted into a new district) show heightened susceptibility to flood and flood erosion. There are 202 villages classified as falling in the high to very high flood vulnerability zone. Majority of these villages are riverine islands (*char villages*). The peak flood inundation map reveals complete submergence of both north and south-banks while also highlighting the presence of few large river islands which continue to survive due to their elevation.

Dhubri also allegedly continue to experience international human trafficking and illegal migrations due to a riverine border with Bangladesh which remains to be unfenced. The relatively high Muslim and Bengali speaking population of the district further strengthen the narrative of illegal migration flows. The river islands in Dhurbi are susceptible to floating away across the international border and require structural measures to avoid loss of territory.

Map 11: Aggregated Flood Vulnerability, Dhubri District



Map 11b: Flood Inundation Map, Dhubri



Source Map 11 and 11b: Flood Hazard Atlas of Assam, 2016



### 3.3: Contextual frameworks

There are four thematic areas in which the response to chronic flood disasters and disaster-induced migration and displacement is evaluated in this thesis – Enabling Policies, Mitigating Policies, Relief Policies and Compensatory Policies. Under each of these thematic policy areas, there is either central or state level legislation that provides an overall mandate for administration. For example, in the case of enabling policies, there is the constitutional mandate, which obligates the state to respect and protect citizens' right to voluntary movement and residence within the Indian borders. In contrast, legislation such as the Mahatma Gandhi National Rural Employment Guarantee Act places a positive responsibility on the state to generate 100 days of guaranteed employment for every person demanding work in rural India, thereby allowing in-suit adaptation and reducing the need for rural-urban relocation. In the mitigating policies, the general five-year plan document has been the source of administrative guidelines for affirmative state action for building water management infrastructure that will help mitigate flood disasters and prevent forced displacement due to flood erosion. The policy context of Relief analyses the deliverance of the Flood Relief Policy (drawn from the Flood Relief Manual of the State of Assam) and the Disaster Management Policy (drawn from the Disaster Management Act). The Relief policies are needed to provide urgent humanitarian response to those who are displaced due to flood-inundation and would require temporary shelter and support during the duration of the disaster. And finally, the section on Compensation Policy would cover the Chief Minister's Special Assistance Fund for the Erosion Affected Families, and the Indira Awas Yojana Scheme of the Central government of India. Both these policies focus towards providing compensation and assistance to households which have lost their lands due to flood-erosion and have thus become homeless (or landless).

Table 6 provides an overview of the policies analysed in this thesis, their arrangement in the thematic areas and their perceived synergy with climate migration governance.

Several factors such as the bureaucratic perception, institutional capacity, political pressures, and demography can influence the outcomes of these policies. In section 2.2

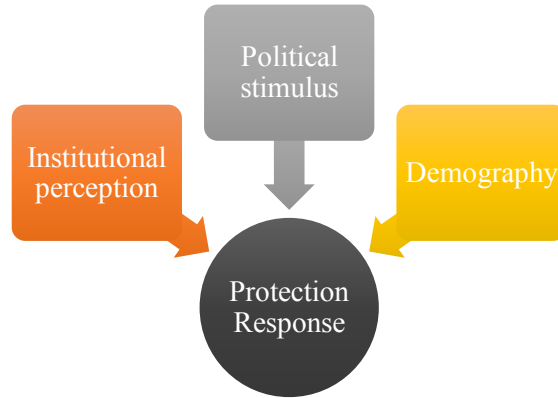
and 2.3 of this thesis, I discussed how the existing barriers to climate adaptation, disaster risk reduction, and the framing of climate change migration could substantially affect the response a climate change migrant can expect from the state.

**Table 6: Existing synergies with Climate Change Migration Governance**

Policy type	Legislation/Mandate	Source	Synergy with Climate Migration Governance
<b>Enabling Policy</b>	Article 19 Constitution of India	Constituent Assembly	Enables voluntary adaptive migration
	Mahatma Gandhi National Rural Employment Guarantee Act	Central Government	Provides diversified livelihood option and allow adaptation
<b>Mitigatory Policy</b>	Infrastructure Development Agenda renewed through the National Planning Commission (now NITI Ayog) and State Planning Commission	Central Government and State Government Through various Departments	Reduces instances of forced displacement by creating resilient infrastructure
<b>Relief Policy</b>	Flood Relief Manual, 1976	The State of Assam	Provides essential relief toward displacement caused due to sudden-onset disasters
	Disaster Management Act 2005	Central Government	
	Chief Minister's Policy on ex-gratia support to flood victims	State Government	
<b>Compensation Policy</b>	Relief and Rehabilitation Policy, 2003 r/w Land Acquisition (Amend.) Act 2014	Central Government	Provides compensation to communities permanently displaced due to loss of habitat
	Indira Awas Yojana	Central Government	
	CM's Special Policy for Erosion Affected Families	State Government	

For this study, I adopted three independent variables that may have a substantial impact on the policy outcomes. I define them as Institutional Perception, Political stimulus and Demography.

Figure 1: Variables to influence protection response



### 3.4: Variable Explanation

The dependent variable for this study is the *protection response offered to climate change migrants*. It is worth remembering that climate change migration, being a wicked problem, can never have a complete solution. Due to the contested nature of climate change migration and the general inability to decide who is a climate change migrant, the solutions can only be determined as a progressive approach towards resolving the wicked problem (section 2.3). To influence the outcome of the response, three variables are employed for the analysis.

**Institutional perception:** The institution in this thesis refers to the executive branch of the government that implements legislated policies and agendas. Public institutions especially bureaucracies are characterised by a high degree of resilience towards change (Scott, 1996). The neo-classical theory of institutional organisation views institutional actors to have a very limited agency in deciding organisational agenda and implementation strategy (Burrell & Morgan, 1979; Astley & Van de Ven, 1983). The institutional practices, particularly of everyday governance are unvaried and result in an organisation morphism through space and time (Meyer, et al., 1983; Scott & Meyer, 1984; Tolbert & Zucker, 1983).

Such conception of lack of agency of organisation actors and banality of public administration, however, became problematic when institutional theorists started tackling the issue of institutional change (Westenholz, et al., 2006; Toboso, 2001; Helmsing, 2013; Kuks, 2004). Institutional theorists have highlighted the role that individual actors play in institutional change. Lawrence and Roy (2006), deal with the relationship between agency and institution and suggest that actors can purposively behave either to maintain or to transform existing institutions. The new perspective in institutional theory considers institutional actors to be creative, autonomous, proactive, and self-directed (Yorozu, 2017; Sarma, 2013; Phillips & Lawrence, 2012; Smets, et al., 2017; Maletzky, 2017). The new institutionalism research demonstrates that policies are adopted, and institutions are created (or revamped) when elite actors with sufficient resources see an opportunity to realise interests that they value highly (DiMaggio, 1988; DiMaggio, 1988a; Battilana, et al., 2009). The importance of personal value and agency is also shown to be highly relevant in stages of ‘*Agenda setting*’ and ‘*Agenda framing*’ (Princen, 2011; Dery, 2000; Jones & Baumgartner, 2004; Peake, 2001; Gandy, 2015; Colombini, et al., 2016; Howard, 2015). For a problem to attract policy solution, it is necessary that the elite actors must view the problem as one they rank highly on their public policy concern matrix. In this context institutional perception of climate change related migration becomes relevant.

Institutional perception as a variable in the study reflects the attitude and concern elite officers of Indian bureaucracy attach to climate change related movements. How they understand it, and how they define it. Falling back on my discussion in chapter 2, I stated that I treat climate change migration as a wicked problem, which means that there can be multiple perceptions, definitions and framing and that these perceptions, understandings and framing will directly reflect the policy agenda undertaken to manage climate change related migration. Based on available literature and initial interviews with the Central government actors it also came to light that the Central government of India views climate change migration as a development issue. But do the sub-state actors share the same definition of climate change migration, and equate it to a developmental problem? Or does the state government which is a border state and embroiled in controversies of managing illegal cross-border migration attach

security narrative to climate change migration? And above all how does the framing of elite actors influence the policy choices they make to protect those forced to migrate due to climate change related disasters.

My second independent variable is the **Political Stimulus**. It is naïve to believe that administration acts in a political vacuum; despite the separation of powers and a robust sense of accountability regarding the constitutional mandate of non-discrimination, administrative actors are susceptible to political narratives. The influence of the political narrative on the value judgements of administrators is often treated as a paradox of bounded rationality, where the actor is influenced in their thought and action by the larger social and political circumstances they work in.

The organisational theory of governance treats street-level actors as mechanically functional beings who are fully capable of efficiently and objectively delivering the policy agenda framed by the elite bureaucracy, and broken down into specific routine tasks, I have reason to believe that this is not true. Borrowing from the theory regarding street-level actors in policy deliverance, I want to understand if the deliverance of policy components by the street-level actors is in fact objective, or if it is influenced by a bounded sense of rationality (Skidd, 1992; Ortega & Braun, 2011; Katsikopoulos, 2014; Puranam, et al., 2015).

Migration policies in India and especially in Assam are strongly affected by the political narrative surrounding religion and ethnicity. Religion plays an important part in guaranteeing the rights and protection of the people and can not only determine the response towards their protection needs but can also provide an overview of who is vulnerable to displacement.

At the national level, India takes pride in being a land of diversity and cherishes its ethnic plurality. At the state level, there have been increased instances of ethnic clashes and violence against minority groups. States in the north-east of India have witnessed ethnic conflict since the pre-independence days over land-use rights and forestry rights. It is likely that the district administrators will be more willing to provide support

and resettlement to people belonging to major ethnic groups or those who are at the frontline of ethnic politics.

Since government entities cannot discriminate on the grounds of religion, the government adopts a formal façade of equality in its dealings. However, looking beyond this façade is possible by way of analytical reasoning and critical thinking. The influence of the variable is triangulated in the study by adopting multiple and corroborative data sources. The next section on the research design explains the data sources used in this study.

Finally, **demography** is an independent variable. It can be seen in earlier studies on social vulnerability to climate change and migration due to climate change that specific groups of people like Hispanics, blacks, the aged, women and children are more likely to be trapped in a collapsed eco-system. Demographic factors are essential in determining the vulnerability of a population occupying a delicate or disaster-prone area. The demography of the victims also strongly impacts on how the institution perceives an issue, how it functions, and how seriously it takes its outcomes. Demographic groups that are unlikely to unite and rely on their rights are more likely to face adverse and restrictive migration policies.

### **3.5: Research Design**

This study adopted an inductive research model based on a responsive interviewing technique. The reason for using an inductive research method was the necessity arising from the gap in the literature. There is an absence of existing knowledge or theory on how climate-change migration is managed at the local level, particularly in India. The novelty of this study and the absence of theory allowed for creative freedom in discovering what we do not know. Scepticism towards qualitative inductive research of this kind often arises because it may not scientifically present the evidence, it can be too vague and it might involve a case of cherry picking to build arguments. I acknowledge that conducting research where there is no previous research or grounded theory in the study area can be a daunting task, as it provides a vast research space where the researcher may often feel lost and unfocused. However, as Corley & Gioia

(2011) point out in support of such a method, 'advances in knowledge that are too strongly rooted in what we already know delimit what we can know'.

I started with the premise that people working in the state government organisation are 'knowledgeable agents'- they know what they are doing and can explain their thoughts, intentions and actions (Gioia, et al., 2013). The interviews were however carefully guided to cover all of the contextual elements. It is an inherent assumption in the responsive interviewing technique that the participants develop subjective meanings of their experiences; these meanings are varied and multiple. This allowed me to develop a broad understanding of the complexity of the participants' views rather than narrowing the meanings down into a few categories or ideas (Creswell, 2013; Rubin & Rubin, 2011). There was no need to specify the problem and look at it through a binary causal lens; as stated earlier I treated climate change migration as a wicked problem and thus the multiplicity of reasons leading to migration were what made the problem wicked.

I also engaged in group discussions with the migrating community and surveyed some of the vulnerable and erosion-prone areas across the state to pursue an objective assessment of the problem in hand. A few of the interviews were repeated to iterate the findings from the field and develop a deeper understanding of the interviewees' subjective points of view. Such qualitative interviews are also termed topical interviews, and such topical studies help to explore what, when, how, why or with what consequences something happened. The objective here was to work out a coherent explanation by piecing together what different people have said while recognising that each person might have their construction of events.

The districts are the principal administrative units; thus they were the primary stakeholders for this study. The districts are supervised by Deputy Commissioners (D.C.), and the D.C. office is the smallest complete unit of administration in the State. Each D.C. has general responsibility for a wide portfolio, which includes the maintenance of law and order, the administration of jails, supervising land revenue administration including the maintenance of land records, the collection of land

revenue, acting as Revenue officer in cases of disputes arising out of land records, and the management of public lands and properties.

The D.C. oversees development activities including forming policy and implementing strategies on public health, education, social welfare, the welfare of backward classes and minorities. He coordinates various secretarial departments to deliver special economic programmes of the central government aimed at reducing poverty, creating empowerment, livelihood diversification and delivering social security measures to the citizens. In his role as a regulator, the D.C. mandates the regulation and distribution of food and civil supplies, and essential commodities, including price regulation. He oversees excise and prohibition matters, matters relating to stamps and registration, the ceiling and regulation of urban land, the maintenance of vacant land, government loans and schemes for land and agricultural improvement.

The D.C. is responsible for election and citizenship matters, including voter registration, commissioning of the election process, ensuring fair elections and the declaration of results. The D.C. is also responsible for the supervision and proper functioning of local urban bodies and the implementation of various developmental and anti-poverty measures in urban areas; his role also extends to formulating grants for urban centre development.

In situations of disaster, the D.C. acts as the head of the District Disaster Management Authority and oversees the formulation of disaster management strategies and coordinates relief and rehabilitation activities by involving various departments. Apart from these obvious agendas, the D.C. is also in charge of other matters that are not defined under any statute of law, including coordinating the treasury, supervising district budgets, over-seeing land acquisition matters, and acting as a focal point for public grievances.

The Deputy Commissioners are appointed through the Union Public Service cohort of Administrative Officers, which makes them Central government employees rather than State government employees, and the process of their appointment, promotion and termination of services is guided by the Constitutional provisions under Art. 312



to 320 of the Constitution of India. This arrangement ensures a separation of power at the state level and guarantees political non-interference and non-partisan behaviour within their administrative work. Since the reform of the civil services in India, the Deputy Commissioner holds office for a minimum tenure of 3 years, after which they can be transferred to the same or a higher rank within the state or to a deputation to the Central government service.

The Deputy Commissioners, due to their role in formulating, managing and implementing developmental policies, were the key participants in this study. The role of the D.C. office is crucial in providing opportunities for adaptation (enabling policies), coordinating and assisting other departments in regard to structural measures for risk reduction (mitigatory policies), adopting and implementing relief strategies (relief policies), settling land compensation claims, approving rehabilitation grants and allotting loss and damage compensation (compensatory policies).

### *Data Collection*

The participants (interviewees) for the research study were selected to represent those who are authorised to make decisions, adopt functional policies, prioritise executive agendas and implement strategies. For this reason, in every selected district I reached out to the Deputy Commissioner and used the snowball technique to identify and familiarise myself with other responsible officers.

A semi-structured approach was adopted keeping the research context in mind. Due to the inherent flexibility of the responsive interview technique, I kept myself open to accommodate new information, adapt to the actual experiences that the interviewees involved, and adjust to unexpected situations and deal with irrelevant information. A non-confrontational style of interviewing was maintained, which encouraged the interviewee to talk, so that the latter felt comfortable and not alienated. Channels for clarification or re-interviewing were kept open where necessary. I thoroughly recognised that each interviewee as well as myself as the researcher had a distinct set of experiences, a different construction of the meaning of those experiences, and different areas of expertise. Self-reflection and clarification acted as a useful tool in overcoming my own bias and seeing the real picture.

**Table 7: List of Interviews**

Name	Designation	No./type of Interviews
<b>Tarun Gogoi</b>	Chief Minister of Assam	Personal interview
<b>V. K Piepersenia</b>	Chief Secretary	2 Personal interviews
<b>Dr M Angamuthu</b>	D.C. Kamrup M	2 Personal interviews, clarifications through WhatsApp
<b>Rajesh Kumar</b>	D.C. Morigaon	Personal interview
<b>Vishal Solanki</b>	D.C. Jorhat	Brief interview
<b>Victor Carpenter</b>	D.C. Dhemaji	3 personal interviews
<b>VKV Srinivasan</b>	D.C. Goalpara	Personal interview
<b>AK Majumdar</b>	D.C. Chirang	Personal interview
<b>Nazirul Islam</b>	D.C. Dhubri	2 Personal interview 1 telephonic conversation
<b>Sushil Kumar Pegu</b>	D.C. Bongaigaon	Personal interview
<b>Ms Nandita Hazarika</b>	Chief Project Officer, ASDMA	Personal interviews
<b>Kaushav Talukdar</b>	PO, DDMA, Kamrup M	Personal interview
<b>Ms. Minakshi Das</b>	PO, DDMA, Morigaon	Personal interview
<b>Pran Kishan Gogoi</b>	PO, DDMA, Jorhat	Personal interview
<b>Lohit Gogoi</b>	PO, DDMA, Dhemaji	2 personal interviews
<b>KC Chowdhary</b>	PO, DDMA, Chirang	2 Personal interviews, clarification through WhatsApp
<b>Ananta Samanta,</b>	PO DDMA, Bongaigaon	Personal interview, field visit
<b>Moferjal Sarkar</b>	PO DDMA, Dhubri	Personal interview
<b>Jishnu Barua</b>	Jt. Sect. (on Deputation from Assam Cadre)	Personal interview, 1 telephonic conversations
<b>Ravi Shankar Prasad</b>	Joint Secretary, Ministry of Environment (on Deputation)	Personal interview
<b>Prof. Rajen Saikia</b>	Retd. Principal Nagaon College	3 Personal interviews
<b>Dr Monirul Hussain</b>	Retd. HOD, Department of Politics, Guwahati University	1 Personal interview

Apart from the District commissioners, the Project officers of the District Disaster Management Authority, the Chief Secretary of the State, the Chief Minister of the State as well as the CEO of the Assam State Disaster Management Authority were interviewed using the same technique of responsive interviewing. Within the Central government administration, two interviews were conducted at the Joint Secretary level with officials from the Assam cadre who have served in the state for a long time and have dealt with migration and environmental issues intensively. One of the Joint Secretaries is currently serving in the Ministry of Forest and Environment and is one

of the key participants in the Indian delegation to the UNFCCC. The research was also enriched by interviews with Professors and Civil society leaders at Guwahati University, the National Law University of Assam and Nagaon University. Given the controversial nature of migrations in the politics of Assam, many administrators requested different levels of anonymity and these are respected while quoting them in the study. The table 7 shows the number of interviews conducted with each interviewee

To triangulate the study, seven group discussions were conducted in randomly selected areas that have faced erosion induced displacement, including one group discussion conducted at a refugee camp site. These sites were randomly selected and the group discussion participants voluntarily communicated with me with no prior notice of an agenda or prior discussion. It is well-worth noting that as I was not earlier planning on conducting group discussions, they were unstructured and open-floor, allowing the participants to openly discuss the issues they faced when migrating. As an outsider, the participants in some of the groups were suspicious of my stated objective and intentions. In the village of Asudhubi, I sensed growing hostility during the discussion, and coincidental election-violence in the proximity of the village and cut short the discussion at an opportune time.

**Table 8: List of Group Discussions**

Group Discussion	Date	Remark
Laharighat group discussion	20 <sup>th</sup> February 2016	10 people led by village headman who was incidentally present at the time
Fafal/Naborgam GD (Goalpara District)	5 <sup>th</sup> April 2016	10 people group. Village Headman from either of the villages not available
Asudhubhi GD, Goalpara	6 <sup>th</sup> April 2016	15 people group. The discussions were cut short due to an election-related disturbance on the nearby village road
Kaura Gram (Dhobakuar), Jaleswar Village, Goalpara	7 <sup>th</sup> April 2016	20 people. Mother of the local BJP candidate led the discussions. A separate discussion with NRC officers was held in the adjoining NRC office
Bhashayani Char, Dhubri	20 <sup>th</sup> April 2016	10 people group led by the Village headman
Bagdhora Char, Dhubri	20 <sup>th</sup> April 2016	10 people group. The discussions were interrupted by the BSF personnel
Relief Camp GD, Bongaigaon	1 <sup>st</sup> March	12 people group, represented by the PO, Disaster Management Unit Bongaigaon
Dhemaji farmer group discussion	14 <sup>th</sup> April	8 people group engaged in farming and allied activities

The work was further enriched by the use of basic geographical system information mapping skills and Excel skills to view and analyse the geographical placement of vulnerable communities and governmental programmes in order to understand whether the governance is, in fact, assisting the people who are the most vulnerable. This helped analyse the reasons behind the protection deficit and variations.

### **3.6 Timeframe and Data Triangulation**

The field inquiry for this research was conducted over a four-month period from January 2016 until April 2016. Of the 17 weeks spent in India, 15 weeks were spent in the state of Assam and two weeks were spent in New Delhi. I used a personal level connection who retired as Additional Deputy Inspector General of Assam (2<sup>nd</sup> most senior Indian Police Office in the State) to snow-ball the interview participation. Each interview with an officer was planned for a whole day, during which I engaged in open-ended discourse using semi-structured interview method and spent time in passively observing the proceedings of their offices. Few officers did not allow me to observe the proceedings of their office and their concerns were respected. Few other officers like Dr Angamuthu, Mr Victor Carpenter, and Mr Nazirul Islam allowed several hours of direct interview and observations spread across different days.

The initial intention was to record the official proceedings and interviews digitally, however, this was felt to be an invasive technique and created barriers at some places where the officers found it difficult to talk openly. Thus, I resorted back to the conventional technique of taking handwritten notes of interviews and field observations. There are nine available interview recordings of an approximate duration of one hour each, and a field diary maintained on a daily basis. There were situations like the meeting with the Chief Secretary and the meeting with the Chief Minister where the interviewee requested not to transcribe the information they provide. To allow an open discourse, I respected the comfort zone of the interviewees and used memory to transcribe the events and details of the interview after the meeting.

Apart from the interviews, there is administrative data which was available only in physical format at the time of the fieldwork.<sup>16</sup> Some of the state data like the internal report on migration flow, a police report theorising the linkage between *char-island*, migration and crimes, and the D-voter dataset were provided confidentially by the state. These datasets were handed in physical format on printed papers, as well as in digital format through CD and emails (soft-copy of the reports).

The information gathered from the interviews was triangulated against the administrative data. It is worth emphasising here that Indian administration follows a strict policy on paperwork and documentation of state action. Thus, it is possible to find documentary evidence of every official meeting, directive, and task implementation. The absence of paper documentation (often called paper trails by ethnographers) would undoubtedly mean phoney information provided by the interviewee.

However, most ethnographic studies on Indian bureaucracy would also warn against the authenticity of records. It is widely believed that Indian administration ace the art of constructing bogus paper trails of their everyday administrative practices. There is a constant paradox of *asli* development (real development) and *farji* development (fabricated development). This fictitious narrative of administrative data can be significantly different from the real picture of the administration in India. Especially in case of the welfare projects, the beneficiaries usually appear as mystical characters to rationalise an eccentric drama of state presence (Mathur, 2016; Gupta, 2012).

The reservations towards over-reliance on administrative state data are fully acknowledged in this work. A layer of caution is added by further triangulating the findings with sample survey of field locations and group-discussions in some of the villages which have found mention in initial interviews and document trail created by the administrative actors.

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<sup>16</sup> It is well worth mentioning that due to Indian central government's continued support to Digital India program and agenda to promote administrative transparency a large amount of reports which I extracted from the government offices and archives in Assam are now available online. Especially the data on, daily flood report, Indira Awas Yojana and Mahatma Gandhi National Rural Employment Guarantee Act. Later during the time of analysing and writing the thesis I heavily relied on the online data which was more clean and discernible uptill the village level in most cases.

I also had the opportunity to re-examine my interviewees, with the knowledge I gathered from the field surveys. In many such occasions, the interviewee either demonstrated a (somewhat) scripted shock, refused to acknowledge lapse by suggesting that I might have confused the village names or even used the tactical drama of summoning the local authorities immediately and reprimanding them in my presence. I am not sure how the tactical theatrics influenced or changed the administration for better (or worse), but it did allow me to view state practice as it unfolded.

The triangulation method also reflects my training in Indian Law. As a law graduate, who studied Indian legal system I have training in the Administrative law, Law of Evidence, and Procedural Laws of India. I have previously also worked for nearly four years in a local law firm dealing with matters of civil nature at the district level. This exposure to the legal system at a sub-national level left me with considerable experience of recognising *admissible* and *non-admissible*<sup>17</sup> state documents, and to continually suspect the paper trail to be *farzi kagaz* (fabricated documentation) unless there was corroborating evidence to prove their ‘realness’. My own past professional experience added a layer of nuance and carefulness in analysing and interpreting the data I received from the state.

## Conclusion

Based on the literature review and initial assessment the following results are predicted for this study:

First, the *institutional perception* has a mixed effect on framing the policy regarding climate change migration and its deliverance. Once the institution perceives climate change migration as a problem to be solved, it engages in identifying it as a developmental or security issue. This identification of the issue directly impacts whether the protection will be positive or negative. It is expected that the framing of climate migration as a developmental issue will lead to positive protection while its

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<sup>17</sup> The two terms *admissible* and *non-admissible* are used to indicate paper evidences that are *admissible* (or *non-admissible*) in a court of law as a proof of administrative action.

framing as a security crisis will lead to an adverse protection scenario, especially for those who are not considered citizens of the state.

Second, the political narrative at the subnational level will negatively impact the protection outcomes. The state of Assam has a negatively charged narrative of migration, which has led to a state of violence and emergency in the past. The political association of the term migration with illegal cross-border immigration negatively affects how the society, including the actors responsible for governance, view the people they must govern. Moreover, communities that frequently engage in migration or are already embroiled in a narrative of ‘others’ are negatively impacted through the protection they receive.

Finally, the demographic variable should show mixed results in regard to protection outcomes. While particular communities of people who can represent themselves will be able to attract better protection and assistance, the weaker sections of the society like the aged, women and children or politically under-represented groups will not only be more vulnerable to forced forms of migration due to disaster but will also receive little to no assistance from the state.

## Chapter 4 Enabling and Mitigatory Policies: *Tracing Institutional Frameworks and Progress*

The present chapter provides a brief overview of the legal instruments and institutional policies used for managing migration and displacement caused by flood disasters in the state of Assam. As mentioned in Chapter 2, the national governance agenda lies at the heart of climate change migration policies. Governance can be delivered through existing norms and models that synergise with climate change migration or by creating new institutions and new norms. In the Indian scenario, the governance of climate change migration is conceived as a part of the existing development and welfare agenda. While the policies are not enacted explicitly for regulating forced movements, they provide synergy in regard to a positive outcome.

As stated in Chapter 3 earlier for convenience, I have grouped these policies into four thematic categories: (a) ***Enabling policies*** – which allow citizens to use migration as a form of adaptation. Citizens can migrate freely and without any detriment, to seek gainful employment and alternative economic opportunities in any part of the country. These policies enable citizens to engage in gainful employment outside of their local areas and provide opportunities for cyclic, temporary and permanent migration undertaken voluntarily. The purpose of such voluntary movement is to increase the economic capacity needed to adapt to changing weather patterns. (b) ***Mitigatory policies*** – these help mitigate forced migration scenarios by enhancing structural capacity and building preparedness. The goal of mitigatory policies is to build a general state capacity to predict and mitigate disaster impact; thus this strongly relates to scenarios of forced migration during sudden-onset disasters. (c) ***Relief policies*** – these are tailored to provide adequate relief response in the event of disaster-induced displacement. As a humanitarian action, the relief policy is built to assist any person in the face of disaster, including any foreigner or those trapped due to an inability to migrate to a safer location. (d) ***Compensatory policies*** – these are built to provide financial assistance and compensation to those who suffer loss of their habitat or damage to their property during a disaster. Compensatory policies also allow the state to provide ex-gratia support to disaster victims.



In the current chapter I engage with Enabling Policies and Mitigatory Policies, and in Chapter 5, I discuss the strength and impact of Relief Policies and Compensatory Policies. Both of these chapters are constructed as descriptive chapters to provide a detailed overview of the response process and give the reader a general idea about the administrative functioning of the state in regard to the above-mentioned thematic areas. The open audit data used in these chapters was taken from the respective programme websites. In the case of the MGNREGA scheme and the IAY scheme, the open data is available for social audit as an MIS database on the program websites (Ministry of Rural Development, n.d.). Unpublished state data is also used, for example, the list of erosion-affected areas and the D-voter list of the State of Assam. These datasets were procured during the field work. Geographical maps for the chapter are generated using the basic functions in the Bhuvan GIS software of the Indian Space Research Organization and GIS portal of the Central Water Commission (Indian Space Research Organisation, n.d.).

The chapter is divided into two parts. Part 4.1 discusses Enabling policies, and part 4.2 discusses mitigatory policies. Programs discussed in these sections are the ones identified as having maximum synergy with climate migration governance by the elite bureaucratic actors in India. These policies are aimed at maximising the local benefit from voluntary adaptive migration while reducing scenarios of forced displacement and being trapped in a collapsed ecosystem.

#### **4.1: Enabling Policies**

In a disaster-prone State, adaptability towards known and regular episodes of disasters is seen to be very high (Adger, 1999). Researchers agree that people residing in vulnerable locations circumscribe their lives and well-being around the disasters and use several forms of temporary migration as an adaptation strategy (Black, et al., 2011; Campbell, 2010). Most adaptive migrations are used to diversify livelihood options and improve economic resilience to climate change-related weather events. Policies which facilitate free economic movement and provide livelihood

opportunities, are therefore, necessary elements of enabling policy thematic area. I will consider three primary frameworks in this section: (a) the Right to Freedom of Movement (b) Right to freedom of Residence (emanating from the need of temporary/cyclic relocation), and (c) The Mahatma Gandhi National Rural Employment Guarantee Act of 2005 (hereinafter MGNREGA), which created a legal obligation on the Indian state to provide 100 days of guaranteed paid unskilled employment to anyone demanding it.<sup>18</sup>

#### ***4.1.1 Right to Migrate***

In India, Article 19(1)(d) of the Constitution of India guarantees *freedom of movement to all its citizens* (Constitution of India, 1950). The qualifying words for this right – *all its citizens* – implies that the provision of freedom of movement is available *only* to those who are Indian citizens. Other than a citizen, a recognised alien who is legally present in Indian territory has a temporary right to freedom of movement as specified by the central government of India. This right to freedom of movement for a recognised alien may involve statutory restrictions from entering some areas, such as nuclear facilities of a country, or refugee/asylum camps, or restricted buildings. But for an irregular alien who do not have a legal permission to enter or travel within Indian boundaries, or a person whose citizenship status is contested, the right to freedom of movement under the constitution does not exist (Pylee, 1999; Derrett, 1961). Any such person can be duly deported outside the territorial borders of India unless such irregular migrant can establish a right to non-refoulement. The international principle of non-refoulement is a fundamental principle of International Law recognised under the key human rights and humanitarian law treaties, including the Geneva Convention on the Law of War, Universal Declaration of Human Rights, UN Convention on the Status of Refugees, Convention Against Statelessness, Convention Against Torture (McAdam, 2012). The principle of non-refoulement enjoys a status of *jus-cogens* norm

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<sup>18</sup> Scholars often also use the term NREGA (National Rural Employment Guarantee Act) interchangeable with MGNREGA, perhaps for the ideological need to distance oneself from party politics connected with the Gandhi-Parivaar in India. I however, use the term MGNREGA as that is what the Act is legally called during the time of writing this thesis.

under international law and forbids countries from returning anyone to another country where their lives are in perceivable and immediate danger. Being a *jus-cogens* norm it is immaterial if the country wanting to deport an irregular migrant is in fact signatory to any of the mentioned treaties (Goodwin-Gill, 1996; IOM, 2014; Zimmermann, et al., 2011). The applicability of non-refoulment is however, restricted to irregular aliens who are already found outside the boundaries of their own nation and who fear persecution on political grounds relating to colour, class, gender, nationality, race or membership of a particular social group. It is highly debatable if the principle is applicable also in situations of hydro-metrological disasters (Murray, 2010; Gill, 2010; Martin, 2010; Bates, 2002; Leal-Arcas, 2012). India does not per se recognises natural disasters as a reason for allowing temporary refuge or asylum to an irregular alien.

In case of regular alien and right of movement granted to the citizen, Article 19 clause 5 allows the state the to impose reasonable restriction in order to maintain public order. These reasonable restrictions include the confinement of offenders from the general masses, and the use of externment or internment orders with a clear procedural mandate to disallow movement for a specific amount of time in a pre-specified time. Other than these restrictions, the right to freedom of movement imposes an obligation on the state not to interfere with the personal liberty to migrate. However, whether such rights create an absolute duty on the state to pursue policies that allow citizens to enjoy their liberty to its fullest extent is a jurisprudentially fluid question. Hohfeld, while explaining the concept of rights, classified them in correlation with the obligation they attract. Rights are ‘privileges’ when they create an obligation of non-interference, thereby guaranteeing liberty for the rights-bearer. Rights are ‘claims’ when they require an action to be performed by some entity other than the rights-bearer to allow the rights-bearer to enjoy the right (Eleutheriadēs, 2008; Lindahl, 2006; Vatiéro, 2010).

Freedom of movement as a *privilege right* puts an obligation on the state not to interfere with the right by enacting any legislation that unduly challenges the citizenship right of any specific group of people within Indian territory. I will elaborate more on this point in chapter 5 where I discuss the politics of entitlement and identity.

However, to state it here succinctly, in the State of Assam the struggle to identify migrants and remove them from spaces occupied by the aboriginal Assamese population has led to enactment of The Illegal Migrant Determination (and Deportation) Act of 1986 (hereinafter IMDT Act). The legislation which became operational almost immediately after its enactment allows detention and deportation of anyone believed to be an illegal immigrant in the State (Roy & Singh, 2009). In 2012, after a long drawn out judicial process the IMDT Act was declared unconstitutional by the Supreme Court of India amidst a high political drama (Thaker, 2004; Economic Times, 2015; Singh, 1984). However, during the time-period the legislation was in place, executive orders were adopted by the Election Commission which allowed anyone to apply a plain sheet of paper contesting the citizenship and voting rights of any other person believed to be illegally present in the state. The Election Commission received en-masse applications from the '*disgruntled youth of Assam*' (Retd. Addl. DIG Rajender Kumar, 2016). The procedure still dictates that once an application is received the person whose citizenship is being contested will be placed on a D-Voter list until they can prove in the Foreigners' tribunal that they are in fact a bona fide Indian citizen. Presently, around one hundred and forty thousand adults are listed as D-voters in Assam (Block Development Officer Dhemaji District, 2016). These people and their families are unable to migrate due to fear of further marginalisation, detention and deportation. Those who are listed as D-voters are treated as non-citizens, and their families cannot avail themselves of any benefits of the welfare programmes sponsored by the government (NRC Verification Officer, 2016; Pratima Devi Rabha, 2016). In chapter 5 I will discuss how the political narrative on migration disenfranchises people from their rights as citizens, making it very difficult for them to move away from their geographical vulnerability or avail themselves of the institutional support provided by various welfare programmes in the state.

The operationalization of the IMDT Act targeting specific communities (non-Assamese speaking, non-ethnic) negatively impacts the enabling rights of those who would like to move out of their fragile ecosystems. In the districts selected for this study, there are presently thirty-eight thousand, three hundred and four D-voters

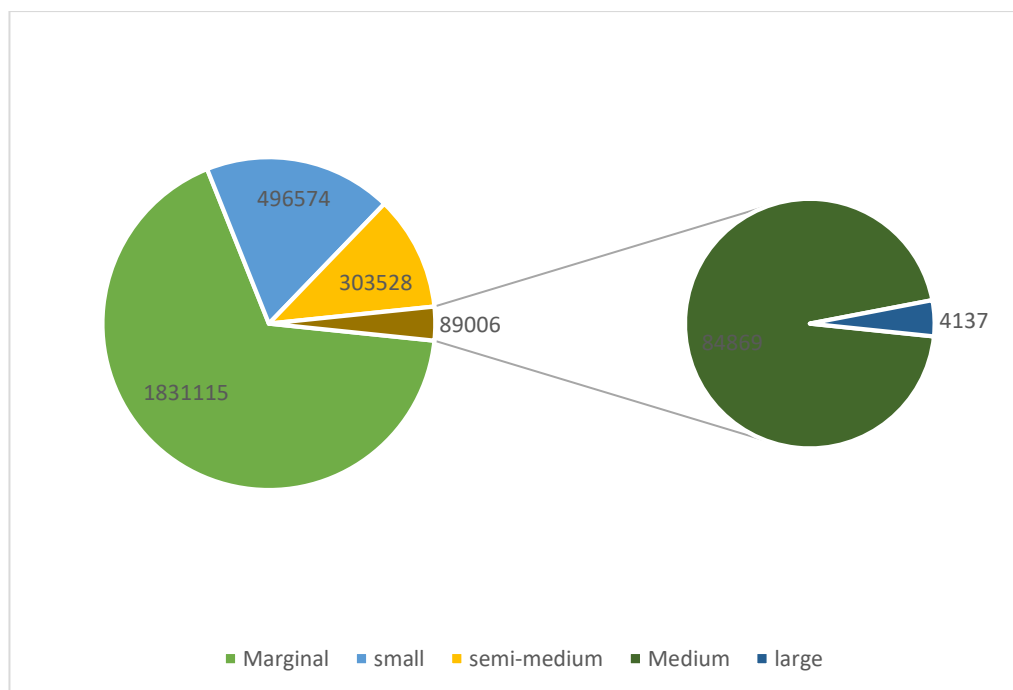
remaining, among whom twenty-four thousand, five hundred are women. In the last twenty years, the Foreigners' tribunal has only decided ten thousand, seven hundred and seventeen cases in the study districts.

On the other hand, freedom of movement as a *rights claim* puts an affirmative obligation on the state to provide the conditions necessary for the realisation of this freedom. The state has a duty to create a public infrastructure for transportation (Sileno, et al., 2014). The lack of adequate infrastructure for transportation, including damaged roads and bridges, and the lack of safe and affordable transport can limit people's ability to move out of fragile ecosystems (Inter-Agency Standing Committee, 2010). This constraint becomes extremely dangerous in the case of sudden-onset disasters, where a lack of transportation can lead to a situation of entrapment for the disaster victims (Squires & Hartman, 2006).

#### ***4.1.2 Right to Freedom of Residence***

In a rural economy that is primarily dependent on agriculture, the provisions of livelihood are closely related to the right to land-ownership and the security of tenancy rights (Manjunatha, et al., 2013; Awasthi, 2009). In India, the right to property is not a fundamental right. However, the right to residence under Article 19(1) (g) is of paramount importance for people residing in homesteads and engaging in subsistence farming practices. Most of the land holdings in Assam are small marginal holdings that are used for subsistence agriculture (Figure 4.1)

**Chart 1: Distribution of Landholdings in the State of Assam (no. of holding in each category)**



*Source: Generated from the Agriculture Census of India, 2011*

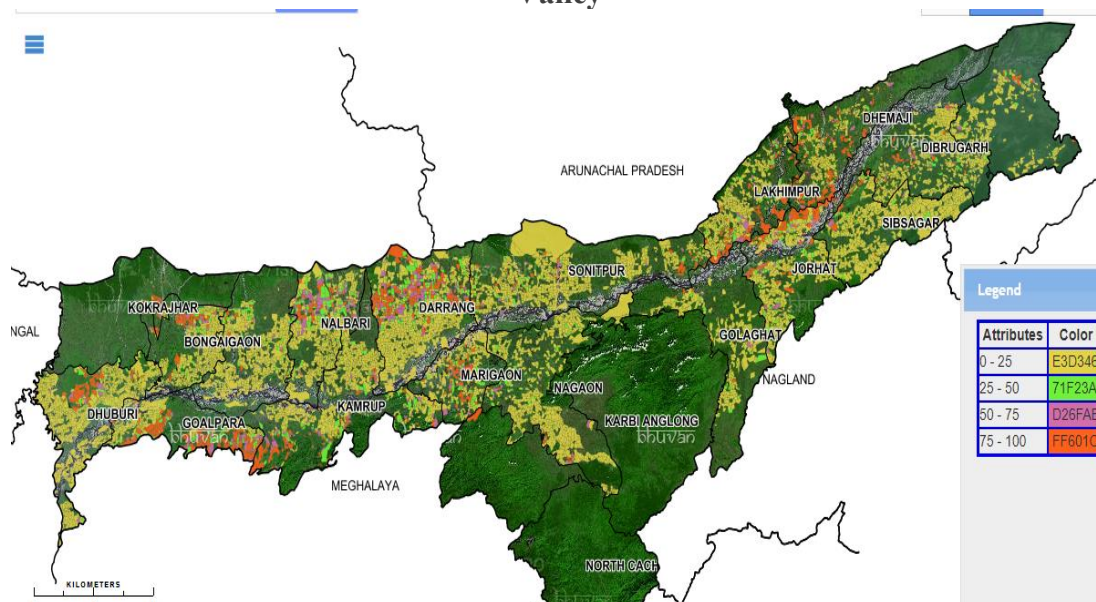
The State government manages the subject of property and ownership transfer under entry 18 of List II, Schedule VII (Government of India, 1950). It is also the repository of land-tenures and the primary actor in deciding land-use policy. In the state of Assam, this responsibility lies with the Department of Revenue and Disaster Management. The State government, under Article 19(5), has the authority to impose reasonable restrictions on freedom of residence, based on its land-use policy, and any specific constraints on land-use placed by the central government. The Central government has the authority to designate reserved forests and wetlands, based on its commitment under the International Convention on Conservation of Biodiversity, and the Ramsar Convention on the Protection of Wetlands (UNESCO, 1971; Damodaran, 2013; Sharma & Sarma, 2014; Menon & Vadivelu, 2006).

In the State of Assam, by virtue of Schedule VI to the Constitution of India, the State government has foregone its authority to regulate land-use in some territorial regions that are classified as Tribal areas. These areas include the North Cachar Hills District, the Karbi Anglong District and the Bodoland Territorial Area District. The Bodoland Territorial Area lies in the Brahmaputra Valley and is constituted of four districts –

Kokrajhar, Baska, Barpeta and Chirang. Within these autonomous district areas, any new acquisition of property by non-tribal people is restricted by Article 51 of the Bodoland Territorial Council Act of 2003 (Bose, 2013; Mahanta & Das, 2013; Datta & Sarkar, 2012).

However, the existing ownership right of the non-tribal population residing in the area is protected in its entirety. Any non-tribal person asserting a right to property (including the right to residential property) must be able to show the presence of such a right before the commencement of the BTCA of 2003 (Government of Assam, 2003). Apart from the constitutionally recognised BTCA, there are several tribal factions in Assam that are demanding a similar autonomous status. The following map provides an overview of the tribal concentration in the Bhramputra Valley of Assam. The data shown on the map are aggregated at the village level and provide a good overview of the village sectors where the displaced non-tribal population find social opposition (if not legislative) in acquiring land for residence. In chapter 5, I will discuss how the issue of tribal and non-tribal identities continues to create a large segment of denizens in the state who cannot claim regularisation of their land-ownership until their status as citizens is established, thus, pushing these communities towards landlessness.

**Map 12: Percentage-wise Distribution of Scheduled Tribe in the Brahmaputra Valley**



*Source: Generated from Bhuvan GIS platform using Census Data 2011 (village level grid data used)*

The restrictions on the availability of land due to the designation of sectors as forest, wetlands or tribal holdings makes it difficult for erosion-affected families to permanently relocate to safer areas. It also makes it difficult for the government to assign alternative land for rehabilitation to those living in fragile ecosystems. I will highlight this again in the discussion on compensatory policies in section 4.4 of this chapter.

Due to small-holding of farms throughout India (85% as per 2011 Census), there is a deep-seated realisation in the Indian administration of the need to diversify livelihood options for the rural community and make urban growth more inclusive. Two significant programmes that have been created to achieve this target are the Mahatma Gandhi National Rural Employment Guarantee Act (discussed in next section) and Indira Awas Yojana (Renamed as Pradhan Mantri Awas Yojana -Gramin) (discussed in Section 5.2)

### **4.1.3 Right to Livelihood**

The central government of India has several programmes for employment generation that are operated on an all-India basis. The major ones are the Mahatma Gandhi



National Rural Employment Guarantee Act for rural wage employment; the National Rural Livelihoods Mission for self-employment; and the Prime Minister's Employment Generation Programme. The state government of Assam operates additional schemes to assist in livelihood diversification. These include the World Bank supported Assam Agricultural Competitiveness Project; the Mission for Integrated Development of Horticulture; and different schemes for the development of livestock and fisheries that are undertaken on a departmental basis and through the MP Local Area Development fund.

In this thesis, I concentrate on the Mahatma Gandhi National Rural Employment Guarantee Act of 2005 (hereinafter MGNREGA). The Indian government has expressed several times that MGNREGA provides a cross-sectoral synergy with climate change adaptation, and is aimed at reducing rural-urban migration (Ministry of Environment and Forest (India), 2012, p. 116; Ministry of Environment and Forest(India), 2015, p. 145).<sup>19</sup>

Under MGNREGA, any adult from a household can demand 100 days of paid unskilled employment from the government, and such a demand must be met within 15 days. If the government fails to meet such a demand it is duty bound to pay unemployment allowances to the applicant (Section 3, MGNREGA). The scheme represents an explicit recognition by the government of its responsibility for ensuring the availability of adequate employment for all registered households all of the time. The stated objectives of MGNREGA include the creation of a social safety net for vulnerable groups by creating a fall-back employment option. However, unlike other schemes, the MGNREGA does not require a specific economic threshold or demographic character for those seeking employment. Any Indian citizen can register for unskilled jobs in a rural area in an unskilled sector.

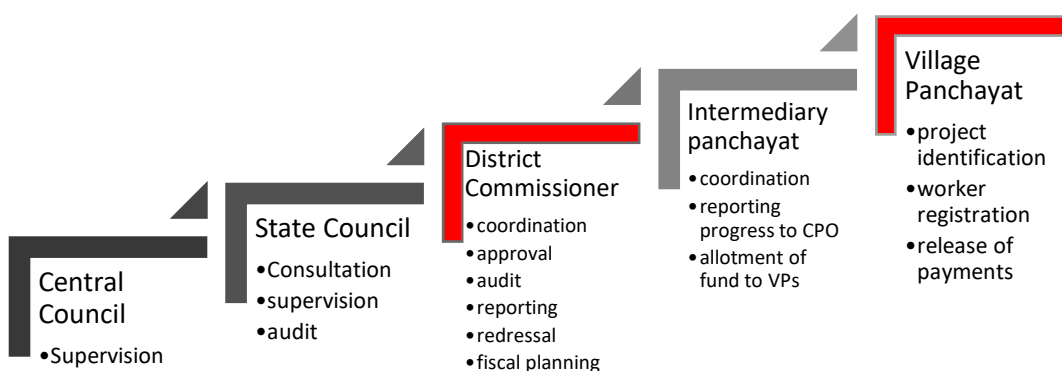
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<sup>19</sup> India's 1<sup>st</sup> National Communication to UNFCCC was written in 2004, a year prior to the enactment of the MGNREG Act. In that report, the Government of India strongly identified the need to diversify rural employment and help households increase their income threshold as a strategy towards adaptation. *See for example* pg. 93 of India's First National Communication to the United Nations Framework Convention on Climate Change, available at <http://unfccc.int/resource/docs/natc/indnc1.pdf>

In the state of Assam, 90% of the cost of the employment created under MGNREGA is borne by the Central government of India and the state has only a 10% share responsibility. In scenarios where the state administration fails to provide guaranteed employment, the state has to bear the 100% fiscal burden for the payment of unemployment allowances (Sec. 22 clause 2, MGNREGA).

In the organisational scheme for the MGNREG Act, the village panchayats are the primary stakeholders in the promotion of the scheme, registration of workers and identification of the work to be undertaken. The District Collectors as the Chief Program Coordinator have the responsibility for approving block-wise series of projects to be taken; according necessary sanctions and administrative clearance; supervising and monitoring progress across the whole district; conducting periodic inspections of works in progress; and redressing the grievances of the applicants (Section 14-15, MGNREGA). The roles of the Central and State Councils are only supervisory and consultative in nature, in terms of determining the policy's progress.

**Figure 2: Organogram for functionality under MGNREGA**



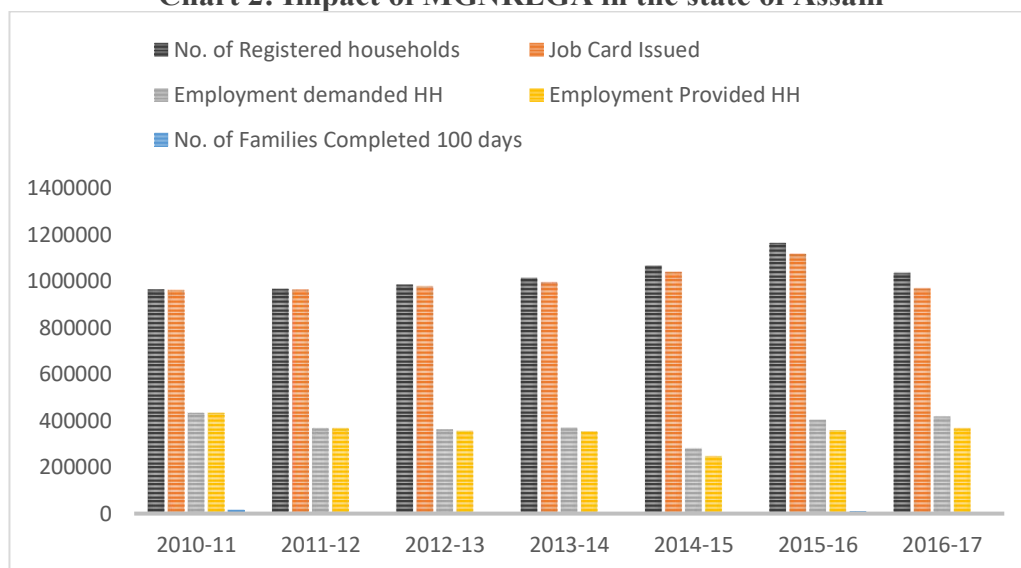
*Source: Chapter IV (Section 14-16) MGNREG Act*

Previous localised studies considering the synergies between MGNREGA and climate change vulnerability reduction in agrarian villages have reported a positive outcome and potential for reducing rural-urban distress migration (Tiwari, et al., 2011; Esteves, et al., 2013; Ranaware, et al., 2015; Pankaj & Tankha, 2010). Similar, the potential for

a high synergy between the MGNREGA scheme and Climate Change adaptation is also found in the state of Assam (Bhattacharyya & Vauqueline, 2013). However, the overall impact of the scheme has remained limited so far. In poor states, the generation of livelihood under MGNREGA has remained weak due to corruption and inferior quality asset creation (Fraser, 2015). Das (2013), in analysing the impact of the scheme in the state of Assam, concluded that the generation of jobs under the scheme is inadequate and that this has led to a general dissatisfaction amongst the rural communities about the prospects of the scheme.

A review of the data on the extent of the deliverance of the scheme in the state of Assam certainly raises some fundamental questions about the State government's innovative ability to create job opportunities for all eligible households. The MGNREGA data available from 2010 to 2017<sup>20</sup> was analysed for the districts selected for this study. A collective overview of the data for the eight districts taken together shows that while there has been a steady increase in the number of households seeking registration under the scheme, the demand for jobs remains low and the provision for the guaranteed 100 days of employment per year remains abysmal.

**Chart 2: Impact of MGNREGA in the state of Assam**



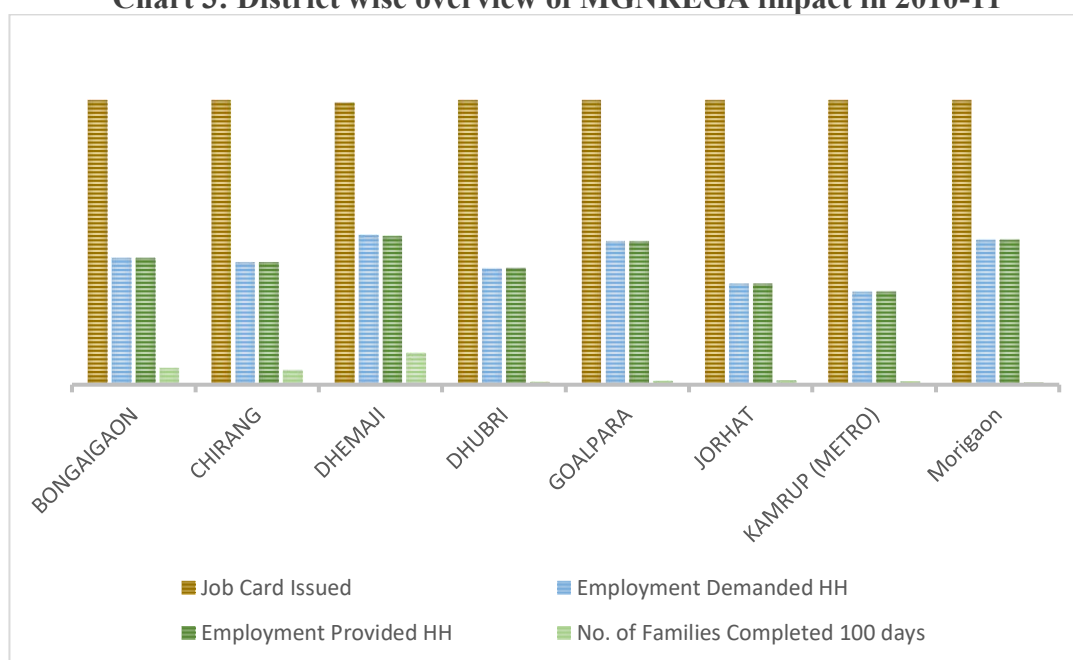
Source: Calculation based on MGNREGA district-wise data set

<sup>20</sup> At the time of writing this thesis the data for the year 2016-2017 was only available for the first three quarters of the fiscal year.

The data is retrievable from: [http://mnregaweb4.nic.in/netnrega/MISreport4.aspx?fin\\_year=2013-2014&rpt=RP](http://mnregaweb4.nic.in/netnrega/MISreport4.aspx?fin_year=2013-2014&rpt=RP)

In 2010-211, around 3.89 million households registered under the MGNREGA scheme in the State of Assam. The eight study districts of Dhubri, Gaolpara, Bongaigaon, Chirang, Kamrup Metro, Morigaon, Jorhat and Dhemaji constituted 25% of the total registrations. The study districts issued job cards to nearly 100% of all registered households. The study districts issued job cards to nearly 100% of all registered households. The highest demand for jobs was in the district of Dhemaji, where 52.66% of the registered job card holders demanded MGNREGA employment. A similar level of demand was reported in the Morigaon (50.90%) and Goalpara (50.33%) districts. In the districts of Jorhat and Kamrup Metro, which are more urban than the rest of the State, the demand was low, at 35.54% and 32.73% respectively.

**Chart 3: District wise overview of MGNREGA impact in 2010-11**



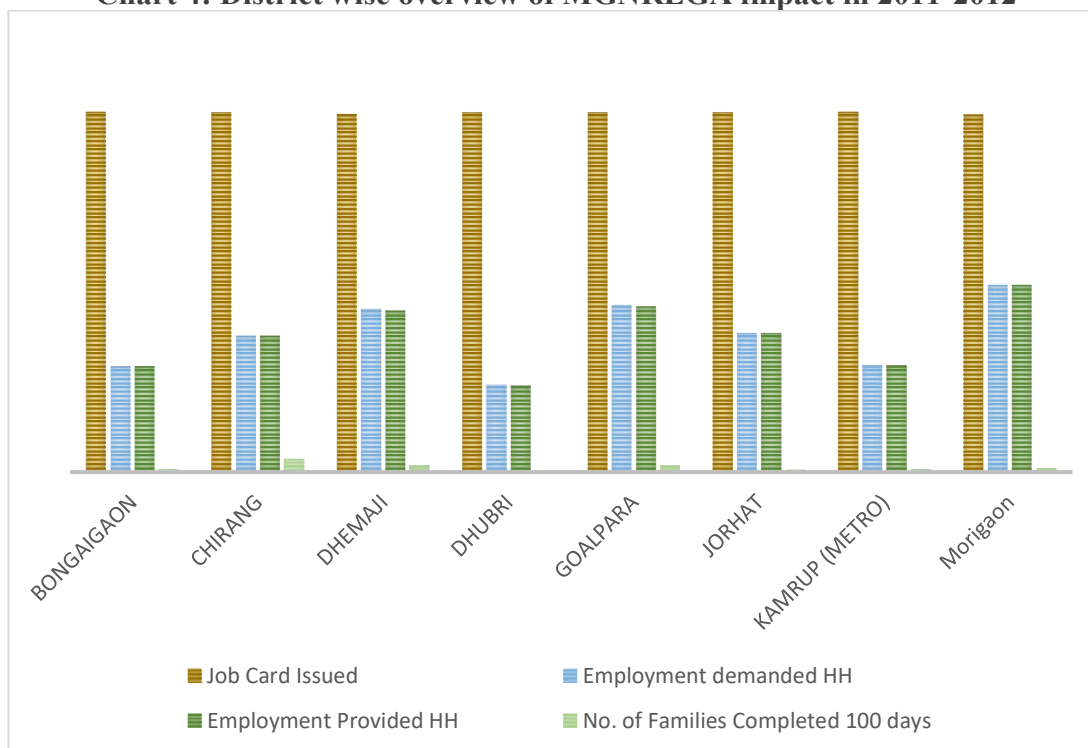
Source: Calculation based on MGNREGA district-wise data set  
 The data is retrievable from: [http://mnregaweb4.nic.in/netnrega/MISreport4.aspx?fin\\_year=2013-2014&rpt=RP](http://mnregaweb4.nic.in/netnrega/MISreport4.aspx?fin_year=2013-2014&rpt=RP)

However, what is deeply concerning is that across the entire state only 3.17% of the households demanding employment received 100 days of guaranteed employment. In the district of Dhemaji, 11.12% of the households demanding employment were engaged in a 100 days’ employment, while in Morigaon only 0.84% of households demanding employment were given 100 days of work. The chart below provides a

district-wise overview of the work demand pattern for the year 2010-2011 for the study districts. The year 2010-2011 is the base year in which all of the districts of Assam were brought under the MGNREGA scheme. A total of 962,169 households registered in the eight study districts and the districts of Goalpara and Dhubri had a collective share of 10% of the total registrations achieved throughout the whole state.

In 2011-12 there were 60,129 more registrations under the scheme. However, the share of registration from the study districts fell from 25% to 24%. In the study districts, the reduction in registration was seen only in Dhemaji despite its relatively better performance in job creation over the previous year. All of the other districts registered higher numbers of households than in 2010-2011. The demand for employment amongst job card holders decreased across the state from 40% in 2010-2011 to 34% in the 2011-2012 fiscal year.

**Chart 4: District wise overview of MGNREGA impact in 2011-2012**

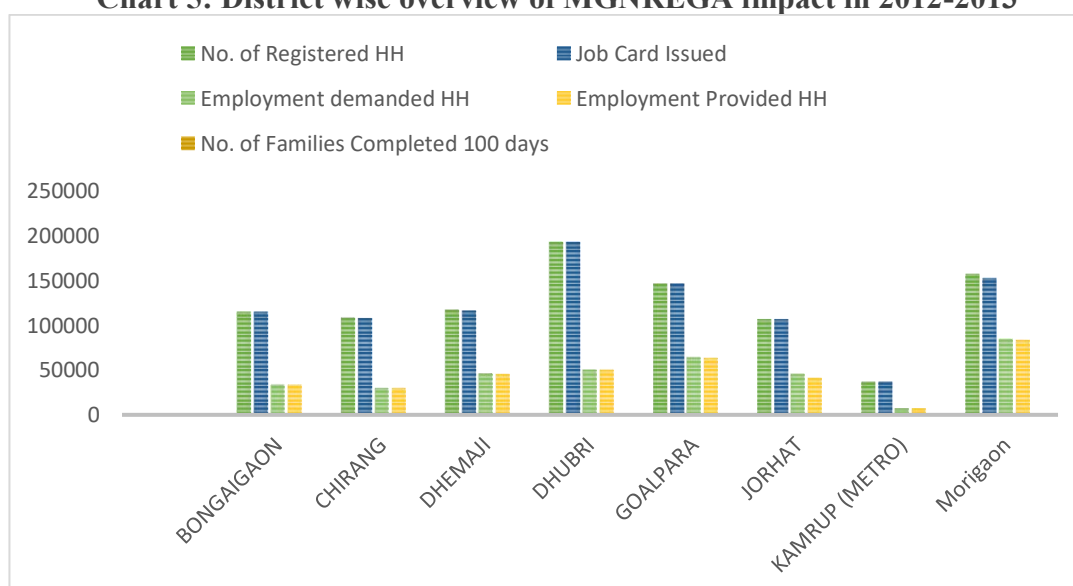


Source: Calculation based on MGNREGA district-wise data set  
 The data is retrievable from: [http://mnregaweb4.nic.in/netnrega/MISreport4.aspx?fin\\_year=2013-2014&rpt=RP](http://mnregaweb4.nic.in/netnrega/MISreport4.aspx?fin_year=2013-2014&rpt=RP)

It is worth noting that the 2011-2012 fiscal year started with the 13<sup>th</sup> General Assembly election for the state, and cash incentives provided to families during the election campaign could be a reason for the decreased work demand (Deputy Commissioner Bongaigaon, 2016; Deputy Commissioner Dhubri, 2016). Except for Jorhat and Morigaon, which registered a slight increase in demand, all of the other study districts registered a decrease in work demand. Work demand in Bongaingaon fell from 44.46% in 2010-11 to 29.37% in 2011-12 while in Dhubri the demand fell from 40.79% in 2010-2011 to 24.18% in 2012-2013. Households completing 100 days of work fell from 3.17% in 2010-2011 to 1.17 in 2011-2012. In Dhubri only 0.29% of households demanding work were able to complete 100 days of employment, while in Jorhat, despite the increase in work demand, only 0.69% were provided with 100 days of employment. The chart below provides an overview of the work demand pattern in the year 2011-2012

In 2012-13 the registration of households and the issuance of job cards under the scheme was 3.02% higher than in the 2010-2011 base year. There was no significant change in the registration of households from the study districts, and their collective share in the state cohort of total registrations remained at 24%. However, work demand and work availability during this year fell from 34% in 2011-12 to 31% in 2012-2013.

**Chart 5: District wise overview of MGNREGA impact in 2012-2013**



Source: Calculation based on MGNREGA district-wise data set  
 The data is available online at [http://mnregaweb4.nic.in/netnrega/MISreport4.aspx?fin\\_year=2013-2014&rpt=RP](http://mnregaweb4.nic.in/netnrega/MISreport4.aspx?fin_year=2013-2014&rpt=RP)

In Kamrup Metro, only 20% of those who were issued with a job card demanded work, and in Dhubri this percentage was merely 26%. It is worth noting that the year 2012 witnessed severe flooding during April, June, July, September and October.

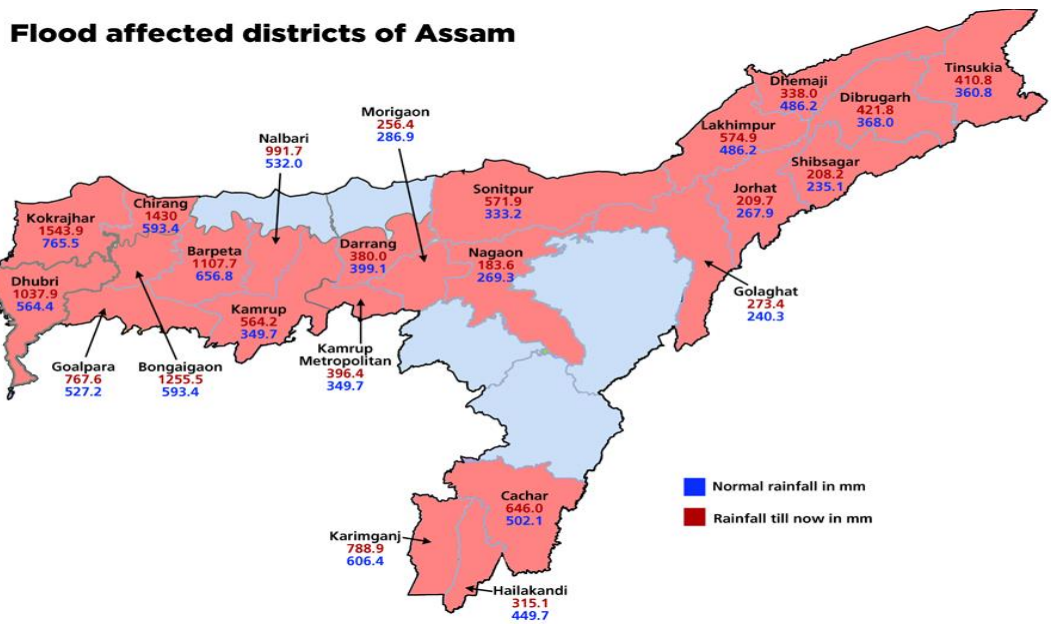
The flooding in the state occurred in three waves, lasting for a short duration each time. The first wave of flooding occurred in April and led to the temporary displacement of 4068 people. During this time, no relief operation was undertaken. However, the intensity of the floods increased tremendously during the second flood wave that occurred in June and July. Forty-three embankments and dykes were breached by the flood waters across the state, and all twenty-seven districts of the State were affected. The districts of Dhemaji and Jorhat were the worst hit areas. The river island Majuli, which lies in the district of Jorhat, was completely submerged during the floods. 2.3 million people were displaced during this period, and 4540 villages across 128 revenue circles were severely inundated. On 26<sup>th</sup> June 2012, the rainfall was 400% higher than the expected rainfall pattern. This was a small period of flooding and by the 30<sup>th</sup> June 2012 The monsoon rain fell below by 90% of the annual average allowing flood water to recede.

However, in the third week of September, the third wave of flooding washed across 22 districts, affecting 2.9 million people across 2594 villages in 94 revenue circles. The incessant monsoon rain, which is a common hydro-metrological phenomenon, was unusually heavy during the June 2012 episode of flooding. Past occurrences of such strong flooding have only been recorded in the years 1988, 1998 and 2004. The Map 13 shows the extent of the rainfall and flooding during the monsoon season of 2012 (National Institute of Disaster Management, 2013).<sup>21</sup>

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<sup>21</sup> NIDM report on 2012 flooding uses ASDAMA rainfall data from 26<sup>th</sup> June 2012 and 30<sup>th</sup> June 2012

**Map 13: Impact of 2012 Monsoon Flood in the state of Assam**



Source: Times of India, Archive

It is worth noting that after the June 2012 floods severe violence broke out in the lower catchment of the Brahmaputra river in the districts of Kokrajhar, Chirang and Dhubri. Approximately 77 people in Assam were killed during this violence, and 400,000 were displaced for an indefinite amount of time (Al Jazeera, 2012). The situation was handled by the involvement of 13 factions of the paramilitary, a curfew and shoot-at-sight order within these three districts (Buisness Standard, 2012; BBC, 2012). The conflict and curfew led to the suspension of works conducted under the MGNREGA programme, which mainly affected job-availability for the displaced families (Project Officer DDMA Chirrang, 2016).

Some of the people displaced by this violence are still living in camps in the neighbouring district of Bongaigaon, where the living conditions are abysmal and there is no provision of water, electricity, livelihoods or schooling (Project Officer DDMA Bongaingaon, 2016). The only sign that gives away its status as a camp for those displaced due to severe violence is a board that states, ‘rehab model village’ (picture below).

These Rehabilitation camps do not offer opportunities to engage in MGNREGA programmes. The displaced families can, however, claim unemployment benefits



under the MGNREGA Scheme, if they can establish their status as citizens of India (citizenship discussed in detail in Chapter 7). The non-availability of workers in areas from which displacement has occurred leads to a skewed programme performance.

**Picture 1: Rehab Model Village for violence affected families, Bongaigaon**



**Picture 2: Inside the Rehab. Model Village, Bongaigaon**

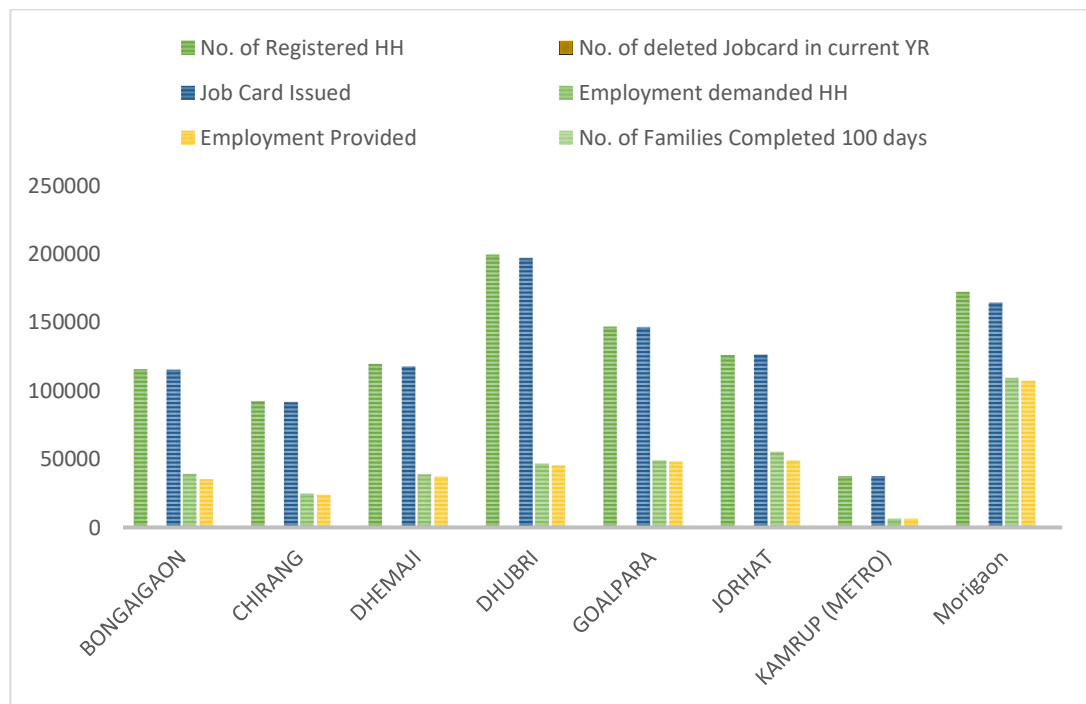


The July violence was followed by an August exodus of North-Eastern youths from the megacities of India. Video clips of the violence in Assam were widely circulated through social media to incite communal violence against North-Eastern youths working in several Indian cities (First Post, 2012). As mentioned earlier in this chapter, significant instances of violence and killings occurred in the cities of Mumbai and Pune (Maharashtra State), Lucknow (Uttar Pradesh State), Bangalore (Karnataka), Hyderabad (Andhra Pradesh) and Coimbatore (Tamil Nadu). In the city of Bangalore alone 30,000 North-Eastern youths fled to their home states during this time (Economic Times, 2012; India Today, 2012; Indian Express, 2012).

The then Prime Minister of India, Dr Manmohan Singh, who was also a parliamentarian from the Guwahati constituency of Assam, along with the Chief Minister of Assam, Shri Tarun Gogoi, became directly involved in negotiating space and strategies with the Chief Minister of Karnataka (Chief Minister Tarun Gogoi, 2016). At the request of the Assam government, additional trains were arranged to enable north-eastern youth to return to Assam (Zee News, 2012; Deccan Herald, 2012; Al Jazeera, 2012a). And the Home Minister of India ordered a blanket ban on SMS and MMS circulations in the violence-affected states for 15 days to mitigate public incitements (Times of India, 2012; First Post, 2012).

The floods, the violence in Assam, and the violence against north-eastern youths in rest of India badly affected not only the MGNREGA scheme's performance but also the performance of all other social welfare schemes and infrastructure building projects during that year (Deputy Commissioner Kamrup (M), 2016). Collectively the three floods severely ravaged the rural infrastructure building works while the violence and requirement for support for the conflict-displaced people pulled everyone in the administration towards the urgent requirements, such that the projects under the MGNREGA scheme were put onto the back-burner.

During the 2013-2014 MGNREGA scheme cycle, the registration of households across Assam slightly increased again. However, the employment demand amongst job card holders decreased in the districts of Dhemaji, Dhubri, Kamrup Metro and Goalpara, while it increased significantly in the districts of Morigaon and Bongaigaon.

**Chart 6: District wise overview of MGNREGA impact in 2013-14**

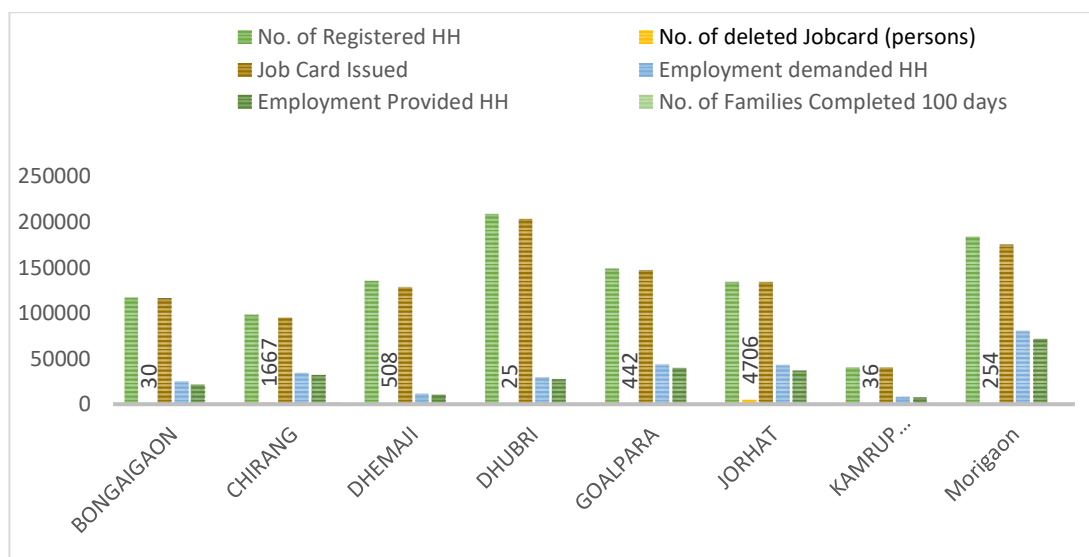
Source: Calculation based on MGNREGA district-wise data set  
 The data is retrievable from: [http://mnregaweb4.nic.in/netnrega/MISreport4.aspx?fin\\_year=2013-2014&rpt=RP](http://mnregaweb4.nic.in/netnrega/MISreport4.aspx?fin_year=2013-2014&rpt=RP)

It is interesting to note that in the 2013-2014 registration cycle, the issuance of job cards decreased from the earlier 100% target to 95% in the district of Morigaon. Although this is only a slight decrease, I have reason to believe that the care in issuing job cards is associated with the State's perception of citizenship.

The Assam violence in 2012 over the narrative of 'illegal Bangladeshi Migrants' and the backlash against that violence across India by religiously charged groups who considered the Assam violence part of a sustained scenario of violence against the Muslim community in the north of India were picked up heavily by social media and the news media. Central government leaders like Nitin Gadkari placed the blame squarely on 'illegal Bangladeshi Muslims' who enter from Assam and settle in various parts of the country for the backlash violence against the North-Eastern youths in the major cities of India (Business Standards, 2012a) a. The Central government, as well as the Supreme Court of India, gave multiple strong instructions to the Assam state government to fulfil the Assam Accord promise to update the National Register of

Citizenship in the State and withdraw rights conferred to alleged non-citizens (Ministry of Home Affairs, 2013). Thus, it can be assumed that the sudden decrease in the issuance of job cards and workers immediately following the episodes in the year 2012 was the result of a strong political undercurrent in regard to citizenship and belonging. When asked, the deputy commissioners of the districts refused to discuss this issue, calling it *'immaterial as the number of non-registrations is very low'*.

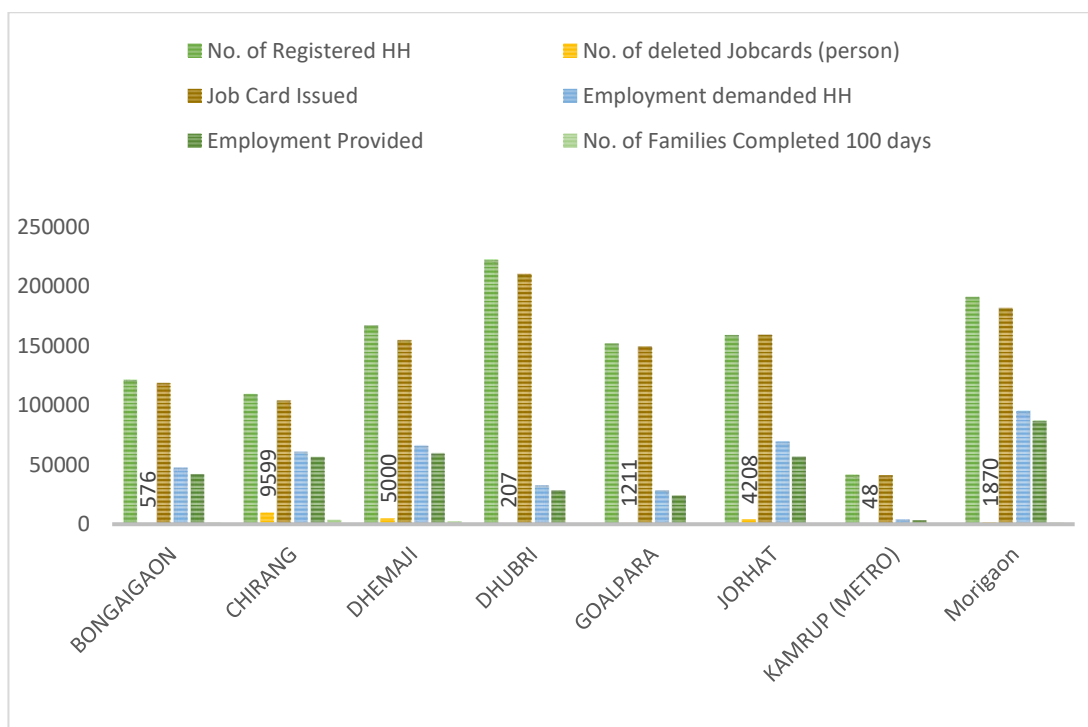
**Chart 7: District wise overview of MGNREGA impact in 2014-2015**



Source: Calculation based on MGNREGA district-wise data set  
 The data is retrievable from: [http://mnregaweb4.nic.in/netnrega/MISreport4.aspx?fin\\_year=2013-](http://mnregaweb4.nic.in/netnrega/MISreport4.aspx?fin_year=2013-)

2014&rpt=RP

In 2015-2016, the number of registrations into the MGNREGA scheme increased by almost 50,000 additional households. At the same time, the number of deleted job cards doubled from 15,893 deleted households in 2014-2015 to 29,082 in 2015-2016. In the district of Chirang, 3% of the job cards from the previous year were deleted. The work demand pattern went up from 26% to 36% in 2015-2016. In Chirang, 58.5% of those with a job card sought employment. Around 5.54% of those were given 100 days of employment in the district. Overall there was a slight increase in guaranteed employment during this year, and the state average was 2.53%.

**Chart 8: District wise overview of MGNREGA impact in 2015-2016**

Source: Calculation based on MGNREGA district-wise data set  
 The data is retrievable from: [http://mnregaweb4.nic.in/netnrega/MISreport4.aspx?fin\\_year=2013-2014&rpt=RP](http://mnregaweb4.nic.in/netnrega/MISreport4.aspx?fin_year=2013-2014&rpt=RP)

It is worth noting that 2015-2016 was the year that preceded the 14<sup>th</sup> General Assembly elections in Assam, which were held during April 2016. The performance of the districts on their essential programmes was under the media spotlight and social scanner throughout this particular year. In the district of Chirang, which out-performed its records, both the sitting MLAs won the elections although with a very narrow margin (Election Commission of India, 2014).<sup>22</sup>

The work demand dependence on MGNREGA is usually low and fluctuating. In some districts like Goalpara and Kamrup Metro, the dependence has in fact further decreased and the state government has not been able to create 100 days of waged employment in any of the districts. So far, the overall success of MGNREGA in reducing vulnerability by increasing livelihood security has been minimal. Thus, although the

<sup>22</sup> The Bijni election was won by a margin of just 1567 votes. Both of these constituencies are massive voter turnout constituencies with 86% of registered voters casting a vote. Both the returning MLAs of Chirang had stiff competition from first-time contestants, one of whom was an Independent candidate, while the other one was from the Bhartiya Gareeb Party (Indian Poor-person Party), a newly formed and relatively unknown party.

government of India has proclaimed it to be one of its key strategies for mitigating rural out-migration through livelihood adaptation, the synergy between MGNREGA and climate change migration remains operationally insufficient.

One of the other principal characters of the MGNREGA scheme is the building of rural infrastructure. This involves tasks such as building dykes, constructing roads and irrigation canals, maintaining wetlands and creating small structural measures for flood-control and erosion prevention. Such structural responses are necessary for mitigating vulnerability to floods. Elements of MGNREGA, therefore, also overlaps with the Mitigatory Policy thematic area – I discuss them in more details in the second part of section 4.2.

#### **4.2: Mitigatory Policy**

India's first National Flood Relief Policy was created in 1954 in an aftermath of the devastating floods that followed a massive earthquake in the state of Assam during 1950-51 (Umashankar, 2014; Singh, et al., 2013). From the memory people of Assam may tell how the 1951 earthquake permanently altered the geomorphology of the Brahmaputra River, making it a shallow basin river.<sup>23</sup> The changed morphology is partially responsible for the river braiding and extensive flooding during the monsoon season (Sarma, 2005; Gilfellow, et al., 2003; Allison, 1998).

The 1954 policy was designed with three phases of action. The Immediate Phase (Within two years) mandated the construction of embankments at vulnerable sites, the creation of revetments and spurs, to protect towns against river erosion, and the collection of data, to investigate the patterns of flooding. The Short-term Phase (from 3rd to 7th year) included progress in the creation of embankments and making structural improvements in drainage channels. The Long-term Phase (from 8th to 12th year) consisted of the construction of water storage reservoirs, the building of new

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<sup>23</sup> The fearful narrative of earthquake is potent in Assam. It was witnessed first hand by the researcher during the field work, when a Richter 5.3 level earthquake with epicentre across the Indian border with Myanmar shook the *bhumi* (land) of the circuit house in Dhemaji and the open spaces got flooded by crowds of people. Having experienced a 7.8 Richter earthquake in Tokyo during one of my fellowship in 2009, I personally felt immune to a tiny quake until my fearful neighbours insisted that I vacate the premise immediately and take safe cover with them. The night hours after that were filled with memories of 1951 earthquake, and phone calls from my newly acquired Assamees well-wishers, like it must usually happen in Assam after every earthquake since.

embankments wherever necessary, and the adoption of other long-term measures for flood control and irrigation (Water Resource Information System, 2013). The Policy has since been revised to include the non-structural measures of flood zoning and early warnings, which require state governments to identify flood zones within their jurisdictions and promote land-use patterns that will disincentivise land ownership in flood-prone areas.

#### *4.2.1 Setting up of Brahmaputra Board*

The management of floodplains under the 1954 policy was left to the state administration as river morphology and land-development policy differs on a state by state basis. However, due to the massive size of the hydro-metrological projects the state rely upon the central government for financial assistance as well as technical guidance. The River Management Wing of the Ministry of Water Resource and Irrigation looks after the implementation of the flood management programmes throughout India except in case of the Ganga River Basin and the Brahmaputra River basin. Specialised institutions were created in 1972 and 1980 to provide technical expertise and financial support for the Ganga and Brahmaputra basins respectively (Rashtriya Barh Ayog, n.d.; Mukhtarov & Gerlak, 2013).

The Brahmaputra Board, set up under the Brahmaputra Board Act of 1980, is tasked to perform functions and exercises that the central government may specify from time to time by notification in the official Gazette. Since its constitution, it has been given the task of carrying out surveys and investigations in the Brahmaputra valley and preparing a master plan for the control of flooding and bank erosion and the improvement of drainage in the Brahmaputra and Baraka valleys. The Board has also embarked on the construction of multipurpose dams in consultation with the central government. In the state of Assam, the policy on flood control is implemented through the agendas set out/revised in the National Flood Relief Policy of 1954 and the works undertaken by the Brahmaputra Board (Brahmaputra Board, n.d.).<sup>24</sup>

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<sup>24</sup> The documentation on the Statutory provisions for flood planning and management in India are available through the Central Water Commission website at the following link [http://www.cwc.nic.in/main/webpages/Legal%20instruments%20of%20Rivers%20in%20India %20publications.html](http://www.cwc.nic.in/main/webpages/Legal%20instruments%20of%20Rivers%20in%20India%20publications.html)



Overall progress under the 1954 policy has been slow. In the Brahmaputra basin, an estimated 4458.60 Km of the embankment has been constructed since 1954. In 1976 the government of India constituted the *Rashtriya Bhar Ayog* (Central Flood Control Board - CFCB) to provide an in-depth analysis of approaches needed to strengthen the strategies under the 1954 policy.

The measures recommended by the CFCB are incorporated through the non-plan budgets of the state and central governments. The Public Works Department deals with all public works related to flood control. State Flood Control Boards are constituted of representatives of the various departments of the state governments and central organisations directly involved in flood control measures. However, often, the structural flood control measures are inadequate, and in the state of Assam the level of this inadequacy is alarming (National Disaster Management Authority, 2008). The following maps provide a comparative visual analysis of the water management work undertaken in India and the State of Assam. The water resources projects depicted in the maps are broadly categorised into Major and Medium Irrigation Projects, and Hydroelectric Projects. The Central Water Commission maintains voluminous records on projects implemented by the State and Central Government Departments. The 2010 dataset has been used to plot information on the maps using the spatial-relations-interface and the query-interface map of irrigation projects including dams, reservoirs, and irrigation channels. The maps have been generated through the GIS project overview programming. The all India map on the next page depicts a total of 1759 Major & Medium Irrigation Projects; 132 ERM Projects; 220 Hydro-electric Projects; 293 Powerhouses; 390 Lift Irrigation Schemes; 4608 Dams; 208 Barrages; 299 Weirs; 74 Anicuts and 4574 Reservoirs.<sup>25</sup> The All India Map also provides a comparative overview of structural development in the North-east part. The Map shows a relative absence of water projects in the State of Rajasthan (western part of India). It is worth mentioning here that Rajasthan is a desert landscape with dry-spells and lack of rainfall as a primary issue. There are no significant rivers in Rajasthan and thus, the current

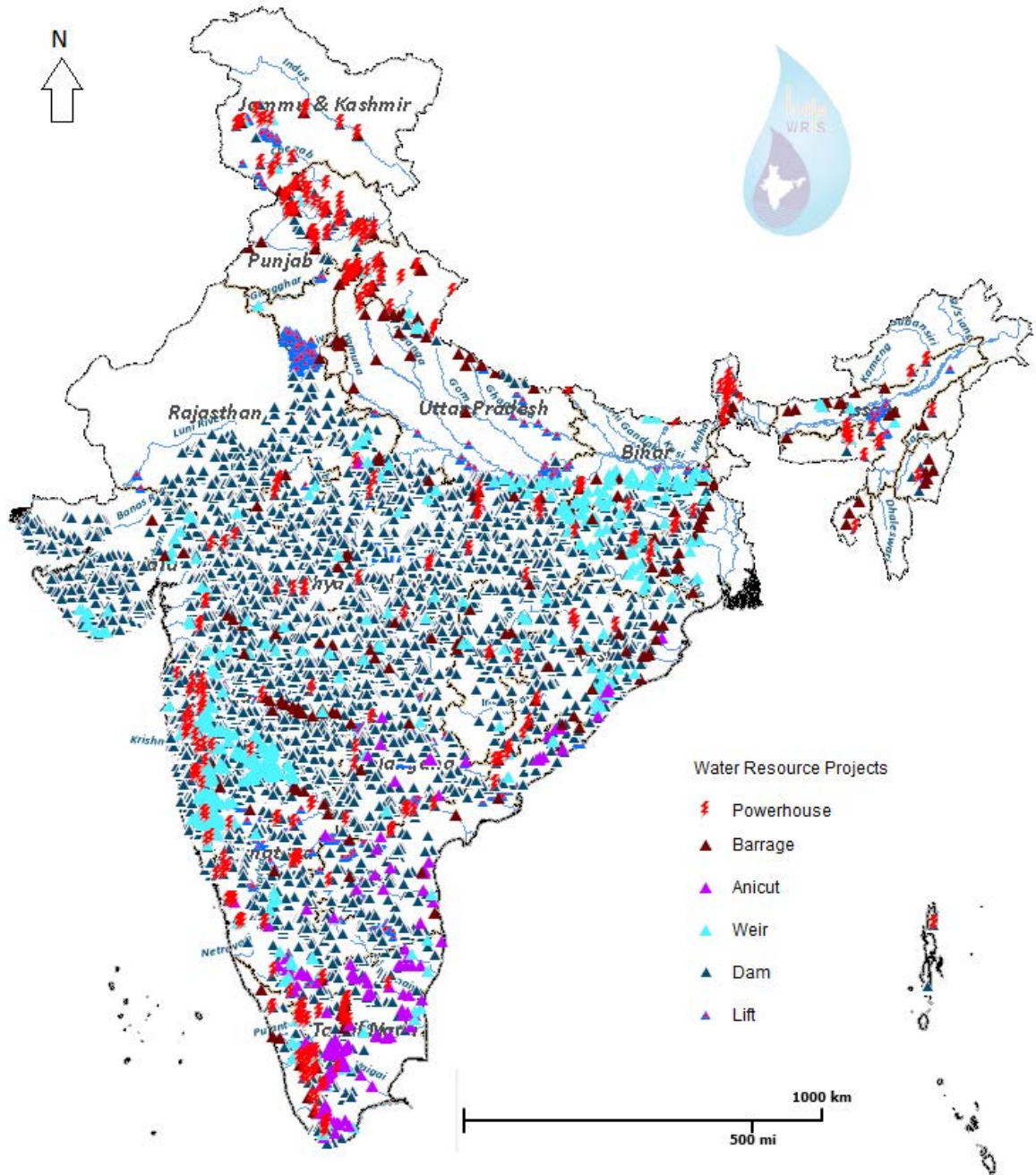
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<sup>25</sup> Information collated through the Water Resource Information System of India website. The List of water works in Assam is available at the following page <http://www.india-wris.nrsc.gov.in/wrpinfo/index.php?title=Assam>



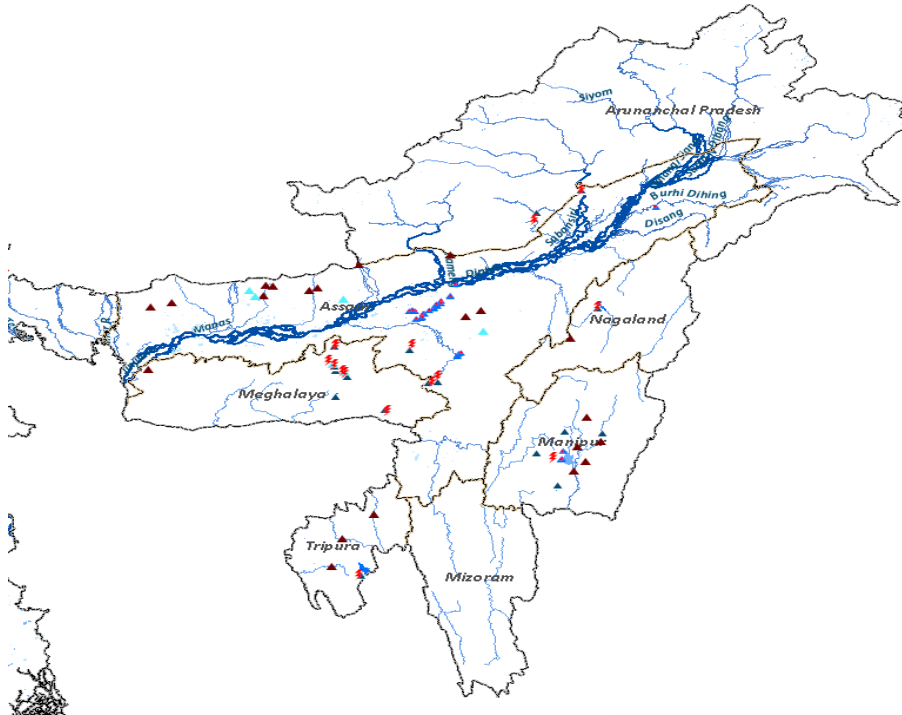
mapping of river-projects and flood risk reduction projects do not populate the state of Rajasthan.

Map 14: Water Management Projects across India, based on 2010 dataset



Source: Map not to scale - generated using the WRIS data available at <http://www.india-wris.nrsc.gov.in/WRPApp.html>

Map 15: Water Management Projects in the North-East (including Assam), 2010 data



Source: Map not to scale - generated using the WRIS data available at <http://www.india-wris.nrsc.gov.in/WRPApp.html>

The maps depict a lack of structural development in the Brahmaputra Valley as well as the Ganges Valley. However, there are differences between the nature of the Brahmaputra valley and the Ganges Valley. First, due to its morphology, the river Ganges has a deep drainage basin with mostly defined banks; this character is missing in the case of the river Brahmaputra, which, due to the 1950 earthquake in the region and a resultant shift in the tectonic plates, became a shallow basin river with an undefined course. GIS imagery from Indian Space Research Organizations' National Remote Sensing Mission shows that the Brahmaputra is very susceptible to river course-change and bank erosion (National Remote Sensing Center, 2011).

Second, the Ganges, due to its 'sacredness', has an abundance of privately managed river-bank structures called '*ghats*', which are an important part of the everyday rituals of the lives of the Hindu people occupying the bank of the Ganges. People living across the Ganges use these *ghats* not only for special ritualistic purposes like birth and death ceremonies, but also on an everyday basis for purification baths and the offering of daily prayers. However, Brahmaputra is not a 'mother river'; in fact, it is the only paternalist river in India, and no such religious sentiment or physical structure

symbolic of religious practices is visible across its Banks.<sup>26</sup> Brahmaputra river system, does not attract a similar emotive response as Ganga. There is no fundamental sacredness associated with the river itself. Unlike the Ganges, which is the ‘life-giving mother river’, the Brahmaputra is the ‘mighty destroyer’ or a ‘stream of sorrow’ in the popular colloquial narratives.<sup>27</sup> The narrative of destruction normalises the disasters in Brahmaputra valley and they are not considered as intense as the ones faced in the Ganges river system.

The occurrences of floods in Brahmaputra are politically inconsequential for the Central Indian government, due to a relatively low population of the North East India as well as the normalisation of flood incidences itself. The prominent place that Ganga river basin receive in Water management agenda of India is not shared by Brahmaputra, which has led to negligence in big-scale projects in the region.

#### ***4.2.2 Structural progress under MGNREGA***

The MGNREGA scheme is equipped in handling and delivering small-scale projects under its program operationalisation. The flood control activities under the MGNREGA scheme are 7<sup>th</sup> in the order of priority of projects that can be adopted (Sharma, 2012). In the state of Assam, the erosion protection and flood control measures include the construction of cross drainage and bunds, boulder pitching of the river bank, the construction of spurs, the deepening of drains and the construction of side-slopes and bed-slopes.

In the cluster area of flood control works, the State of Assam had a total of 4044 ongoing projects in the year 2015-2016 with a combined value of 199.235 million rupees. There has been a decrease in expenditure since 2012-2013, when 1751 projects with an estimated value of 242.432 million rupees were undertaken. Most of the projects in the study districts are undertaken in the Districts of Dhemaji, Chirang and

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<sup>26</sup> An exception to the norm is presence of *ghat* at the water-side periphery of the Kamakhya Temple dedicated to Goddess Kamakya in Guwahati.

<sup>27</sup> In popular culture one of the most celebrated singer of North-East India - Dr. Bhupin Hazarika has famously alluded to river Brahmaputra for the ‘heartless miseries across its wide boarder’. The song *Bistirna paarore* was later translated to Hindi and Brahmaputra was replaced by ‘Ganga’ (reflecting might ganga-like river of north-east). The Hindi rendition of *Ganga Behni of Kyun (Ganga why do you flow?)* made Bhupin Hazarika a colossal figure in mainstream music culture of India.

Morigaon, which are primarily rural and have an intensive river network requiring flood control measures. In contrast, in the district of Kamrup Metro, which is an urban district, the number of projects relating to flood control is minimal. The following table provides a breakdown of the projects undertaken in the study districts in 2015-2016 and 2012-2013. It is necessary to note here that some of the projects that were started in 2012 may have spilt over into subsequent years, and even into the year 2015. However, there is no accurate data that can be used to provide an overview of the spill-over projects.

**Table 9: Breakup of MGNREGA works undertaken in 'Flood Control and Protection' Cluster**

District	2015-2016			2012-2013		
	Completed	Ongoing	Approved	Completed	Ongoing	Approved
<b>Bongaigaon</b>	29	89	5	3	48	1
<b>Chirang</b>	114	284	26	252	74	24
<b>Dhemaji</b>	37	271	44	55	207	47
<b>Dhubri</b>	30	80	10	4	44	1
<b>Goalpara</b>	2	59	0	54	21	0
<b>Jorhat</b>	15	146	1	64	18	0
<b>Kamrup M</b>	0	1	1	0	1	0
<b>Morigaon</b>	13	350	36	16	125	7
<b>Assam total</b>	519	4044	587	982	1751	395

*Source: Ministry of Rural Development, MIS Database for MGNREGA*

A United Nations Development Programme study conducted in collusion with the Ministry of Rural Development found that the construction undertaken under MGNREGA in the state of Assam was sub-standard; no proper survey or design was undertaken; and it lacked consideration of the cost-benefit ratio (Sharma, 2012). The projects, some of which cost over 10 million INR, were undertaken at the Gram Panchayat level and were found to be non-durable and technically unsound, often constructed under the supervision of the Junior Engineer with the authorisation of the Water Resource Department.

For example, in the district of Barpeta, a single project for boulder pitching of the river, costing twenty-three lakhs INR, was undertaken by the GP under the supervision of

the Junior Engineer. It was found that the construction was made without any survey, design, or cost-benefit analysis. Due to the material weakness the project was unable to withstand even the normal flow of the river and got washed away prior to the flood season. Similarly, in the District of Bongaigaon, Popragaon G.P. undertook large-scale cross-drainage projects with an estimated cost of Rs 1.77 crore. However, the survey, design and execution were found to be flawed, and thus the project was deemed unsustainable in the long run (Sharma, 2012, pp. 67-70).

The lack of structural projects in the State of Assam has led to the erosion of more than 4.27 Lakh Hectares of land in the Brahmaputra valley over the past five decades. The total eroded area constitutes 7.4 % of the total land area of the state. The annual average loss of land is nearly 8,000 Hectares per year across the 17 riverine districts (Water Resource Department, 2016). In 2015, two surveys were conducted at the revenue circle level by the district administrators and the Special Advisor to the Chief Minister to estimate the number of families living on the embankments who were affected by erosion. The result of these non-published surveys was made available by the Assam State Disaster Management Authority during this research.

The surveys indicate differential data and differential methodologies in terms of calculating the land-loss. Over the two surveys, it is estimated that between 10,153 to 18,495 families suffered from bank-erosion. Within the government, some people feel that the numbers from both the surveys are very restrictive. The enumeration accounts only for families who are undisputed land-owners and does not even include tenant residents, let alone landless residents or those with disputed titles. Furthermore, the surveys do not account for households that have degraded and uncultivable lands due to sheet-erosion and sand-deposition (Chief Operating Officer ASDMA, 2016). The people who live in these eroded and degraded land areas are now permanently displaced.

### **Conclusion**

As stated in chapter 2, climate change migration is treated in this thesis as a wicked problem requiring complex and multi-layered responses. Two such responses were discussed in this chapter, which focused on enabling mobility as an adaptation strategy

and mitigating structural vulnerability to reduce episodes of sudden and forced displacement. In this context, the rights to freedom of movement, freedom of residence and freedom of livelihood were discussed along with the administrative responsibility for welfare (livelihood diversification) and development (structural enhancement).

The chapter provided an overview of the existing normative framework and its deliverance in the eight study districts. The process of implementation of these policies, as stated in the chapter, is carried out by the office of the District Commissioner, which is the smallest comprehensive unit of administration in India. The District Commissioner is advised by secretarial departments like the Brahmaputra Board, and the Revenue and Disaster Management department, to make operational strategies and decisions about implementation. Local actors such as the Panchayats, block development officers and Junior engineers are the agents who nominate and identify projects based on the strategy planned by the district and secretarial administrators, for example the identification of structural works that need to be undertaken on a priority basis or the identification and registration of households for employment under MGNREGA.

The local agents also act directly in terms of implementation once tasks have been approved by the office of the Deputy Commissioner. While some of these agents, like the Panchayats, are involved in the identification and deliverance of several different structural and welfare projects, their responsibility is limited to specified actions, and they are not required or expected to contemplate cross-sectoral or cross-project synergies. Furthermore, the administrative accountability of the local officers is limited to their line managers and does not include the public they are serving.

The overall responsibility for delivering project(s), enhancing synergies, and public accountability in regard to service delivery is shared between the office of the Deputy Commissioner, the State Secretariat, and the governing political party (the public face of the government). It can be seen from the description so far that the state of Assam benefits from a functional normative framework in assisting in enabling adaptive climate migrations and mitigating forced forms of climate change migration. However, the deliverance is poor. I will be discussing in the discussion chapters why and how

the administrative perspective, the political influence on everyday administration, and the demography of the state allows for the variations in response to climate migration and considerably restricts any positive outcome.

## **Chapter 5 Relief and Compensatory Policies: *Tracing Institutional Framework and Progress***

Continuing with the description in the previous chapter, this chapter concentrates on the Relief Policies and Compensatory policies that have synergies with the essential response required to deal with climate change migration. Understanding how countries respond to sudden-onset disasters and how those who are currently displaced due to loss of their lands and livelihoods are compensated is essential for two reasons. First, in the absence of an international consensus, national policies play a significant role in filling the normative legal gap by providing substantive rights to those who are on the losing side of the climate change battle. Although the UNFCCC has constituted a Task Force on Displacement, its role is limited to consultation and drafting recommendations for state parties. Following up on those recommendations or even being party to the consultative process is entirely a state's own prerogative. It has also been seen that the Government of India has avoided any open dialogue on climate change-related displacement, citing it as a western negotiating tool and insisting that the existing legal mandates in India are sufficient to synergies climate change displacement with the human development and human security agenda.

Second, as the administrative organisations work with an incremental stability approach, it is highly likely that despite having targeted legislation, the administrative apparatus of the country will take some years to internalise the mandates through revamping its functionality. It can be seen from the case of the enactment of the Disaster Management Act in India that while the legal basis for setting up a disaster management authority was created in 2005, the actual functional administrative set-up is not present in many Indian states.

In the State of Assam, the Assam Disaster Management Authority as a fully functional entity was constituted in 2012 (Chief Operating Officer ASDMA, 2016), and even now most of the relief functioning in the state follows the 1976 Flood Relief Manual and associated executive order instead of the Disaster Management Act guidelines (Bohra-Mishra & Massey, 2011). Although some administrators do believe that the earlier executive actions under the Flood Relief Manual and the Disaster Management Act



are complementary and in places even imitate each other, the Disaster Management Authority does not have direct involvement in disaster response. While it acts as a coordinating body, disaster management authority personnel are not involved in the yearly flood-management preparatory meetings between the Deputy Commissioners and the Revenue Department (Project Officer DDMA Kamrup(M), 2016).

In the remainder of this chapter, I focus on the relative success of the relief and compensation policies of the state of Assam. Section 5.1 provides an overview of the relief process in the state while discussing the performance of relief across the eight study districts. I focus mainly on the district of Morigaon, which has been the worst hit by floods and flood erosion. Section 5.2 discusses the aspect of compensation, including the ex-gratia compensation allotted to flood victims, and the *Indira Awas Yojana*, whereby flood-erosion victims are prioritised in the allocation of the affordable housing fund.

## 5.1 Relief Policy

*“Relief, recovery, rehabilitation it goes in stages. However, we have only kept ourselves limited to relief so far.... The flood comes, we assist, people go back, we go back.”*

(Chief Operating Officer ASDMA, 2016)

The state of Assam is a relief-focused state. Following the devastating floods of 1972, 1974 and 1975, the government of Assam adopted the Assam Flood Relief Manual in 1976. The manual was aimed at streamlining the efforts of relief, demarcating the responsibility of each horizontal and vertical department in the necessary administration and fixing the amount and duration of relief provided to each individual victim.

The manual focuses on emergency situations arising out of flooding while suggesting that the same pattern of relief can also be followed in the case of other disasters including civil conflict and human-made disasters. Section 1.3 of the Manual specifies

the duties and responsibilities of Deputy Commissioners with a degree of flexibility to allow them to operate according to the needs of the situation. The Manual requires each department within the State Secretariat to draw up a departmental plan for minimising damage and ensure the supply of provisions that may be needed during flood relief (Section 1.6). Section 1.7 classifies the flood-affected areas into very vulnerable and vulnerable areas based on the recommendations of the Ministerial Committee on Flood Relief appointed by the Government of India through the Ministry of Irrigation and Power.

The manual uses an administration pattern like that in the Famine Code of 1880. However, it is debatable whether, unlike the Famine Code, the Relief Manual provides relief that is too generous, which creates victim dependency and undue stress on the state economy. I will take up this discussion again in Chapter 6, where I talk about the institutional capacity to respond to climate migration.

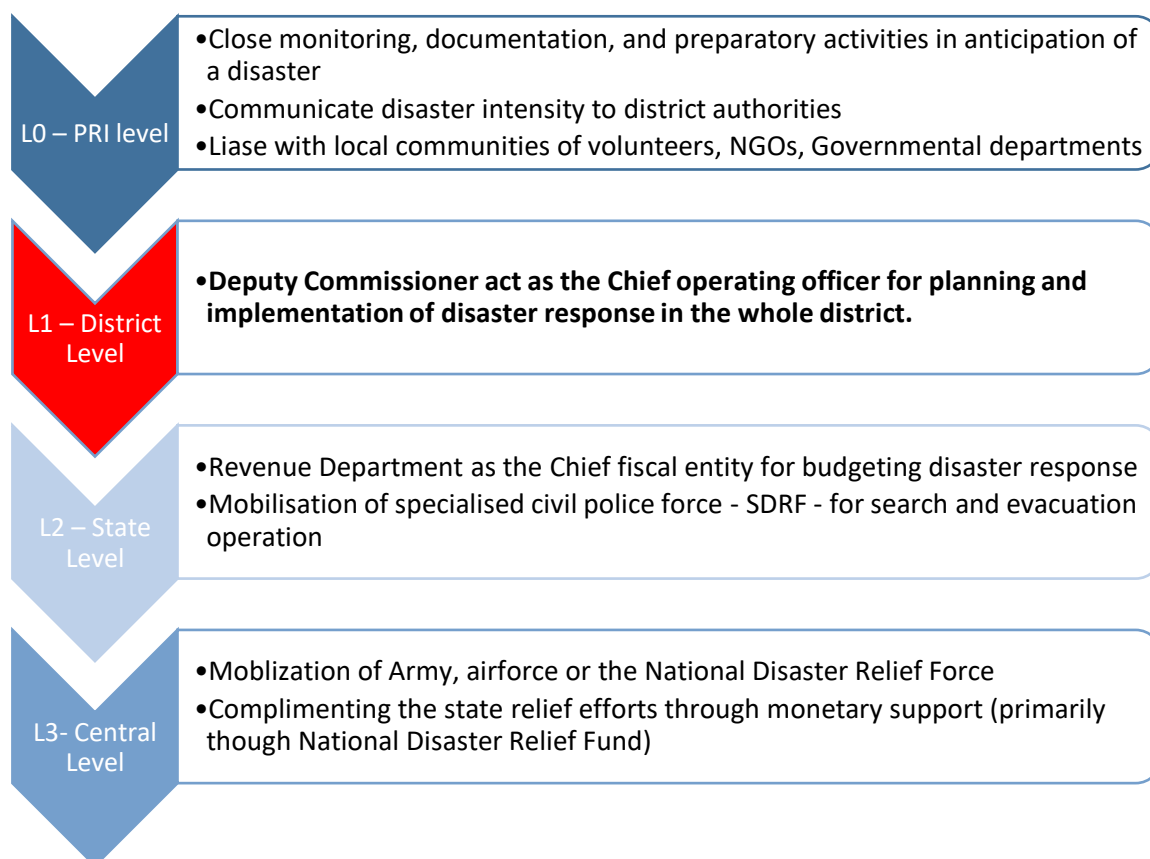
### *5.1.1 Disaster Management Act*

In the year 2005, the Government of India enacted the Disaster Management Act to standardise the disaster response across the entire country. The act made it mandatory for every state government to set up a State Level Disaster Management Committee as a nodal organisation to strategise relief and rescue operations across the state. The Assam State Disaster Management Authority was subsequently inaugurated in 2012. At the time of the field visit, the authority had physically established itself with space and personnel and was fully functional up to the district level. Each district surveyed has a designated District Disaster Management Authority (DDMA) with a Programme Officer and District Disaster Management Plan, as mentioned in chapter 3.

Under the new approach, Assam has adopted an integrated disaster management agenda, wherein *all departments are involved in responding to all the hazards* that may occur (Assam State Disaster Management Authority, 2012a). The response is carried out through a vertical system of responsibility depending on the severity of the disaster. The localised institution of the Panchayati Raj is the first initiator as well as a first responder. The implementation of strategic operations like the opening of relief camps, the provision of essential food and non-food items, or the management of the

evacuation process is overseen by the District Commissioner's office (Assam State Disaster Management Authority, 2012a).

**Figure 3: Functional Hierarchy under Disaster Management Act**



Although the DM Act of 2005 makes it mandatory to involve the PRIs and village bodies in the planning phase, it was seen that the relief plan follows the top-down approach of the 1976 Flood relief Manual and the villagers are unaware of the presence of the Assam State Disaster Management Authority or the District Disaster Management Authority (Group Discussion in Fafal, 2016; Group Discussion Sutar Gaon, 2016). An overview of some of the necessary response functions in the event of displacement and planned relocation during a disaster episode is provided in the table below. Most of the planning and implementing functions are concentrated in either the DC office or the State secretarial departments, while the PRIs and even the State Disaster Management Authority only play a limited coordinating role.

**Table 10: Functionality of Key Institutions during Disaster**

Department	Function
Panchayati Raj Institutes (village level)	<ul style="list-style-type: none"> <li>• Coordinate support from line agencies to undertake response</li> <li>• Coordinate with line agencies/departments and ensure supply of relief materials</li> </ul>
Deputy Commissioner & DDMA (District level)	<ul style="list-style-type: none"> <li>• Conduct weekly meetings to review flood management during the flood season</li> <li>• On receipt of flood warning D.C will: <ul style="list-style-type: none"> <li>○ Send relief officers</li> <li>○ Request SP to send Police party and install temporary wireless stations</li> <li>○ Request Fire &amp; Emergency Services to place State Disaster Response Force (SDRF) personnel along with rescue boats if required</li> <li>○ Seek suggestions from the WR department in regard to evacuating people from vulnerable places</li> </ul> </li> <li>• Visit the places of flood occurrence <ul style="list-style-type: none"> <li>○ Make prompt operational decisions. Assess the requirements for men and materials for relief. Call for coordinated aid</li> <li>○ Ensure that services are arranged, and materials are mobilised</li> <li>○ Supervise arrangements in Evacuation centres and Relief Camps</li> <li>○ Arrange to collect donations in cash and kind</li> <li>○ Requisition the services of the officers of various departments, Urban Local bodies and Zilla Parishads to undertake relief works</li> <li>○ Call for Non-Officials/Volunteers/NYK, Civil Defence, Red Cross Volunteers or members of other voluntary organisations</li> <li>○ Secure assistance from the Army/NDRF or other Central Government agencies when the arrangements made by civil authorities prove to be inadequate</li> </ul> </li> <li>• D.C will make arrangements to construct shelters in Relief Camps</li> <li>• Arrange sanitation and maintenance of clean lines and water supply in the Relief Camps</li> <li>• Grant gratuitous relief in cash and kind to the affected people</li> <li>• Arrange care of the infirm, destitute, orphans, children and expectant/nursing mothers in the relief centres</li> <li>• Ensure supply of cooked food only in unavoidable circumstances</li> </ul>
Revenue & Disaster Management Department (State Secretarial Level)	<ul style="list-style-type: none"> <li>• Dispatch quick response teams in high-risk prone areas for evacuation</li> <li>• Distribute relief materials, Restore basic services</li> <li>• Set up temporary shelters for the affected population</li> <li>• Coordinate with possible stakeholders</li> </ul>
Finance Department	<ul style="list-style-type: none"> <li>• Determine the preliminary allocation of funds for relief efforts</li> <li>• Mobilise resources</li> </ul>

Department	Function
Home Department	<ul style="list-style-type: none"> <li>• Dispatch response teams to hazard-prone locations based on the warning information</li> <li>• Coordinate with the State Disaster Information Centre</li> <li>• Facilitate evacuation</li> <li>• Provide resource support to conduct Search &amp; Rescue Operations</li> <li>• Maintain law and order</li> <li>• Relay information through emergency communication lines</li> <li>• Provide support to Fire &amp; Emergency Services to undertake swift actions</li> </ul>
Public Works Department (Roads and Bridges)	<ul style="list-style-type: none"> <li>• Determine routes for mobilisation of resources</li> <li>• Establish emergency communication network</li> <li>• Provide equipment support to search and rescue</li> <li>• Coordinate the supply of goods and services</li> <li>• Establish missing road-links</li> <li>• Clean and remove debris from communication infrastructure</li> <li>• Undertake emergency repair of roads/communication and buildings</li> <li>• Provide emergency communication links</li> <li>• Undertake construction of temporary structures</li> </ul>
Transport Department	<ul style="list-style-type: none"> <li>• Facilitate movement of emergency personnel, equipment and essential food, water and medical supplies</li> <li>• Move population to safe areas</li> <li>• Maintain and operate around the clock connectivity to all affected areas</li> </ul>
Food and Civil Supplies Department	<ul style="list-style-type: none"> <li>• Coordinate with local authorities and transport essential supplies to disaster-affected areas and shelters</li> <li>• Provide tailored food packets to people with special needs</li> <li>• Mobilise air/land/inland water transport for food and essential item supply to the inaccessible regions</li> </ul>
Public Health & Engineering Department	<ul style="list-style-type: none"> <li>• Provide immediate safe drinking water supply in disaster-affected areas, emergency shelters, relief camps and hospitals</li> <li>• Provide latrines/sanitary latrines in Relief Camps quickly</li> </ul>
Health and Family Welfare Department	<ul style="list-style-type: none"> <li>• Undertake vaccination drive/established disease prevention or mitigation protocols for the relief camps</li> <li>• Set-up medical relief camps from District to PHC Level</li> <li>• Assess the availability of medical equipment and staff</li> <li>• Provide basic medical assistance</li> <li>• Activate mass casualty plan if the need arises</li> </ul>

Source: Assam State Disaster Relief Manual

### 5.1.2 Relief Operationalisation

Every year between the months of October and December the Deputy Commissioner, in consultation with the Chief Minister Office, the Revenue Department, the State Secretariat and organisations such as the United Nations Development Programme, reviews the flood response approach for the upcoming year. In January and February, the DC Office invites tenders from private individuals and organisations to procure the

provision of relief (non-food relief). At the same time, the Block Development officer, in consultation with the Gram Panchayat and Intermediary Panchayats, survey the district to identify breaches and allocate buildings as shelter houses during a disaster.

By the end of March, the tenders have been accepted, the provision for relief has been contracted out to private individuals, and buildings have been earmarked as shelter houses. The information about relief and shelters is disseminated by the PRIs and the *Gaon Buda* (Village headman). Any urgent task for repairing a structural breach is contracted out to the Public Works Department. The months of April and May are utilised by the designated contractors to stock up government inventories with relief items for inspection and shift them to the designated shelters after quality checks have been made (Deputy Commissioner Bongaigaon, 2016; Deputy Commissioner Kamrup (M), 2016). The end of June until the end of September is the monsoon period when the flooding occurs. The relief process begins when the water reaches the safety mark in a local area. Temporary relief for a maximum of three days is provided in the form of food items and non-food items such as gasoline, rain-sheets, and firewood for cooking. The utilisation of funds every year depends upon the relative intensity of the floods and the total relief expenditure (Deputy Commissioner Goalpara, 2016). Unexpected structural breaches due to unsustainable constructions, as discussed in Chapter 4, may lead to a broader than anticipated scale of disaster. And multiple flooding such as the triple flooding of 2012 may lead to 'back-to-back relief operations' (Bohra-Mishra & Massey, 2011). The principal task of the state during the monsoon months is to stay alert to any instance of flooding and respond to the humanitarian needs of the people; everything else, *'especially any infrastructural work comes to a stand-still as the rains are incessant and there is water-logging everywhere'* (Deputy Commissioner Kamrup (M), 2016).

A regular process of '*incidence recording*' (IR) also known as *flood situation reporting* is used throughout the state and in all the study districts. This process, which has continued since the adoption of Flood Relief Manual in 1976, is a sophisticated tool that is used for recording details of flooding on an everyday basis, starting from the very first day of the monsoon onset. Everyday reporting of the flood-situation is

communicated in a set format from every revenue circle. The level of the water, the incidence of damage to infrastructure, life and property, and the details of rescue, relief and support are transmitted to the district administration. The District administration compiles the report into a single file format daily, to be communicated to the State Disaster Management Authority (before 2012 the reports were sent to the Water and Irrigation Department and the Revenue Department simultaneously). ASDMA compiles the report from all the districts to create a daily record, which is published on their website. A backlog of these reports can be found on the ASDAMA website. Since 2014 this has been accessible to the public. The pictures below show the format of the reports on 14<sup>th</sup> July 2014 and 13<sup>th</sup> July 2016.

**Picture 3: Daily Flood Report 7th July 2014**

<u>PARTICULARS</u>	<u>Situation as on 07<sup>th</sup> July, 2014</u>					
Name of the Rivers flowing above Danger Level	Brahmaputra Nematighat (Jorhat)					
No. of Districts Affected	02					
Name of Districts Affected	Dhemaji, Lakhimpur					
No. of Revenue Circles affected	02					
Names of Revenue Circles affected	Dhemaji	Jonai				
	Lakhimpur	Subansiri				
No. of Villages affected	Dhemaji	05 (Jonai)				
	Lakhimpur	03 (Subansiri)				
	<b>Total</b>	<b>08</b>				
Total Crop area affected (in Hect.)	Dhemaji	108				
	Lakhimpur	95				
	<b>Total</b>	<b>203</b>				
Population affected	Dhemaji	250				
	Lakhimpur	256				
	<b>Total</b>	<b>506</b>				
Relief Camps/ Centres opened	Nil					
Inmates in Relief Camps	Nil					
Human Lives Lost (Dist. wise)	Nil					
Animals Affected	<i>Dist.</i>	<i>Big</i>	<i>Small</i>	<i>Poultry</i>		
	Dhemaji	50	87	300		
Animals Washed away	Nil					
Houses Damaged	<i>Dist.</i>	<i>Fully</i>	<i>Partially</i>			
	Nil	Nil	Nil			
Rescue Operation	<i>Dist.</i>	<i>Agency</i>	<i>Boat deployed /Helicopter used</i>	<i>Persons Evacuated</i>		
	Nil					
Relief Distributed	<i>Dist.</i>	<i>Rice</i>	<i>Dal</i>	<i>Salt</i>	<i>M. Oil</i>	<i>Others</i>
	Nil					
Infrastructure Damage	<b>Sonitpur:</b> <ul style="list-style-type: none"> <li>River side slope of newly constructed embankment of Sessa and Chatrang is eroded away at different reaches.</li> </ul>					
Animals Affected in National Parks & Wildlife Sanctuary	Not Reported.					

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Picture 4: Daily Flood Report 13th July 2014

<i>PARTICULARS</i>	<i>Situation as on 13<sup>th</sup> July, 2016</i>					
Rivers flowing above Danger Level	Brahmaputra at Nematighat (Jorhat), Dhubri (Dhubri); Dhansiri (S) at Golaghat (Golaghat), Numaiagarh (Golaghat)					
No. of Districts Affected	06					
Name of Districts Affected	Lakhimpur, Golaghat, Morigaon, Jorhat, Dhemaji, Biswanath					
No. of Revenue Circles affected	15					
Name of Revenue Circles	Lakhimpur	02	Subansiri, Nowboicha.			
	Golaghat	05	Khumtai, Bokakhat, Golaghat, Dergaon, Morongi.			
	Morigaon	01	Mayong			
	Jorhat	03	Teok, Jorhat West, Titabor			
	Dhemaji	02	Dhemaji, Gogamukh			
	Biswanath	02	Gohpur, Halem			
	<b>Total</b>	<b>15</b>				
No. of Villages / Localities affected	Lakhimpur	05	03 (Subansiri), 02 (Nowboicha).			
	Golaghat	88	24 (Khumtai), 12 (Bokakhat), 21 (Golaghat), 30 (Dergaon), 1 (Morongi).			
	Morigaon	22	22 (Mayong)			
	Jorhat	28	05 (Teok), 21 (Jorhat West), 02 (Titabor)			
	Dhemaji	13	12 (Dhemaji), 1 (Gogamukh)			
	Biswanath	06	03 (Gohpur), 03 (Halem)			
	<b>Total</b>	<b>162</b>				
Total Crop area affected (in Hect)	Lakhimpur	36.03	8.03 (Subansiri), 28 (Nowboicha).			
	Golaghat	5,408.65	2,316 (Bokakhat), 130.19 (Khumtai), 180 (Golaghat), 2775.46 (Dergaon), 7 (Morongi).			
	Morigaon	618	618 (Mayong)			
	Jorhat	1,230	80 (Teok), 1,150 (Jorhat West), 670 Bighas (Titabor)			
	Dhemaji	1,217	1,211 (Dhemaji), 6 (Gogamukh)			
	Biswanath	175	160 (Gohpur), 15 (Halem)			
	<b>Total</b>	<b>8,684.68</b>	<b>&amp; 670 Bighas</b>			
Population affected	Lakhimpur	957	102 (Subansiri), 855 (Nowboicha)			
	Golaghat	55,419	12,254 (Bokakhat), 18,683 (Khumtai), 21,052 (Dergaon), 2,815 (Golaghat), 615 (Morongi).			
	Morigaon	1,458	1,458 (Mayong)			
	Jorhat	47,751	2,300 (Teok), 45,000 (Jorhat West), 451 (Titabor)			
	Dhemaji	4,943	4,758 (Dhemaji), 185 (Gogamukh)			
	Biswanath	350	350 (Gohpur)			
	<b>Total</b>	<b>1,10,878</b>				
Relief Camps	Golaghat	04 (Relief Camp)				
	Jorhat	12 (Relief Camp)				
	<b>Total</b>	<b>16 (Relief Camp)</b>				
Inmates in Relief Camps	Golaghat	197				
	Jorhat	2,624				
	<b>Total</b>	<b>2,821</b>				
Human Lives Lost (Dist. wise)	Dist.	-				
	<b>Total</b>	<b>-</b>				
Animals Affected	Dist.	<i>Big</i>	<i>Small</i>	<i>Poultry</i>		
	Morigaon	4,819	3,735	5,753		
	Golaghat	14,864	4,521	U/A		
	Jorhat	11,200	3,850	10,500		
	Dhemaji	284	309	240		
Animals Washed away	Dist.	<i>Big</i>	<i>Small</i>	<i>Poultry</i>		
	Golaghat	U/A	U/A	U/A		
Houses Damaged	Dist.	<i>Fully</i>		<i>Partially</i>		
	Jorhat	U/A		U/A		
	Golaghat	U/A		U/A		
Rescue Operation	Dist.	<i>Agency</i>	<i>Boat deployed / Helicopter used</i>	<i>Persons Evacuated</i>		
	Jorhat	SDRF, NDRF	6 Boat (Used for Relief distribution)	-		
Relief Distributed	Dist.	<i>Rice</i>	<i>Dal</i>	<i>Salt</i>	<i>M. Oil</i>	<i>Others</i>
	Jorhat	12.26 Q	2.54 Q	0.26 Q	9 Lt.	Mosquito Net- 60 Nos, Mosquito Coil- 23 Pkt, Candle- 25 Pkt Biscuits- 30 Pkt.
	Golaghat	43.80 Q	8.25 Q	2.47 Q	247.5 Lt	M Coil : 10 Pkt, Candle: 10 Pkt
Infrastructure Damage	<b>Golaghat:</b>					
	<b>Road:</b>					
<ul style="list-style-type: none"> <li>Dergaon Rev. Circle Borjan Gelabil road submerged 500 m. at 2<sup>nd</sup> km, Bhikhari Namghar road submerged 600 m, Chokolaghat ali submerged 500 m. at 2<sup>nd</sup> kmm, Borkathoni Mohima ali eroded Culvert No. 5/5.</li> </ul>						
<b>Jorhat:</b>						
<b>Road:</b>						
<ul style="list-style-type: none"> <li>Kamarbhati road damaged, Koiborta Gaon to Malow Ali Road damaged.</li> <li>Kakodonga Mandal Gaon road submerged.</li> </ul>						
Urban Flood	Nil	-				

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This reporting pattern has also been used to issue Flood Early Warnings under the State Government's unique preparedness program – FLEWS, to assist communities to safely evacuate areas that might be prone to flooding. The assessment for issuing a FLEW warning is made at each District headquarters and transmitted through radio channels and the use of sirens in some places. However, the group discussions at the river-islands showed a complete ignorance of the warning system and the communities evacuating the river-islands based on their perception of danger during disasters. This is also a more plausible explanation for people being marooned on inundated pieces of land during every cycle of a flood disaster.

### *5.1.3 Response Delivery*

Generally, the people of Assam are adept at living with floods. The indigenous tribes build houses on stilts, and every rural area has dingy boats that are used for fishing during the year and commutation during the monsoons. In some cases, the State Disaster Response Force and the National Disaster Response Force are used to evacuate people; *'mostly women, children or the elderly need such support. The state tries to be self-sufficient by using the civilian police or the home guard unit first before approaching the CRPF, Army or the NDRF'* (Deputy Commissioner Dhemaji, 2016).

The state provides relief packages of food and non-food items to those who are physically present in the shelters (Deputy Commissioner Bongaigaon, 2016). However, in circumstances where people cannot come to the shelters due to entrapment and the inability of the state to evacuate them, air-dropping of relief material is undertaken. Limited assistance in the form of cash is also provided in areas where the provision of shelters and procurement has lapsed, due to structural flaws, like an inundation of the buildings designated as shelters. The guidelines require that cash is given only to individuals who have lost their grain stock. However, it is widely recognised that monetary assistance may not solve the problem of a lack of food resources for a stranded population. As one project officer said, *'people cannot eat money during floods, they still need grains'* (Project Officer DDMA Chirrang, 2016). Another senior officer commented that the cash amounts to burden shifting from the state to the flood victims. *'If families are unable to come to the relief camps due to harsh geographic conditions, it is absurd to expect that they can go to a marketplace*

to buy grains' (Shri Rajender Kumar Additional DIG, 2016). While at the shelter every person is entitled to a minimum support package, which includes food and non-food items (Table 12).

**Table 11: Relief Entitlement during Disaster**

Item		Beneficiary	Quantity
Food supply for people housed in the relief camps and shelters or where air-drops are needed	<i>Food grains</i>	Adult	600grams per day
		Child under 12	400 grams per day
	<i>Pulse</i>	Per person	100 grams per day
	<i>Salt</i>	Per person	30 grams per day
	<i>Mustard Oil</i>	Per person	30ml per day
	<i>Gur</i>	Per person	100 grams per day
	<i>Chira</i>	Adult	600 grams per day
Child under 12		400 grams per day	
Cash given to families who have no food reserves and are not housed in the relief camps/shelters due to unavoidable circumstances (such as the absence of relief camps/shelter)	Adult	60 rupees per day	
	Minor	45 rupees per day	
Assistance for clothing where houses have been washed away, fully damaged or severely inundated for a week	Family	1,800 (one time)	
Assistance for utensils where houses have been washed away, fully damaged or severely inundated for a week	Family	2,000 (one time)	

Source: Data procured from Assam State Disaster Management Authority (entitlement for 2016/17 fiscal year)

The window of relief operations is limited to a period of 3 days to 30 days. This means that the statutory accountability of the government to provide humanitarian assistance is restricted to a maximum of 30 days unless there is a continuation of the state of emergency (Department of Revenue and Disaster Relief, 2007). It has been found that in practice this period of relief stretches from 2 to 5 days, as the affected families return

to their place of habitual residence as soon as the flood water starts to recede. This quick return is motivated by a lack of shelter spaces, and the fear of losing their land to the new encroachers. In particular, in regions where land is held under collective community rights, and there is no clear ownership, there are conflicting claims of possession (Revenue Circle Officer Kamrup (M), 2016).

Flood relief shelters/camps are temporary arrangements in school buildings. For example, in the district of Morigaon, the District Disaster Management Plan of 2012 indicates 30 potential buildings that can be used as relief shelters, all of which are school buildings. The table below provides an overview of the number of shelters per study district alongside the number of villages in each district that are categorised as ‘very high flood risk’ villages in the 2016 flood hazard atlas prepared by ISRO.

**Table 12: Number of Relief Shelter in the Study Districts**

District	No. of very high-risk villages	Total Number of Shelter in the whole district	Number of Schools used as shelter
Kamrup M	53	79	44
Dhubri	202	162	142
Goalpara	154	237	172
Bongaigaon	37	57	57
Morigaon	265	30	30
Jorhat	109	34	23
Dhemaji	11	39	21
Chirang	8	11	11

*Source: Data collated from 2010 Disaster Management Plan, except in case of Goalpara (2006 figures) and Jorhat (2011 figures). The Very High-Risk Village figures taken from the District Level Flood Hazard Atlas published by ISRO.*

It can be seen from the table above that the availability of necessary shelters for the protection of people displaced due to flooding in the state is abysmal. Except in the case of the District of Goalpara, there is not even one shelter per ‘very high risk’ village in any of the districts. In the district of Morigaon, a total of 30 designated shelters cater for the needs of flood victims throughout the state. Given that villages marked as high risk and moderate risk are also liable to temporary flooding and displacement, it is apparent that the state capacity to provide relief shelters is highly inadequate, shifting the burden of relocation entirely to the displaced families.

With the state having such a low capacity to structurally mitigate disasters (as discussed in Chapter 4) and almost no capacity to respond to them (discussed above), it is discernible that there is annual damage, including damage to human lives. The table below provides an overview of the estimated flood damage in the state.

**Table 13: Flood Damage in the State of Assam**

Year	Area Affected ('000 Hect.)	Crop Area Affected ('000 Hect.)	Population Affected (million)	Human Lives Lost	Cattle Lost	Total Damage (million INR)
2000	966	322	38.88	36	19988	2512
2001	203	36	5.42	4	15	149
2002	118.7	298	75.5	65	4294	7805
2003	701	213	52.75	35	108	11281
2004	236	522	12.64	495	118772	-
2007	150.4	674	108.68	134	-	-
2008	416	314	0.29	40	8002	14442
2010	-	147	0.25	17	3754	-
2012	Entire state	583	5.3	149	-	-
2013	-	0.71	0.08	-	181114	-

*Source: Calculations based on information provided by the Directorate of Economics and Statistics, Government of Assam (data from the highly devastating triple floods of 2012 is taken from National Disaster Management Authority. The data reflects the damage caused by the June and September floods only. Some of the data for all the years is not available due to discrepancy in reporting from the circle officers)*

It is evident from the annual flooding situation that there is not just loss of public infrastructure but also personal loss of livelihoods, crops, land and life. People affected due to these losses are pushed further towards climate change vulnerability and are more likely to migrate to re-build their economic capacities. Most of these adaptive migrations are cyclic, as discussed in Chapter 2. However, when the cost-benefit analysis at the household level makes it apparent that the cost of cyclic rotation is higher than permanent relocation, the families tend to relocate to their new areas. In the case of flood erosion (data provided in Chapter 4), the displacement is permanent and forced. The sudden-nature of floods and the fragile nature of the river island and river banks in the Brahmaputra valley make it difficult to predict the loss of land. There have been instances, like in the case of Morigaon specifically, where in just one season of flooding during 2012, a land area encompassing approximately 14 villages on the river bank was entirely washed away. The families who left their houses during the

period of flood inundation returned to find their lands completely submerged under the Brahmaputra river (Project Officer DDMA Morigaon, 2016). Similarly, in the village of Sutar gaon, the displaced families returned to barren land covered with silt and sand deposition after the floods, unable to farm on their original land (picture 5), and due to lack of timely assistance from the state, these families encroached the wetland which was 100 meters inward from the bank.

**Picture 5: Sheet Erosion and River Braiding in Sutar Gaon, Laharighat Revenue Circle, Morigaon District**



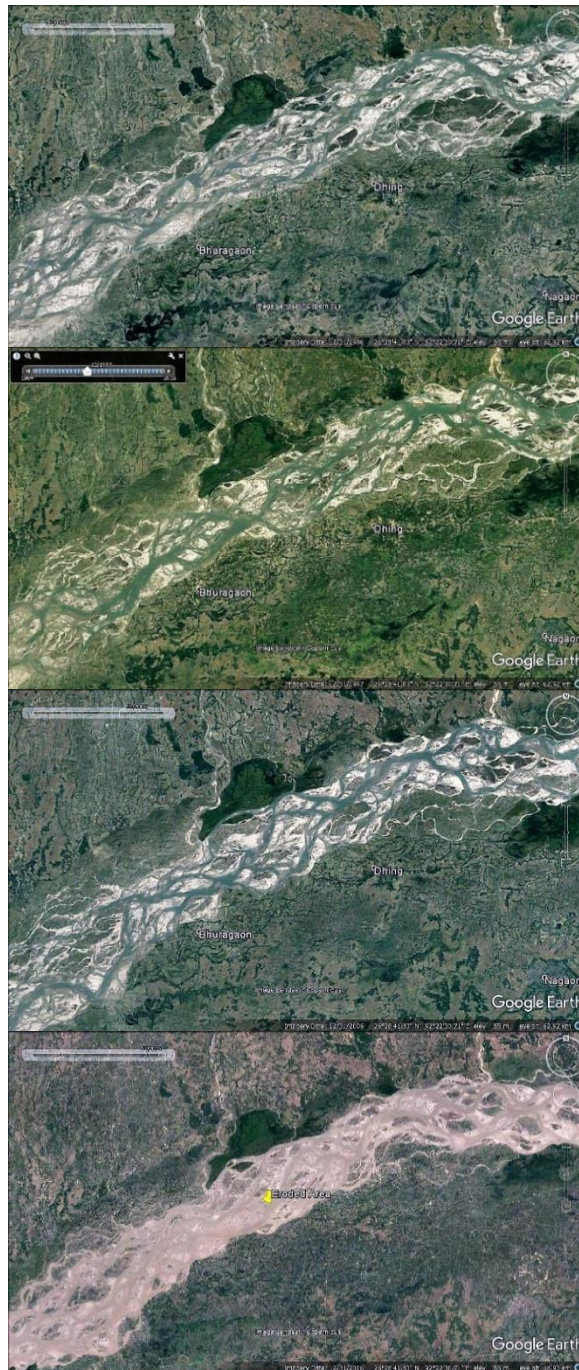
The map series (Map 16) drawn on a temporal scale shows the decadal change in the river-system from 1986 to 2016. The Google earth time-scale imagery is used for viewing river-bank erosion in Laharighat Revenue Circle of the Morigaon District. The placement is adjusted to provide satellite imagery of the location pictured in picture 5.

As can be seen from the pictures and the GIS imagery a large portion of land in the District is now eroded and the families living in the eroded villages are now permanently displaced. It is imperative that these families require some form of



rehabilitative support from the State. This brings me to the analysis of the final normative component of this thesis – the compensatory policies.

**Map 16: Satellite Imagery of Flood Erosion in Morigaon District on a decadal time-scale from 1986 to 2016**



*Source: Google Earth Temporal Mapping Function*

## 5.2 Compensatory Policies

The prime responsibility for providing compensation to the victims of floods including those permanently displaced due to floods rests with the government of the state. This is because the primary responsibility to build a flood-resilient infrastructure is also that of the state government, as per the State List II of Schedule VII to the Indian Constitution. The funding for damage compensation, restoration and rehabilitation is scattered across various departments through their regular budgetary planning. For example, the Department of Agriculture will help with the loss of crops; the Department of Labour welfare will provide minimum wage compensation for the duration of the flood. Similarly, for structural losses, the Department of Water will assist in the restoration of embankments or irrigation canals, while the Department of Rural Development will respond to housing needs. There are no pre-determined budgets for responding to loss, and every flood cycle is individually assessed through an actual estimation of the damages caused during each episode of flooding.

In terms of fund allocation, as cash given to the victims of disasters, ex-gratia compensation is part of the relief operations mentioned in the previous section. There are, however, claims for compensation arising from the loss of land and livelihoods on a permanent basis. Until very recently the state actors relied on previous precedents in regard to compensation allocation and policies, such as the Land Acquisition and Resettlement Act of 1894; the National Policy of Resettlement and Rehabilitation of 2007 (NPRR); and the Land Acquisition Act of 2013 to value land damaged by erosion. The values calculated were not uniform and depended upon the demographic and political circumstances. For example, a woman owner losing her land is likely to receive a larger compensation package and sooner, than a man (Revenue Circle Officer Dhubri, 2016). Similarly, compensation allocated in crucial constituencies or in the run-up to the state or central government elections can be higher, and quicker (Deputy Commissioner Dhemaji, 2016). The state also has assistance policies like *Indira Awas Yojana* to assist landless Below Poverty Line families in seeking grants to construct affordable rural housing. The scheme prioritises benefits for families who have lost their lands due to floods. In 2013, the state of Assam also adopted the Chief Minister's Policy on Compensation to Erosion Affected Families. The scheme is the first of its

kind in the state (and also the nation) to acknowledge erosion as a reason for seeking compensation from the state.

### *5.2.1 Ex-gratia Compensations*

In the regular plan, the government indemnifies four broad types of losses through ex-gratia payments. These are loss of life, loss of a limb (causing permanent disability), loss of property (including cattle) and loss of livelihood. On 5th December 1988, via communication No. RGR. 120/86/70 made by the Governor of Assam to the State Revenue Department, an addendum was added to Appendix 5 of the Flood Relief Manual of 1976, quantifying the amount of ex-gratia payments the state government should pay under various categories (Department of Revenue, 1976).

Over the years the loss compensation format has remained unchanged although the quantification of payments has been revised several times to keep it in line with the inflation and market assessment of losses.

The rate of ex-gratia payment for the year 2016/17 is provided in Table 14. Apart from these, in the case of total damage to a house, a payment of between 95,000 and 1,01,000 Rupees is made depending upon the geographical location of the house. In the case of partial damage, the amount of compensation is between 5,200 and 3,200 Rupees depending upon the consistency of the building structure (Deputy Commissioner Kamrup (M), 2016). It is quite likely that the additional payments are in fact made out of the Indira Awas Yojana Scheme discussed in Section 5.2.2



**Table 14: Policy on Ex-gratia Compensation for Flood Affected Families (2016/17)**

Items	Norms of Assistance
<b>Gratuitous Relief</b>	
<b>a) Ex-gratia payment to families of deceased persons.</b>	Rs. 4.00 Lakh per person including those involved in relief operations or associated in preparedness activities, subject to certification regarding cause of death from appropriate authority
<b>b) Ex-gratia payment for loss of limb or eye(s)</b>	Rs 59,100/- per person, when the disability is between 40% and 60% Rs 2.00 Lakh per person, when the disability is more than 60% Subject to certification by a doctor from a hospital or dispensary of Government, regarding extent and cause of disability
<b>c) Grievous injury requiring hospitalisation</b>	Rs 12,700/- per person, requiring hospitalisation for more than a week. Rs. 4,300/- per person requiring hospitalisation for less than a week
<b>d) Clothing and utensils/household goods for families whose houses have been washed away/fully damaged/severely inundated for more than two days due to a natural calamity</b>	Rs 1,800/- per family, for loss of clothing Rs. 2,000/- per family, for loss of utensils/household goods
<b>e) Gratuitous Relief for families whose livelihood is seriously affected</b>	Rs. 60 per adult and Rs 45/- per child, not housed in relief camps. State Govt. will certify that identified beneficiaries are not housed in relief camps. Further state government will provide the basis and process for arriving at such beneficiaries district-wise. Period for providing gratuitous relief will be as per assessment of the State Executive Committee and the Central Team (in case of NDRF). The default period of assistance will be upto 30 days, which may be extended to 60 days in the first instance, if required, and subsequently upto 90 days in case of drought/pest attack. Depending on the ground situation, the State Executive Committee can extend the time period beyond the prescribed limit subject to that expenditure on this account should not exceed 25% of SDRF allocation for the year.

Source: Document number MHA No. 32-7/2014-NDM-1, Assam Secretariat

The victim's family must initiate the process of relief through an application made to the revenue circle officer in whose jurisdiction they reside. These applications are verified for duplicity and forwarded to the Deputy Commissioner's office. The DC has full power to assess and authorise ex-gratia payments after receiving such applications. However, in each year there is a maximum amount within which the DC can make authorisations.

It is also a general practice for the political leaders, especially the Prime Minister and the Chief Minister of the state, to sanction ex-gratia assistance to affected people from the Prime Minister's Special Relief Fund and the Chief Minister's Special Relief Fund respectively. There is no minimum or maximum amount that can be sanctioned through these funds, and thus such support may vary from one year to another and from one state to another. For example, the Prime Minister, Manmohan Singh announced an ex-gratia support of 2 Lakh each to households in Bihar and Uttar Pradesh who had lost a family member during the 2012 floods, while 1 Lakh per household was allocated to the victims of floods in the State of Assam during the same year. The granting of compensation is done under the media spotlight with political leaders from the government physically handing compensation cheques to the people whose applications have been approved by the DC for such grants.

### ***5.2.2 Indira Awas Yojana***

Indira Awas Yojana provides a priority housing provision to households who have become homeless due to floods. IAY is one of the most massive housing schemes of the central government of India. It has been widely proclaimed by the Assam state government for its ancillary benefits in the rehabilitation process. Essentially a public housing scheme, it enables Below Poverty Line (BPL) households, houseless low-income families, and those living in dilapidated houses to build or get house sites with financial and technical assistance from the Government.

The scheme stipulates a sharing arrangement between the Centre and the State in the proportions 75 -25. In case of the North- East State, the Centre accounts for 90% of the budget provision while in the case of the Union Territories 100% of the liability for the scheme budget lies with the Central government. It creates four categories of

expenses: (a) the construction of new houses, (b) the upgrading of dilapidated *Kutcha* houses; (c) housing sites for eligible landless; and (d) administrative expenses. The following table provides details of expenditure earmarked for each housing unit within the scheme.

**Table 15: Fixation of Funding under the Indira Awas Yojana**

Item	Unit cost	Central and State Share
<b>Construction of new house</b>		90:10 for the NE States and Sikkim
<b>(i) Plain areas</b>	Rs. 70,000	
<b>(ii) Hilly States and difficult areas &amp; IAP districts</b>	Rs. 75,000	100:00 for UTs 75:25 in other cases
<b>Upgradation of dilapidated kutcha house</b>	Rs. 15,000	Same as above
<b>House sites for eligible landless</b>	Rs. 20,000	100:00 for UTs 50:50 in other cases
<b>Administrative Expense</b>	4% of funds released	As in (1) above

Source: Ministry of Rural Development, GoI  
Available at: <http://pmayg.nic.in/netiay/PMAY-G%20BOOK%20English.pdf>

The scheme reserves 5% of the total allocation per funding year as a contingency fund at the Central level for: (i) the rehabilitation of BPL families affected by natural calamities, (ii) the rehabilitation of BPL families affected by violence and law and order problems, (iii) the settlement of freed bonded labourers and liberated manual scavengers, (iv) the settlement of particularly vulnerable tribal groups, (v) the rehabilitation of people affected by occupational diseases, (vi) the settlement of households benefitted under The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, (vii) the settlement of people forced to relocate in districts along the international border, and (viii) new technology demonstration –with a focus on affordable and green technologies. Apart from the 5% reserve share, further prioritisation can be made by the state in consultation with the Zilla Parishads and Ghram Panchayats based on needs. The Government of Assam prioritises people who are affected by floods and flood erosion in granting benefits under this scheme.

However, the auditing of the scheme is done based only on funds released to BPL families and it does not specify how many beneficiary families have been affected by erosion. Thus, it is difficult to ascertain whether the scheme has any impact at all on those permanently displaced due to erosion.

### *5.2.3 Chief Minister Special Assistance Fund for Erosion Affected Families*

As mentioned earlier, the CM Special Assistance Fund for Erosion Affected Families is the only scheme that has a direct synergy with loss and damage caused by disasters. The scheme was first introduced in 2010 with the intention of providing limited compensation to every household affected by erosion. However, the flaws in tenancy and ownership records led to numerous dubious claims being filed and rejected by the government (Chief Operating Officer ASDMA, 2016). The scheme was also put on hold pending litigation in the High Court of Assam at Guwahati, wherein the validity of the scheme in identifying beneficiaries came into question. A challenge was made towards the granting of compensation to households whose rights to property were already being questioned. Subsequently, the government ratified the scheme by adding two critical caveats: (a) The person seeking damage should be able to prove a clear right of ownership over the land in question, and (b) applicants or their immediate family members should not have benefited from any other state or central government scheme. The new guidelines were introduced in 2015, and since then the local bodies – PRIs and the Block Development Officers - have been asked to identify the extent of erosion and nominate beneficiaries.

## **Conclusion**

In the current chapter, I gave an overview of the Relief and Compensatory policies, and their operationalisation and outcome in the state of Assam. Once again it can be seen that the actors in the network of administration are the same. The office of the Deputy Commissioner is a comprehensive unit of government that acts as the core of the district-level administration, while the secretarial departments, mainly the Revenue and Disaster Management Department, act in their capacity as consultative and advisory units in planning and strategising the relief operations and compensation policies.

The local actors – street level administrators such as PRIs, Block Development officers and Designated Village elders (*Gaon Buda*) – are once again at the forefront of identifying the problem areas and implementing the solutions within the strategy and policies communicated to them by the Deputy Commissioner's office. Similarly, in terms of compensation, the local actors identify and nominate a list of households who must be compensated based on their local knowledge of the loss and damage caused by the disaster. This list is reviewed and approved by the Deputy Commissioners. The process of communicating the approval and allocating the specified amounts of compensation is once again done by the local level actors.

From chapter 4 and chapter 5 it can be concluded that the problem of governance in the state does not lie on the normative side but with the deficit of implementation. The lack of implementation of the norms has always been a matter of concern for academics and policymakers. However, in the international debate on climate change migration, the primary focus is on the formation of new policy and new institutional regimes, while concerns about the operational abilities of the state are ignored. This is partly because many policymakers and academics believe that climate change refugees are a new form of migrant that never existed before. In Chapter 2, I discussed the work of Piguet (2013), who refers to climate change migration as a *return of primitive migration into migration studies*. And the work of security study scholars who do not view climate change migrant as potential 'refugees' but rather as economic migrant capable of challenging western cultural homogeneity and security.

As also discussed, the Indian government sees climate change migration as stress migration caused due to developmental deficit, rather than a security crisis. Going forward with this view in the next three chapters I will reflect upon the sub-national framing of climate change migration and how it impacts the response that climate change migrants receive in the state of Assam. We have seen so far that the response is highly inadequate; however, within this inadequacy there are visible strains of differential treatment due to the social and political pressures acting in the state.

In the following chapters, I will discuss three factors that create these differing responses. The first is the role of institutions. From my study, it can be deduced that

although the institutions can perceive and identify the problem clearly and precisely, they are not able to cope with it because of the inherent lack of capacity and the socio-political circumstances within which they should act.

Second, the political narrative surrounding migration not only negatively impacts the senior bureaucratic officers in taking the initiative, but also restricts how the ground-level workers deliver the solutions. Even when the senior bureaucracy is sympathetic and willing to push schemes to benefit climate change migrants, the ground level officers are influenced by their own political ideologies and commitments in the actual operationalisation of the strategies.

And finally, demography tends to play a dynamic role in creating the image of a climate change migration victim. The component of demography determines where the vulnerability lies, and it also determines, to a large extent, who is susceptible to forced forms of migration. However, in the process of administration, demography as an identity marker for climate change migration is overlooked. This neglect not only enhances the vulnerability and likelihood of forced migration but also steals the window of opportunity through which the administrators can make a relevant impact.

## Chapter 6 Institutional Influence in the Governance of Wicked Problems

In this chapter, I will reflect on the functioning of senior bureaucracy and street-level administrative actors in Assam. The chapter is divided into two parts. In the first part, I will analyse the institutional perception towards climate change migration. Earlier on in the thesis, I mentioned that the framing of climate migration impacts how the government responds to it. It has been found in the public policy and administration literature that the knowledge and mindset of managers profoundly influence the policy direction they adopt (Weber & Khademian, 2008; Weick & K.M., 2001; Rittel & Webber, 1973).

In the case of the Indian central government, climate change migration is broadly perceived as a complex developmental issue that should be dealt with by the existing welfare and developmental policies. However, in a subnational space, the governmental actors are influenced by additional external and local factors that lead to the reframing of the central governmental perception. The framing by the sub-national government is a necessary influence on the utilisation of multilayered synergies and complex interdependencies between developmental policies and climate change migration governance.

The second part of the chapter discusses the institutional capacity, with a focus on the street-level administrators. Lipsky (2010) argued that there is an irreducible core of discretion in street-level public welfare bureaucracies. The street level actors work with their own assessment of priorities influenced by multi-dimensional political and social contexts.

It is argued that even when sub-national actors are sympathetic and willing to assist climate change migrants, the street level administrators may not perceive and locate the interdependencies of their actions (or inaction) to climate change migration synergies. And this non-alignment between the local actors and the state bureaucracy in perceiving and framing climate change migration affects the overall protection response.

### 6.1: Opinions, Perceptions and Framing

*'Of course, it is an issue of survival.'* - M. Angamuthu, DC, Kamrup Metro, Assam

*'The country belongs to everyone; everyone belongs to this country..... This is the janambhumi and the karambhumi.... people go and live wherever they can.'*

- VK. Piepersenia, CS, Secretariat, Dispur, Assam

Unlike the Central government in India, the State government of Assam is more forthright in associating climate change with the growing trend of out-migration and intra-district migration in the state. In my discussions with the senior officers of the state secretariat and the deputy commissioners of the districts, all of them associated climate change with the change in the monsoon rain pattern and erratic flooding. Highlighting specifically the triple flooding in the year 2012, deputy commissioner of Bongaigaon, Mr Pegu stated, *'we always know that there will be an annual flood in the June – July window; however, this was unprecedented, and we were not prepared early enough to handle flooding in April...usually, April is a month when we are still working on our flood strategy....so indeed it took everyone by surprise. Similarly, the flooding in September. We had just finished our relief process when there was a new flood that no-one expected. The nature of the floods has certainly changed, and we think it is due to climate change.'*

Despite the widespread opinion that climate change has altered the hydrometeorological cycles in Assam, the state of Assam has not undertaken any systematic analysis to prove this relation. The studies conducted by local researchers are qualitative analyses of the community perceptions and no quantitative modelling on the relation between the floods in Assam and climatic change has so far been carried out. Ms Hazarika, who is in-charge of the ASDMA, recognised this shortcoming and stated, *'we know that climate change is affecting the people in Assam due to its impact on hydrometeorological cycles...however, if a central government functionary asks me to prove it, I will not be able to do that as we do not have data or correlation analysis... so we do not say anything. However, if you ask anyone in Assam they would say that the monsoon flooding is more intense and wide-spread. Earlier we used to have a*



*problem only in the river-bank regions; now the entire district gets flooded during the monsoon.'*

Due to its geographic vulnerability to flooding and heavy dependence on monsoon rain for irrigation the state has been inherently aware of its vulnerability to climate change. Assam was one of the first states in India to constitute a fully functional Disaster Management Authority and put in place District Disaster Management bodies with operational disaster management plans. The push to create the ASDMA came directly from the current Chief Secretary of the State, who has made disaster resilience one of his priorities.

In 2011, Assam became one of the first states to undertake a comprehensive vulnerability assessment. It is also one of the only two states in India to have utilised the Indian Institute of Space Research to map its catchment flood vulnerability using a geographical information system. The Flood Atlas of Assam was first produced in 2011 and was refined and reproduced with added grid data in 2016.

In 2011, the state of Assam also set out to reinvent its Flood Early Warning System (FLEWS), which utilises social media and telecoms technology, especially the WhatsApp functionality, to communicate early flood warnings. The FLEW system is fully functional. It is staffed in the district of Kamrup Metro and is outsourced to the Block Development Officers, who act as a temporary communication link in other districts of the state.

It is highly apparent that the push in policy as well as agenda setting, along with some favourable planning on disaster risk mitigation in the state has occurred during the tenure of the current Chief Secretary. It can also be seen that the UNDP and World Bank have been instrumental in raising awareness of climate change risk in the policy sector through their risk resilience projects, which have been undertaken in Assam since 2010. As one of the Project Officers in the District Disaster Management Authority explained, *'the UNDP project was instrumental in institutional creation. Earlier we were working out of the Revenue Department with only one Additional Secretary responsible for strategising climate change and general disaster risk...of course the waterworks and PWD department etc. can provide information on risk from*

*before, but the state and the districts did not have a systematic body that could comprehend all the different types of risks. The UNDP project helped in doing a comprehensive risk assessment and from there it became evident that we needed a Disaster Management Authority to coordinate everything'* (Project Officer DDMA Bongaingaon, 2016).

However, it is worth noting that a policy push of this type in terms of institution creation to deal with the natural disasters in Assam last occurred in 1976. The state of Assam adopted a Flood Relief Manual in 1976 with a top-down model for the governance of relief during floods. The policy was aimed at streamlining the relief operations, demarcating the responsibility of each vertical department and creating a minimum state responsibility paradigm. The period of the 1980s and 1990s was marred by severe political trouble and violence in the state and can be discounted in terms of any new policy and institution creation. The state was under a political siege and Presidential rule for most of this period. The first stable government was formed in 1996 by Praful Kumar Mahanta of Assam Gana Parishad (AGP). I will discuss in detail the political influence on migration governance in my next chapter. To put it succinctly here, the AGP was elected on the due to the Assam National Movement, and therefore the top political and administrative priority in the state was protecting Assamese identity and culture. Managing chronic Flood Disasters or displacements due to disasters was not a principal concern of the State Government throughout the 1970s, 80s and 90s.

In 2001, the Congress government came to power with Tarun Gogoi as the Chief Minister and their leadership continued until 2016. Looking at the early research that emerged from the local authorship in Assam, two conclusions can be drawn: (a) There is a broad sense of dependency on floods for irrigation. And this dependency continues, even now. (b) Environmental migration was a security concern and was constructed as the immigration of Bangladeshi nationals into Assam due to environmental constraints in their country. It was indeed seen not as an internal state problem of Assam but as an external issue of border security.

This narrative of Assam as a host society for environmental migrants from across the border has been diluted following the research development as well as the population

census of 2011, which for the first time recorded out-migration from the state of Assam. The state administration now subtly recognises the internal migration and out-migration from the state of Assam due to environmental reasons, precisely hydrometeorological disasters. Out of the twelve senior-level administrators interviewed for this study, eight officers expressed concerns about the safety of the people migrating from Assam to other states in India, while also accepting that the *'structural development for flood protection in the State has been rather slow'* (Deputy Commissioner Dhemaji, 2016; Chief Operating Officer ASDMA, 2016).

The central government of India has long held the opinion that Assam has been an anti-development state and that the current problem of out-migration is a manifestation of the continued failure to achieve adequate livelihood security within the state. However, the state government considers the problem to be much more complicated with a multitude of layers, one of which is climate change. There is no denying that the progress in the state has been slow, but the relatively slow rate of growth can also be attributed to the annual flooding, amongst other things. One state official, while explaining the development deficit, stated that *'the annual flooding reduced the time-frame within which any structural or developmental works could be achieved. What can people do where there is flood water everywhere? The entire state comes to a standstill during that time'* (Deputy Commissioner Kamrup (M), 2016).

#### ***Blaming it on climate change***

With the increase in climate change in the development and disaster mitigation vocabulary of the international actors, there has been a visible impact on the use of this terminology by the local actors too. Subtly admitting this usage bias, one officer from the disaster management board stated, *'the problem is more or less the same, but if I am doing a project on disaster risk reduction and I do not use the terminology of climate change and connect how the projects will assist in adaptation or mitigation, my project will be rejected.'*

The diffusion of international norms into national and sub-national policy action is a well-studied phenomenon (Simmons, et al., 2006; Park, 2006). The prominence of the phenomenon in creating regulatory regimes in the areas of international trade, environmental protection, intellectual property rights, and even human security has

been documented as a significant impact of international aid and cooperation (Busch, et al., 2005; Beise & Rennings, 2005; Berliner & Prakash, 2012; Berliner & Prakash, 2013). The growing integration between climate change and disaster risk reduction strategies has led to an increased expectation that policies aimed at reducing hazard impacts would also have elements of mitigation and adaptation to climate change – in other words the disaster reduction strategies would be *sustainable* and *climate-proofed* (Forino, et al., 2015; Birkmann & Teichman, 2010; Rivera, 2014; Davies, et al., 2009).

Being a flood-prone state, disaster mitigation has always been a key and continuous issue in the state, and thus the shift to perceiving climate change as a hydrometeorological disaster was a natural phenomenon for the state actors. On the other hand, the central actors, including the ones who earlier served in the state administration and are thus highly aware of the state's problems and its dynamics with the central government, firmly believe that the state is using climate change as an excuse to cover up its past developmental deficits (Jt. Sec. Ravi Shankar Prasad, 2016; Jt. Sec. Jishnu Baruha, 2016; Retd. Addl. DIG Rajender Kumar, 2016).

Nevertheless, the Central, as well as the state actors, are increasingly aware of the out-migration from the state of Assam. While the centre blames it on the lack of opportunities within the state and the state government's failure to mitigate disasters, the state government has adopted a more nuanced view. Every administrator interviewed in this study recognised that climate change was one of the critical factors behind the erratic monsoon floods and increased migration within and outside the state. The interviewees were also of the opinion that it is not strictly forced migration, but migration out of poverty and thus more aligned to adaptive migrations. Rajesh Kumar, the Deputy Commissioner of Morigaon district, which is one of the most vulnerable districts in the state, stated, '*It is wrong to say that they are forced to move, yes some influential circumstances are there, but that force is from nature and not from the state or any other entity of the state. If the lands are eroded they have to move, it is an involuntary movement in those cases but not forced.*' (Deputy Commissioner Morigaon, 2016) Similarly, the Deputy Commissioner of Goalpara district stated that, '*when people do not have a job in the local area, they move to the nearby areas and Urban centres. Village economies are small, and there is not much scope for*

*development. A lot of youths from Goalpara go to Guwahati for a job, even on a daily basis due to its proximity* (Deputy Commissioner Goalpara, 2016).

Explaining the migration trajectory and migration reasons, the Deputy Commissioner of Dhubri District Nazirul Islam stated, *'normally a single youth from a family will migrate either to Guwahati or to outside of Assam. The majority of the youths from Dhubri migrate outside of Assam state to West Bengal, Delhi or Bangalore. As Dhubri is an old district and a port city it has equal opportunities like Guwahati so the youths from here will migrate outside the state instead. It works in a cycle; they will migrate just before the flood season and return during the Bihu festival. Now that the floods are more erratic the migration is also more erratic, and sometimes the youths do not come home for Bihu. However, we do not know if it is yet a pattern, we do not have a record. It is just a logical explanation'* (Deputy Commissioner Dhubri, 2016).

The senior bureaucracy in Assam reflected an awareness of climate change, possibly due to the internalisation of the international norms, or replicating the language of the development agencies, or just keeping abreast of the global warming discussions, or feeling the constraints. They understood that in a warming world the hydrometeorological cycles will be disturbed and crop yields will decrease. They are also fully aware that the existing problems due to the lack of development will be exacerbated, and communities will migrate out of collapsing ecosystems.

However, the question of whether climate change can be directly correlated to the present out-migration scenarios yielded an uncertain response. In particular, due to the triple flooding in 2012 and then the December monsoon in 2014, which was a changed hydro-metrological scenario in the state, the administration is now beginning to connect the dots and is starting to consider climate change as a current problem instead of a problem for the future. For example, Dr Angamuthu stated, *'earlier there was only one flood, now there are instances of multiple flooding and flooding even in what used to be dry months. If this is an effect of climate change than we are certainly facing it, and all the displacement which occurred during and because of these floods can be attributed to climate change'* (Deputy Commissioner Kamrup (M), 2016).

Nandita Hazarika, building a more nuanced explanation, said, '*we commissioned a livelihood diversification study for the state in 2012, because we are aware of our climate vulnerability and if we are unable to provide alternative means of employment to our farming communities they will migrate outside the state to generate income... farming cannot provide everything, in this state farming is only subsistence*'.

Like a wicked problem, climate-change related migration is perceived by the state actors as an issue that is present but cannot be decisively pinned down for an explanation. The multitude of reasons for which people migrate, the effect of climate change on those reasons and the gap in the data about understanding how exactly climate change affects migration are some critical questions regarding which each bureaucrat has a different understanding, much like each academic working on the issue. Nevertheless, each of the state administrators agreed that climate change is somehow affecting the out-migration from the state and it is an issue that the state must deal with.

#### ***Priority, Agenda and Programmes***

As discussed in chapter 4 and chapter 5, the state of Assam is highly focused towards disaster relief programmes. Despite an unremarkable performance every year, the state officials do consider relief operations as critical task of the administration. Primarily because of the seasonal nature of the floods, there is no room for escaping their responsibility for flood relief. It is a mandatory task (Deputy Commissioner Bongaigaon, 2016). The relief operations are directly beneficial to the people displaced due to the floods and thus have a straightforward synergy with sudden-onset disaster migration.

In the past, the state has been highly focused on infrastructural development projects, especially in relation to irrigation and water resource development. Recently this focus has shifted towards rural development and livelihood diversification programmes, like horticulture, sericulture, handicrafts, tea-exports and forestry. Legislation like MGNREGA, the development of the State Level Human Development Index and the Assam Disaster Management Authority's study on livelihood diversification for climate change adaptation have collectively contributed to this change. A subtle force

has also been the development of the right to information and the digitisation of government works, which has streamlined the departmental functioning, making it more transparent and accessible for social auditing purposes.

Mr Victor Carpenter, the Deputy Commissioner for the Dhemaji district in Upper Assam, explained in a somewhat upfront conversation, *'earlier no-one knew government business, so there was huge scope of corruption. People in the department used to get a big project sanctioned before the wedding of their daughter, and they would go for a smaller project if they had to buy a car. Every project gives a money-making opportunity; infrastructure development projects were the cash-cows of corruption for everyone. It is a flood-prone state so half of the blame for the non-completion can be shifted to the floods straight away, and the other half can be put on the political parties. The political violence during the 1980s and 1990s created an image of the state as being politically disturbed; that image was used to disperse the blame for non-achievements. Sometimes it is also true that some local leaders will not let progress happen, but mostly it is just smoke without fire.'*

To put it succinctly, however, an example would be the Lower Subansari Dam project in the district of Dhemaji in the Gogamukh revenue circle of Assam. The Brahmaputra river board started its initial feasibility studies about the construction of a hydel-power project, including a dam reservoir, which was aimed at reducing down-stream flood damage and generating electricity in the region. The Subansari Hydropower project, which was to be constructed at the border of the State of Arunachal Pradesh and the State of Assam in the district of Dhemaji was proposed in 2001. It was expected that the dam would not only provide adequate flood control measures but would also raise the electricity generation capacity of the state substantially, by 2000MW. However, as of 2016, the lower Subansari Dam, which falls under the State of Assam, is still under construction, despite almost 117 MoUs being signed between the State and the Central government at various points to kick-start the halted progress. In the 2016 State Assembly election, the opposition to the Dam construction was once again an agenda item of the BJP, and the current Chief Minister, Sarbananda Sonwal vehemently opposed the project. Nevertheless, a gigantic 400% of the initial proposed monetary

value has already been spent on a Dam, which is practically non-existent (Deputy Commissioner Dhemaji, 2016; Project Officer DDMA Dhemaji, 2016).

The process of fiscal approval for planned work over a twelve-month period occurs on an annual basis in April/May. In June and July, the state and its departments are busy dealing with floods. During this time the local political leader uses the fear of flooding to generate a commotion regarding the building of the Dam, through ‘what if dam collapses’ articles, which are published on a regular basis in local papers with a large circulation. As soon as the flood recedes and the relief process is concluded, local leaders start a sit-in protest for Dam construction on grounds that vary from ‘misplaced priority’ to ‘environmental issues’. The protest stagnates the work until September when the position of the local leadership is bought through the proportion of project money donated as party funds. The construction continues between October and December, and if there is no flood during this season, the state officials can supervise the works. From January onwards, the state is busy with its regular relief progress strategy, budgeting for next year etc. and during this time there is no supervision of infrastructural building projects. So, the overall progress and quality achieved during the time are undoubtedly below par. In the end, it is only for three months out of twelve months that any real structural work happens. This delaying tactic is beneficial for everyone involved. Every year a new budget for the project provides a new opportunity to syphon off public funds. Political parties like it too, as they can bring people to protests and create a pro-Assam culture imagery while also generating party funds. It is good even for those who take part in the protest, as they get paid by the parties arranging the protest. The longer a project goes on the easier it becomes to take money out of it. *'The Gogamukh project is in that sense a golden egg laying hen. If we finish it the hen is dead'* (Deputy Commissioner Dhemaji, 2016).

However, the delay in the progress of the Dam has given the state an anti-development image, and it has become increasingly difficult to get similar big projects approved by the centre. Thus, the focus has shifted towards programmes that are more aligned with the central policies and directly beneficial to the rural communities.



This shift means that the state is not able to adequately respond to mitigation needs, and hence the synergy with policies needed for mitigating migration by protecting and developing liveable landscapes are weak. Even though the state has lost 7% of its territorial region to flood erosion in the last five decades, it does not want to depend on structural measures and has instead adopted a policy to compensate those who are forced to relocate due to land erosion. Erosion affected households are also prioritised in every state government welfare policy, including the rural housing policy, the crop insurance policy, the maternal health policy, tribal development policies etc.

In the last five years, projects like MGNREGA, IAY and Horticulture development have become the district priorities in the study districts. For example, in the Dhubri and Kamrup Metro Districts, the District Commissioners have placed affordable housing at the top of their agenda, in addition to maternal health and digitisation project. Affordable housing has a synergy with climate change migration, as it allows families to own structurally stable accommodation and reflect on the mitigation of out-migration. It has been seen in several studies, discussed in chapter 2, that ownership influences out-migration negatively.

In the districts of Dhemaji and Morigaon, priority is given to livelihood diversification projects under the MGNREGA and Horticulture projects. Livelihood diversification is necessary to reduce involuntary rural to urban migration by communities living in fragile areas. Similarly, in the districts of Jorhat, Goalpara and Bongaigaon, the deputy commissioners are keen on employment generation activities, including business development enterprises, through the promotion of semi-skilled trades such as mobile telephone repair shops and electrical shops.

The district commissioners in Morigaon, Dhubri and Goalpara are also highly concerned with the loss of land and the permanent displacement of farming communities from these areas. Thus, the development and revision of cadastral data is also a key functional area. The state government of Assam has adopted a single piece of software to deal with land allotment and revenue data under the Dharitri project. The software allows the districts to compile data on land use and land availability including data on the formation and deformation of the river islands. Knowledge of

land-use and land-ownership is necessary not only to improve the focus of programmes in fragile ecosystems but also to enable compensation for loss of land. Thus, it has a direct synergy with the loss and damage component of climate change migration governance.

However, policies are only as good as the implementation they beget and, in the scenario, where the management of migration is not the end –goal of the policy the synergies are often missed, ignored and overlooked. There are at least three approaches to the implementation of any policy: the top-down approach, which relies on a strong central organisation, a clear and consistent policy objective, fully specified tasks, minimal dependency relationships and an inherent assumption that the implementing authorities will execute the task efficiently as per the expectations, unless an external socioeconomic condition significantly undermines the process. In contrast, the bottom-up approach charts the implementation of policy through self-selecting clusters of organisations (Marsh & Rhodes, 1992; Rhodes, 1997). The third approach is to tie the bottom-up, and the top-down approaches into a new administrative management model, wherein the centre constitutes the loose outline of the policy while the local actors can negotiate competing details and synergies that they would like to prioritise (Marsh & Rhodes, 1992; Rhodes, 1997)

In the Indian context, policies on rural employment generation and disaster management follow the new administrative model, wherein the legal document provides a loose outline of the functions and responsibilities while leaving space for the local actors to fill in the details. It was seen during this study that while the senior bureaucratic officers can perceive the complexity of wicked problems, requiring a series of tasks to be achieved in a relatively harmonious routine, for the street-level actors, the designated tasks are just a routine – part of the mundane everyday administration. There is a growing body of public policy literature that has critiqued the omnipresence of senior bureaucracies (managers), expressing scepticism about the managerial rhetoric of problems and policies, and pointing at the systems' inability to eliminate discretion and differential policy outcomes (Evans, 2010; Baldwin, 1998; Ellis, 2007). In the next section, I analyse the response of the street level actors to tasks that are essential for a positive protection outcome.

## 6.2 Street-Level Actors and their influence on institutional response

There is an intricate core of discretion at the street level in public welfare bureaucracies that is necessary to make policies work. In classic models of public policy implementation, it has been seen that street-level actors use discretion within their powers to make a choice among the possible courses of action and inaction. These choices are influenced by the micro-cosmos of social and political interactions and have the power to impact policy performance profoundly.

In the policies studied for this thesis, the street level actors are crucial in not only identifying the local issues and beneficiaries but also making sure that the policy benefits are delivered to them. The table below provides an overview of the essential tasks that must be achieved by the street-level bureaucrats in the thematic areas discussed in chapter 4 and chapter 5

**Table 16: Implementation process broken to essential street-level actions**

Thematic area	Essential Street-level action	Task
Enabling Policy	Recognition of citizenship rights	Maintain citizenship data
	Recognition of possession and ownership rights	Maintain data on temporary and permanent ownership
	Registration of workers	Maintain household level data and register households for job cards
Mitigatory Policies	Identification of works for construction	Maintain geographic and cadastral data
	Supervision of work completion	Visit construction site to supervise works
Relief Policy	Identification of risk	Visit vulnerable sites for assessing risk
	Distribution of relief material	Disseminate information on relief and shelters and hand over relief materials
Compensation Policy	Identification of beneficiaries	Draw up list of people eligible for compensation
	Recognition of ownership for claims to compensation	Verify ownership documents
		Draw up list of temporary ownership holders who qualify for permanent ownership

It can be discerned that at the local level the management of data is essential for the deliverance of any programme. In the case of migration governance, citizenship data, data on the ownership of resources, and land data are critical to enable the government

to provide targeted programmes on livelihood, affordable housing and compensation for loss of property. I have discussed already, in section 5.1.2 and 5.1.3 of the previous chapter, how the process of relief is operationalised in the state. I will return to this again in chapter 7 and chapter 8 due to its intricate connection with the politics of relief contracting and the influence of demography on the distribution of relief material. I will also discuss the process of maintaining the citizenship data in more detail in chapter 7 due to its complicated relationship with the political narrative in the state.

In the remainder of this chapter, I will focus on the collection of ownership and possession data and how it is utilised to provide compensation to families permanently displaced due to flood erosion. This data is very important for people who are forced to move on a permanent basis due to the loss of their habitat and is essential for strategising the rehabilitation of displaced communities. This is also a functional area, which, unlike relief operations or citizenship records, is hidden from the constant media and civil society scrutiny, and hence provides a more significant opportunity for the local actors to exercise discretion in determining rightful ownership claims.

#### *Determining the rights to the land*

In the state of Assam, the basic unit of the cadastral data record is a plot, and several groups of plots are categorised as a Lot (Field), maintained by a Lot Mandal. Villages can be mapped on a single cadastre sheet consisting of a single Lot. Several villages are put together to form a *pargana*, which is equivalent to the block level administration supervised by Mauzadars, and several *parganas* form a *tehsil*, which is managed by a Revenue Circle Officer (Tehsildar). Several *Tehsils together* form a district, headed by the District Commissioner, which is the complete basic unit of administration (Section 122 – 124 of the Assam Land Revenue Act of 1986).

The registration of ownership of land is not compulsory, and possession rights can be held in the form of a registered deed called a *patta*. A *Patta* is further classified as an annual patta or periodic patta. In the case of an annual patta the patta holder must pay an annual revenue to maintain their possessory rights, while in case of a periodic patta the revenue must be paid on a 10-yearly basis. There is four general starting points for land ownership: (a) the purchase of periodic patta land, (b) hereditary transfer, (c) land

grant under the government scheme to benefit landless farmers, or (d) adverse possession ownership of fallow land.

Each of these categories is recognised under a different patta system. When a person purchases periodic patta land, the buyer gains the land as periodic patta land. In the case of hereditary transfer, the status of the land as annual or periodic patta is passed on to the successor. In the case of land grants made by the government to landless farmers, the land was granted as an annual patta land until 2014. And in case of adverse possession, the land is allotted as patta land only when the right of the possessor is established without conflict. For example, the ownership of government lands is prohibited through The Assam Land Grabbing (Prohibition) Act of 2010. Before the Act came into force, the state recognised the adverse possession rights of landless farming households over the non-reserved category of land. This meant that the possessor had the right to seek a periodic patta on a land if they had paid the amount equivalent to annual patta taxes for a continuous period of 12 years, and the possession had not been disputed by another private party or the state (Department of Land and Revenue, Assam, n.d.).

The data on possession and ownership within each village is maintained by the Lot Mandal, who must update the local cadastral maps and report to the district administration any changes that might have occurred. These changes include any new possessions, changes in the existing ownership of land, and topographical changes such as erosion.

Most of the land surveys in the state were done before Indian independence and re-surveys are conducted only when the cadastral markers points are severely altered. The process of resurveying is a highly manual process that does not utilise modern technology for surveying or mapping, leading to disparity in the data. The cadastral data on ownership and possession is updated when the interested parties approach the Lot Mandal, while the data on flooding and flood erosion of lands is updated when the victims along with the village headman approach the district authorities to re-survey the cadastral data of the affected village. The District authorities will then direct the Lot Mandal to make a resurvey report. In the case where a new river island emerges

and is occupied by incoming inhabitants, a new cadastral map must be made by the Lot Mandal (Deputy Commissioner Dhubri, 2016; Kumar, 2016; Rajkumar, 2016; Revenue Circle Officer Kamrup (M), 2016; Deputy Commissioner Kamrup (M), 2016).

As per the data provided by the State Government, there are 1391 completely non-surveyed villages out of which 358 are char villages that are possibly newly created land areas. Close to 196,856 people inhabit the non-surveyed *Chars* within the study districts. The absence of knowledge about the nature of geographical existence of these land-areas seriously jeopardises the associated rights of the land-owners/occupiers and downplays the claims of compensation in cases of loss of territory (Department of Land Records and Survey, 2016).

Furthermore, even in cases where the cadastral data is known, there is an admitted laxity in the performance of duty at the Lot Mandal level. The burden of ensuring that the Lot Mandal is doing his job falls upon the household that stands to lose their property rights. And the cost of inviting the Lot Mandal and providing hospitality is not always feasible for low-income families. As one Gaon Buddha explained, '*this is the invisible cost of the system*'. The visible cost includes the documentation itself – procuring a copy of the cadastral documentation incurs the costs of transportation and copying, and losing at least one day's worth of working hours, which is not an affordable proposition for households living below the poverty line or headed by a female member. For farmers, maintaining their property rights in a scenario where the land holdings are small and are used for subsistence agriculture alone is neither easy nor economical (Group Discussion Sutar Gaon, 2016; Revenue Circle Officer Dhubri, 2016).

Now, under the CM's Erosion Affected Families scheme, people displaced due to flood erosion can claim state support. However, to rightfully establish a right to compensation a claimant must prove that the land in question was in existence and the person seeking compensation had an ownership or possession right over the eroded land. The question of existence and ownership of a land-mass is thus directly tied to the capacity of the state to maintain and regularly update the cadastral data.

The Revenue Circle Officer, who is the next in line officer responsible for the maintenance of the data, has the task of updating the entire data set under his jurisdiction every ten years, and submits a report to the Deputy Commissioner, who is the only authority empowered to convert land tenures from an annual patta to a periodic patta after a thorough inspection of any contesting claims to the land, including any claim on the land from the government itself (in which scenario the payment of the revenue is for 30 years before conversion from fluctuating to fixed tenure can be effectuated). However, both the positions of the Revenue officer and Deputy Commissioner are rotational and subject to change every three years. Thus, the work of updating the cadastral data and regularising the land tenure may not always enjoy bureaucratic priority (Revenue Circle Officer Dhubri, 2016).

For example, it became clear during this study that none of the deputy commissioners has regularised any land patta from an annual patta to a periodic patta, thus granting ownership rights to the land possessors. The government of Assam further refused to provide statistical information on the number of households holding annual pattas and those holding periodic pattas in the state. The group discussions conducted during the study found that the majority of landowners were paying annual taxes and believed that their land rights were held in the annual patta category (Group Discussion BashaniChar, 2016; GaonBudha, 2016; Group Discussion Sutar Gaon, 2016).

Land held under an annual patta does not allow the possessor an ownership right, and their status as the rightful possessor is itself under constant scrutiny. As one of the Revenue Officers explained, *'It is challenging to grant land; most of the time the families have occupied a reserved category land in a wetland area or a forest... you can see for yourself new families residing in the Hasil Bill area or look at areas within the Kamrup Metro...all of these areas were wetlands once; now people live here...where have they come from? Look at all the villages whose names end with NC; they have reserved forest areas. The government cannot transfer reserved areas to private ownership..... We let them stay.....most of the time.... They are poor people, they have to farm to feed their families...sometimes the younger generations forget that it was a forest or a wetland and then if there is public sympathy or court orders*

*than we convert....but mostly people remember where they have come from and it is a big political issue whether or not the conversion of land happens.*' (Revenue Circle Officer Dhubri, 2016). However, until the conversion happens, the possessor has to maintain a full record of the payment of annual taxes to maintain a possessory right over the property in question. If during this time the land gets submerged or is made barren due to sheet erosion, the possessor must keep paying the revenue until such erosion is recognised, or the rights are converted to periodic patta cultivation rights, when compensation for loss of land (instead of just loss of a single crop) can be sought.

Once erosion is recognised, multiple claims may arise on the same piece of land. Oswin Nampuri, the Circle Officer from Kamrup Metro, explained that such claim cases are very regularly brought from the *char* areas, as the land and population are both floating. Narrating one of the recent cases, he said once land is eroded the *Lot Mandal* makes an erosion report based on which erosion victims can claim compensation or rehabilitation from the state revenue department. These claims, along with the certificate of ownership, are attested at the Revenue Circle level and approved by the District Commissioner. An ex-gratia payment ranging from 50,000 to 200,000 rupees is made based on the type of land in question. Rehabilitation land for the construction of a homestead is provided if the district can identify suitable fallow land for the purpose. However, it is possible that long after such compensation has been made the land may re-emerge and the original owner may try to assert their rights. Meanwhile, it is also possible that through adverse possession some new residents might have started living on that property. The situation can be complicated further if the original owners were annual patta holders and continued to pay taxes for land that was eroded that subsequently re-emerged. The whole process of identifying clean land titles with an explainable line of transfers, hereditary ownership, and possession is one of the most legally complicated areas of adjudication in India (Revenue Circle Officer Kamrup (M), 2016). In a state like Assam, where the land itself is floating and destructible, there are additional layers of complexity. For example, some of the *chars* that were submerged in the Morigaon region re-emerged on the Sonitpur district boundaries. For the people occupying the *chars* across the Sonitpur Districts these were new *chars*, but the Morigaon district farmers claimed existing ownership due to



the presence of debris from their previous houses. It is interesting to note that the claims of the Morigaon farmers were based on the debris of thatched houses (non-permanent structures) washed away in floods, a claim that cannot be proved by any legal standing. The Morigaon officials treated the *chars* as falling under the Sonitpur district jurisdiction, while recognising that some of the farmers had indeed become landless due to floods (Project Officer DDMA Morigaon, 2016). This implies that they can claim land-grants or IAY grants under the state policy for landless farmers. However, whether the grant will be equivalent to the market value of the land they lost or will enable them to buy more land and resettle in a new area is not an issue with which the administrators at the local level are concerned.

The state capacity to untangle the complex land titles is further intensified by the claims of the indigenous tribal communities in the region, who politically channel their right to all the land in the state. I will analyse the influence of politics on the status and rights of the victims in greater detail in Chapter 7. It is, however, necessary to mention here that the implementation on the ground of even the most well-meaning policies is deeply affected by the political narrative. Not only are the communities who are suffering vulnerability kept at a threshold of welfare policies, but their rights are also not adequately represented. Despite the insistence of the senior bureaucracy that the executive functioning of the state is separate and bereft of legislative interference, the political interference of the leadership cannot be ruled out. Where there is no direct interference, there is indirect interference at the street-level. The street-actors themselves use their discretionary powers to avoid undertaking acts that conflict with their personal political understanding. If such non-actions cost the system, its performance is overlooked in a scheme of dispersed accountability.

## **Conclusion**

The analysis in this chapter gave an overview of how the institutional perception and institutional capacity affect the deliverance of welfare policies, which are closely tied to migration governance. It was shown that while the senior bureaucracy is aware of the nested complexity of migration due to environmental constraints and is capable of identifying policies that could potentially benefit households that are forced to migrate

due to climate change, the same level of understanding of the complexity is not visible among the street level actors. The absence of concern added to their inability to perform their jobs effectively allows for a substantial amount of discretion in providing welfare and protection to those who are displaced in the state. The system perceives migrants as dynamic actors who are surrounded by the unfortunate circumstances of poverty and resource deprivation. Nonetheless, even in a constricted environment, the communities are capable of self-care. The administration describes the flood victims as poor helpless people who must relocate to survive (Deputy Commissioner Kamrup (M), 2016). On the one hand, the State administration is conceptually aware of the complex nexus between several policies furthering resource ownership, resilience, adaptation and migration, on the other, the operationalisation of the plans by street-level actors is devoid of this rationality. At one end of the spectrum, the political and social customs surrounding a street-actor influences their perception and deliverance of their task, while on the other end, it adds a layer of complexity by adding yet another interpretation to an already wicked problem. The insufficiency of the results of programmes not only makes the provision of care inadequate but also regularly pushes the vulnerable communities towards further marginalisation and the inability to adapt to changes in weather scenarios.

## Chapter 7 Political Impact on Governance Performance

In the current chapter, I analyse the impact of state politics on the operationalisation of welfare policies. It is worth noting at this point that from 2001 until 2015 the state of Assam was under the stable leadership of the Congress Party, headed by Shri Tarun Gogoi, who was also interviewed for this study while he was still in office. Despite the Congress government's open stance towards minorities and migrant communities, the history of cross-border migration in the State of Assam has continued to negatively affect the deliverance of protection to displaced people. It is argued in this chapter that the social and political construction of migration as illegal migration from Bangladesh has restricted the scope of citizenship rights at the micro-levels. And anyone in the state using migration as a strategy to adapt or forced into displacement due to flood erosion can be placed in the 'illegal migrant' category, on which the state politics thrive. This political interference of the state leadership severely constricts the scope of executive functioning and limits the amount of protection that climate change migrants can receive.

In the remainder of this chapter, I ask, who can seek protection? How does the historical hostility towards ethnic and religious minorities put them in a structurally disadvantaged position that adds to their vulnerability due to forced environmental displacement? And finally, does the politics of relief still have the sympathetic capacity to alleviate some of the suffering even for those whose rights are questionable?

### 7.1 Politics of Citizenship

Whether, a person, displaced due to climate-change related weather event has the right to have a right? Who is the subject of care? How does the categorisation of people as citizens or non-citizens affect the quantum of protection that the government is obligated to offer them? These are some of the fundamental questions that are crucial to this thesis. The incidence of citizenship lies at the heart of all the conditions that govern mobility in a national context. As discussed in chapter 4 section 1, it is the citizens alone who have the right to freedom of movement and residence within

national boundaries. The administration, by respecting this right and ensuring the free right to movement, enables communities to use migration as an adaptation strategy.

Similarly, the quantum of response provided by the government to people displaced due to hydro-meteorological disasters correlates to their status as a citizen or non-citizen. The right to seek compensation for loss or damage caused to a habitat, due to climate-change related weather events, is dependent upon the recognition of a person's right to own property in that habitat.

In the current section, I examine the context of citizenship by analysing the complexity of the *de jure* and *de facto* citizenship rights practised in the state of Assam. This practice of citizenship determines how the state administration does (or does not) respond to the needs of those displaced or migrating due to environmental stress.

#### *Legal determination of citizenship in India*

The key legislation that determines citizenship in India is the Constitution of India 1950, The Citizenship Act of 1955, and The Foreigner Act of 1956. In the state of Assam, further detail is added to the anatomy of citizenship through special legislation, namely The Immigrants (Expulsion from Assam) Act of 1950, the Citizenship (Amendment) Act of 1985 (recently amended again in 2015), The Illegal Migration Detection (and Deportation) Act of 1985 (hereinafter IMDT Act), The Assam Accord of 2003, and the Supreme Court Judgement under Sarbanadan Sonwal Versus Union of India, 2012.

The Indian Constitution isolates citizens from non-citizens in Chapter II Article 5 and Article 6. Article 5 grants Indian citizenship to every person residing in the territory of India as of 26<sup>th</sup> November 1949 provided such a person:

*(a) Was born in the territory of India, or*

*(b) has parents who were born in the territory of India, or*

*(c) Has been ordinarily resident in the territory of India for not less than five years.*

Article 6 of the Constitution provides naturalisation rights to persons who migrated to the territory of India from Pakistan (including the then East-Pakistan) before the nineteenth day of July 1948 and have been ordinarily residing in India, providing that at least one parent or any of the grandparents of such a person was born in the undivided India.

In the case of migration occurring after the nineteenth day of July 1948, the person seeking citizenship by naturalisation must have registered himself as present in India and must have resided in India for at least six months.

The minimum articulation of nationality by the constituent assembly was a response to the massive influx of migrants at the Western borders in Punjab. However, the unsettled territorial delimitation in the Eastern border added complexity to the citizenship debate (Home & Political Department, Assam, 2012). Thakur Bhargav and BP Junjunwala raised some doubts regarding the political allegiance of the Muslims supposedly migrating to Assam. It was proposed that naturalisation under Article 6 must be granted only to people who have resided in India for a continuous period of 5 years instead of a measly six months (Bhargav & Junjunwala, 1949). The Hindu leader from Assam also raised concern about securing the rights of people of Sylhet who may want to migrate to India (Choudhary, 1949). It was felt strongly by several members, including Dr Rajendra Prasad, that the question of citizenship must be subject to future consideration outside of the constitutional assembly (Prasad, 1949). Article 11 of the Constitution was thus adapted to allow the Indian Parliament to make laws about the acquisition and termination of citizenship as time may demand.

Following the incidence of communal violence and probably due to its fear of another episode of atrocities, as witnessed across the Western border, the Indian Parliament passed the Immigrants (Expulsion from Assam) Act of 1950. The act provided that any person who ordinarily resided outside India and had migrated to Assam, whether before or after 1<sup>st</sup> of March 1950, could be scrutinised and expelled by the Central Government (or its delegated officials), if the presence of such a person was considered detrimental to the tribes residing in Assam. The Act barred the application of its

provisions on refugees fleeing East-Pakistan because of civil disturbances or the fear of such disturbances.

During the 1951 census, National Registration of Citizenship was conducted in Assam and the citizenship status of each person residing in Assam at the time was recorded against each house under occupation. The period between 1950 to 1956 was a period of legal limbo and fuzzy institutionalism. While the Constitution created a substantive right of citizenship, the Immigrant (Expulsion from Assam) Act negated that right. During this time, the administrative scrutiny of nationality and the forced expulsion of those deemed to be non-citizens became a usual practice in the region. Police orders were issued in several places requiring citizens to carry identity documents at all times, and Foreigners' Tribunals were constituted during the early 1960s to bring a semblance of justiciability and due proceduralism to the whole process of expulsion.

The marginalisation of the Bengali speaking community in East-Pakistan led to a further influx of migrants into the territory of Assam throughout the 1960s and 1970s. At the same time, the agitation in Assam due to the permanent residence of the non-Assamese community also started to strengthen socially and politically. The fear of demographic change leading to a reduction in the aboriginal tribes of Assam to a politically subordinate position fuelled the Assam Movement, which initiated a process of constructing a subnational identity distinct from and yet concurrent to the Indian national identity. Based on the constitutional right of maintaining communal identities the movement sought to preserve 'Assamese language and culture.'

The Central Government of India adopted the Illegal Migration Detention by Tribunal Act in 1983 and the Citizenship (Amendment) Act of 1986 to pacify and accommodate the differential interests in Assam. The IMDT Act of 1983 aimed to destabilise the citizenship status of those deemed 'illegal Bangladeshi migrants', who were not related through race or ethnicity to the state of Assam, while the Citizenship (Amendment) Act of 1986 sought to regularise the status of these contested illegal Bangladeshi residents by providing them with the right to naturalise as citizens (Jayal, 2013). Section 6A of the Citizenship (Amendment) Act, regarding the incidence of citizenship in the state of Assam, is as follows:

- a) All persons of Indian origin<sup>28</sup> who came before the 1st day of January 1966<sup>29</sup> to Assam from the specified territory<sup>30</sup> and who have been ordinarily resident in Assam since the dates of their entry into Assam shall be deemed to be citizens of India as from the 1st day of January 1966.
- b) Every person of Indian origin who came to Assam on or after the 1<sup>st</sup> day of January 1966 but before the 25th day of March 1971 from the specified territory; and since the date of entry has been residing in Assam shall register himself with the Central Government.
- c) The rule for compulsory registration also applies to any person who is detected to be a foreigner by the Foreigners' tribunal, from the date of the order of such detection.
- d) The names of anyone who entered India after the 1<sup>st</sup> day of January 1966 if included in any electoral roll should be deleted from the date of registration or detection.
- e) A person registered with the Central government or detected by a Foreigners' Tribunal will have the same rights and obligations as a citizen of India (including the right to obtain a passport), but will not be entitled to political participation for ten years from the date of registration or detection.

Although the provisions of the law accord the right to gain citizenship to those who have immigrated to reside in the state of Assam, the moral right to belong and the political right to vote have not been accorded to certain classes of residents. Thus, the paradigm of citizenship rights in the state of Assam is limited and varied. This differential construction of citizenship determines the obligation that a government holds towards a person.

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<sup>28</sup>A person shall be deemed to be of Indian origin, if he, or either of his parents for any of his grandparents was born in undivided India;

<sup>29</sup> The date 1<sup>st</sup> January 1966 was fixed as a cut-off date for the grant of citizenship after Rajiv Gandhi's Government negotiated the same with the Assam Agitation Leadership. There was no special reason to pick 1<sup>st</sup> January 1966 as a cut-off date except the fact that it was negotiated as a middle-ground.

<sup>30</sup>“specified territory” means the territories included in Bangladesh immediately before the commencement of the Citizenship (Amendment) Act, 1985;

### *Operationalising the Right to Movement and Residence*

As discussed in Chapter 4.1, the right to complete freedom of movement and residence is available to all citizens of India. This right guarantee interstate and intra-state migration and is one of the vital assurances available to any citizen living in the fragile ecosystem. It provides an uncontested notional capacity to move away from a disaster while also facilitating the ability to use migration as a strategy for adaptation.

However, in Assam, the availability of this right is differentially restricted for people who are viewed as ‘illegal Bangladeshi migrants’. Assam has been reeling in and out of ongoing conflict since the very first day of the creation of India as an independent nation. As previously discussed in chapter 2, the literature review, the state of Assam has remained a persistent example of a place facing conflict due to migration. The notion of migration in the state is so tainted that it is talked about in hushed voices within the bureaucratic circles. This can be deduced from the fact that several high-level interviewees in this research chose to remain anonymous and decided to be interviewed outside of their public offices while commenting on the issue of migration among marginal communities due to environmental pressures.

The mainstream political rhetoric in Assam views every migrant as an *outsider* irrespective of their nationality and is particularly detrimental to those who are ethnically Bengali. The political rhetoric, when layered with the narrative of environmental fragility and relative poverty in Bangladesh, assumes that Bangladeshi nationals illegally enter Assam, through a porous border, in order to overcome their climatic vulnerability (Reuveny, 2007; Swain, 1996; Swain, 1996).

The movement of refugees from Bangladesh (former East-Pakistan) is persistently viewed as infiltration by the Assamese community who consider themselves to be the ‘sons of the soil’ and thus the only rightful citizens of Assam (Weiner, 1978; Vandekerckhove, 2009; Van Schendel, 2004; Baruah, 1986). In the process, all other non-Assamese communities, especially the Bengali-speaking and Hindi-speaking communities, have faced episodes of extreme violence throughout the seven decades of Independent India. The Nellie massacre against the Bengali speaking Muslim community of Nagaon district (presently falling in Morigaon) and the 1991 massacre



against the Hindi-speaking Marwari communities residing in the upper reaches of Assam are two such episodes that have created a sense of paranoia towards any form of open discussion on migration within the state bureaucratic elite.

It is worth noting here that although the Nellie massacre was a manifestation of the political agenda against the Bengali community it was often projected as religious violence. Thus the 1991 violence against the Hindi-speaking Hindu Marwari community by the Hindu Assamese community came as a surprise. The similarity, of course, lies in the perception of the Bengali community as 'Bangladeshi citizens' and the Marwari community migrating from Rajasthan (India) as outsiders and an alien threat to the Assamese culture.

Despite the claims of continued illegal migration from Bangladesh, there has never been any formal bilateral dialogue between India and Bangladesh on the issue of illegal Bangladeshi migrants (Deputy Commissioner Dhubri, 2016). There have been several political discussions within the Indian Parliament on the rhetoric of continued illegal migrations from Bangladesh into Assam (listed in annexure). But none of these charged discussions in Indian Parliament has ever materialised into a systematic international negotiation with the Republic of Bangladesh on the issue. It is also worth noting that the political apprehension of 'illegal Bangladeshi migrants' is publically refuted by the government of Bangladesh, which maintains that Muslims from Bangladesh would never migrate to the Hindu majority nation of India (Home & Political Department, Assam, 2012).

However, the political rhetoric has resulted in a significant reduction of the citizenship rights of those who are viewed as *outsiders* due to their linguistic and ethnic dissimilarities to Assamese people and culture. A series of administrative orders and legal instruments whose constitutionality is reproachable have contributed towards this reductionism behaviour of the State in Assam.

In 1978, the Chief Election Commissioner of India, S.L. Shaktiher stated: '*I would like to refer to the alarming situation in some States, especially in the North Eastern region (referring to the state of Assam), wherefrom reports are coming regarding large-scale*

*inclusions of foreign nationals in the electoral rolls. In one case, the population in the 1971 census recorded an increase as high as 34.98 percent over 1961 census figures, and this was attributed to the influx of a vast number of persons from foreign countries. I think it may not be a wrong assessment to make that on the basis of the increase of 34.98 percent between the two censuses, the increase likely to be recorded in the 1991 census would be more than 100 percent over the 1961 census. In other words, a stage would be reached when that state may have to reckon with the foreign nationals who may in all probability constitute a sizeable percentage if not the majority of the population in the state.'*

During this time, the agitation in Assam, as discussed in Chapter 2, reached its peak. In 1983 an appeasement strategy was adopted by the Central Government of India in the form of the Assam Accord, to pacify the extreme form of violence and resentment stemming from the Central government's alleged protection of illegal Bangladeshi migrants.

After the Assam Accord the central government adopted the Illegal Migration Determination by Tribunal Act in 1985 and the Electoral Commission set out to revise the electoral rolls based on this legislation. The Electoral Registration Officers (EROs) were asked to prepare two separate lists of names. List I was to contain '*the names of those persons enumerated whose linkage with the 1971 electoral roll could be established directly or through their parentage*' and would act as the main voting list. List II was to contain '*the names of persons whose linkage with the 1971 roll was not established*' and this would come to be famously known as the D-voter list of Assam.

Patwaris, Amins and junior police officials were asked to submit the whereabouts of the persons enumerated in List II. An unfavourable report by these junior level officers of the state led to the unilateral decision to strike off their names entirely, thus rendering them the status of non-citizens. The Election Commission issued a further directive that cases of '*claims challenging election commissions' unilateral decisions should not be treated as ordinary cases*' (vide message No 23/AS/85/8/211 dated 6.7.1985).

The EC also changed the format for raising an objection, which had been done through a prescribed form requiring the counter-signature of another legitimate voter of the same locality, to a new format for making objections on plain paper, in respect of the names listed in the main voter list. Any objection so received was to be given thorough consideration by the Election Officer following an inquisitorial process, and the person whose status as a legitimate voter was being challenged had no significant role in this. The easing of the procedural requirement made the process of raising an objection into a favourite pastime of the politically disgruntled youth (Samaddar, 2003; Samaddar, 2009). En-masse applications were filled out by the AASU leaders against what were considered 'Bengali minorities'.

At the same time, any claims made to challenge List II entries required the use of a prescribed form duly countersigned by another legitimate voter of the locality. The burden of proving a person's status as a legitimate voter and a legal citizen lies squarely on the person seeking re-enrollment in the main voter list.

The process of determining citizenship rested on the production of: (1) Citizenship Certificates, and (2) an extract from the voter list not later than 1971 (Notification no. 23/85/AS Vol IV, dated 12.7.1985). Subsequently, through correspondence No 23/AS/85/10748 dated 2.8.1985, documents like pattas and land revenue records, certificates by Gaon Buddhas, were also held to be legitimate although non-conclusive evidence. Over the years a mix of documents that are held in the non-conclusive category along with one of two documents, namely citizenship records from the 1951 National Registry of Citizenship, or an extract from the pre-1971 voter list, were accepted for constituting claims of valid citizenship. The box 1 provides the present list of documentation needed for verification process under the National Register of Citizenship.

**Box 1**

ONE of the following List A document issued before the midnight of 24th March 1971, by the Government of Assam or any other State in India of the Central Government of India

- (1) 1951 National Registry of Citizenship Record
- (2) Electoral Roll(s) up to 24th March 1971 (midnight)
- (4) Citizenship Certificate
- (5) Permanent Residential Certificate
- (6) Refugee Registration Certificate
- (7) Passport
- (8) LIC
- (9) Any Govt. issued License/Certificate
- (10) Govt. Service/ Employment Certificate
- (11) Bank/Post Office Accounts
- (12) Birth Certificate
- (13) Board/University Educational Certificate
- (14) Court Records/Processes.

If the name of the applicant himself/herself does to occur in the List A document, but such List A document are available in the name of a direct ancestor of the applicant. In such cases, the applicant shall have to submit documents from the List B below to establish relationship with such ancestor:

- (1) Birth Certificate
- (2) Land document
- (3) Board/University Certificate
- (4) Bank/LIC/Post Office records
- (5) Circle Officer/GP Secretary Certificate in case of married women
- (6) Electoral Roll
- (7) Ration Card

Two other supporting documents are required in combination of the List A & List B

- (1) Circle Officer/Gram Panchayat Secretary Certificate in respect of married women migrating after marriage (can be of any year before or after 24th March (midnight) 1971),
- (2) Ration Card issued up to the midnight of 24th March 1971 can be adduced as supporting documents.

*Source:* National Registration of Citizenship website available at <http://nrcassam.nic.in/admin-documents.html>

In a state ravaged by annual floods, it is not easy to maintain documentary evidence. It is noteworthy that during 1985 the government of Assam itself could procure the pre-1971 voter list for only 77 out of the total of 126 constituencies. And, to date, the National Registry of citizenship, which was constituted in Assam in 1951, has never

been updated. Therefore, anyone who has come to live in Assam between 1951 and 25<sup>th</sup> March 1971 may not find their data in any of the citizenship records, despite having a legitimate nationality claim.

Adding to the complexity is the fact that Indians residing in India were never compelled by law to register as citizens or voters until the year 2015, when unique identification under the Aadhaar Scheme of the Central Government was made mandatory for every citizen. This ambiguity over a person's status as a voter or a citizen has never deprived a person of exercising their right to freedom of movement or residence in any other state in India. However, for the state of Assam, the non-existence of the citizenship records has vast implications for the assertion of rights. First, non-existence in the pre-1971 voter list can conveniently lead a person onto the doubtful voter list. Moreover, the chances of becoming a non-citizen exponentially increase for anyone who has migrated into a new area within the state, especially when such migration is undertaken by a survivor of a flood who has lost the limited documentary evidence available to them because of the flood.

This point was elaborated through the field surveys and group discussions conducted in *chars* and river banks in the district of Morigaon, Dhubri and Goalpara. Bhasanichar, which is 30-minute boat ride from the Dhubri riverside, is a region that has faced the continuous disappearance of land-mass, including the full submergence of the river island in the 1978-79 floods. The people who inhabited this island have taken refuge on the nearby river islands of Bagdahara, Birsing and Sutramara, to name a few. The movement across the river-islands is reciprocal and deeply dependent on the social capital and camaraderie amongst the *char* inhabitants.

The lands are held as common property resources without a requirement for tenure delimitation from the government and in most cases, there is not adequately surveyed cadastral data due to the temporary physical nature of the *chars* (Deputy Commissioner Dhubri, 2016). Even in situations where ownership has been determined for a single person or family, the land is cultivated by several households with an understanding of shared yields (Group Discussion BashaniChar, 2016; Group Discussion Bagdhara, 2016).

It was observed that most of the families engaging in this communal cultivation practice severely lacked the capacity to hold documentary evidence of their existence, let alone evidence of being a citizen and thus a rights holder. Freedom of movement for these people is a natural recourse, a human behaviour necessary for survival, and is severable from their right to be a citizen of a state. Citizenship is non-material and is locally identifiable with belonging to a local community or the local area where their husbands or fathers once lived. For example, after the erosion of a part of Aminerchar, families residing in the area moved to the neighbouring Birsing Char. Twenty households from this tiny *char* are listed as D-voters. Although 70-year-old Hajera Khatun Bewa is unaffected by such a listing, firmly believing in her right to migrate to survive, her son, who is a legitimate voter, stated that the listing has jeopardised their right to claim compensation from the government and the mother cannot be listed on the family ration card, which had led to a decline in the resources to which they are otherwise entitled (Group Discussion Birsing Char, 2016).

Similarly, Hushanara Beghum, a former D-voter from the Dhudhnoi sub-division of the Goalpara district, who lost her household and husband, was listed as a D-voter in the new area when she arrived. She is unaware of who made the complaint against her that led to her registration on the D-voter list, but she could obtain the 1961 voter list from her birth-village where her father is listed as a legitimate voter, thus helping her clear her name (Group Discussion Dhobakura, 2016).

It takes an average of 10 years and 8 thousand rupees in court proceedings to prove one's citizenship. During that period of 10 years, those wrongly identified as D voters are stripped of their citizenship rights and are prevented from obtaining any state-delivered social assistance package. This leaves such people and their families completely annihilated from political participation. At the same time, it restricts their right to freedom of movement and residence as they cannot risk moving more than a few metres away from their original place of residence, as they believe that it will be socially more convenient to gain legitimacy and ultimately prove their right as a citizen. This leads to a significant portion of the *Char* and river-bank residents being entrapped in their fragile ecosystems.

This problem is particularly an issue for women who move from one village to another due to their marriage. Shakina Begum, who moved to Dhudhnai with her two small daughters after her land was flooded, has been a D-voter for at least 3 election cycles – a period of 15 years. Her daughters, who are now over 18 and eligible to register as voters, because of their late father’s legacy data, have not yet registered themselves due to the fear that once they are married and move to a new village their status as voters in their original place of residence may be delegitimised. Hence, they will only register after getting married. At present, there are 1.3 Lakh D-voters in the state of Assam, 69% of whom are women. In my study area, the concentration of D-voters is as per the table below.

**Table 17: Distribution of D-Voters in Study Districts**

District	Total no.	Male	Female
Dhubri	11875	3210	8665
Goalpara	10389	3057	7332
Bongaigaon	1247	674	573
Chirang	233	75	158
Kamrup M	4743	2250	2493
Morigaon	5365	2466	2937
Jorhat	17	11	6
Dhemaji	4367	2093	2274

*Source: CD-ROM with detailed register data on D-voter presence in Assam*

In all the above districts, except Jorhat and Bongaigaon (which in fact have a tiny D-voter population), the population of female D-voters is remarkably higher than that of male D-voters. The district of Dhubri, which shares an international border with Bangladesh, has two and a half times more female D-voters than male D-voters. Meanwhile, the District of Chirang, which lies in the Bodoland Autonomous Region, has double the amount of female D-voters than male D-voters.

What is interesting about the political narrative against D-voters is the way it is utilised to depict an apocalyptic flux of young male migrants entering Assam illegally from Bangladesh with a systemic agenda to completely change the demography of the state, by occupying one village at a time. However, not only are 69% of the D-voters women,

who are easily discounted in political participation, but there is also absolutely no instance of whole villages or *char* being occupied by D-voters.

Most of the D-voters are in fact uniquely listed members of a household where everyone else is a legitimate citizen of the country. For example, just in Aminerchar, where 30 people were identified as D-voters, only four of them were men and only one male member shared a household with his wife who was also a D-voter. There is very little rational explanation for how a person whose entire family are legally recognised Indian citizens can be a D-voter.

Nevertheless, even where a single member of a household is listed as a D-voter, such a household risks losing its social security net. Explaining this dichotomy, the Block Development Officer from South-Salmara in Dhubri explained that the documents required to prove citizenship and legacy data are the same documents needed to gain the benefits of the schemes. The unavailability of documentation for one purpose naturally means the unavailability of the documentation for the other purpose too. Thus, this leads to a reduced status as a citizen where the person in question is only entitled to an urgent response and not any rehabilitation or compensation strategies (Revenue Circle Officer Dhubri, 2016).

The tribal, racial and religious dynamics acting at the micro level are also instrumental in determining the D-voter status of people in that micro-community. For example, in the D-voting list from Chirrang, all the D-voters are either Bengali Hindus or Koch Rajbhongshi people. Meanwhile, politically Bengali Hindus are unwelcome foreigners from Bangladesh who alter the racial landscape of Assam. The *Koch Rajbhongshi* have occupied the Assamese territory since the 1500s, during the rise of *Koch Hajo* kingdom in the region.

However, racially as well as through their lifestyle habits, the *Koch Rajbhongshi* have remained different from the Bodo Tribes, which are politically dominant in the Bodo Land Autonomous Tribal Region. As the district of Chirang falls under this autonomous administrative region, tribes other than Bodo tribes are heavily discounted in their claim towards citizenship, and Koch Rajbhongshi face persistent



discrimination and violence. Most of the Koch Rajbhongshi people have migrated to the Bongaigaon district in the last few decades following the Bodo Autonomous movement due to the existence of social capital in Bongaigaon (Project Officer DDMA Chirrang, 2016).

The D-voters in Dhemaji are primarily Tea tribes who are discounted against the dominant Misshing tribes. The Tea Tribes migrated during the British Colonial Era and enjoyed Scheduled Tribe status in the state. However, they are socially and politically looked down on as outsiders from what are now the Uttar Pradesh and Bihar states in independent India. Another peculiarity of the D-voting list of Dhemaji is the presence of Marwari Hindus who migrated from Rajasthan (western India) to Eastern India to conduct business and faced extreme violence during the 1990s in the upper Assam region due to their Hindi speaking identity.

Identification as a D-voter restricts a person's right of freedom of movement and residence in several subtle ways. D-voters limit their own choice of movement to safer grounds as they are concerned that migration to remote locations may sever their legacy connection completely. The lack of social capital in any new receiving area (which is not a neighbouring village) would make it difficult for them to prove their citizenship status or to even get necessary communal support and assistance with cultivation.

And finally, the fact that anyone who migrates can end up being listed on a D-voter list strongly ties households to their place of ancestral residence due to fear that permanent or long-term movement will sever their relationship with the piece of land which determines their status as a citizen. Interestingly, this sentiment is also visible in the youth population who migrate out of the State of Assam for employment. The two sons of the *Gaon Buda* of Sutar Gaon regularly travel to Chennai and Bangalore to work as security guards. Each time, they stay away for a period of ten to eleven months, returning to Assam for the festivity of Bihu or to cast votes during the election, and to maintain a continued presence within the state (GaonBudha, 2016).

From an administrative point of view, however, being a D-voter is not a 'big problem'. For one, the population on the D-voting list is not a sizeable population when it comes to the whole state. In addition, most of the cases on the D-voter list are dismissed by the foreigners' tribunal as false allegations. Although the process takes an average of 10 years per case and is expensive for people already living below the poverty line with meagre resources, *'ultimately the rights of the citizen do get restored'* (Deputy Commissioner Dhemaji, 2016). However, for low-income families who are pushed out of the safety nets without democratic representation in a place ravaged by floods every year, this means extreme forms of marginalisation and destitution.

One may wonder, why despite the obvious known fallacies of the system and a Supreme Court mandate holding the D-voter list as unconstitutional, the state continues to not just maintain the doubtful voter list but also engage in fresh enumeration? To answer this question, we need to understand the institutional indifference and a dispersed sense of accountability.

As explained in the regional registration office of Dhudhnoi division, the election officers genuinely believe that it is their essential duty towards the Assamese community to mark a person as a D-voter if citizenship doubts are raised against that person. This is particularly the case if the person is not an indigenous Assamese. For a street-level officer, such registration is just a part of the vigilante process and not an act of annihilation *per se* (Election Officer, 2016).

As Mr Ashok Kumar Deka BDO Dhemaji also confirmed *'there is always the option to go to court and show the right documentation there and once they do that their name will be restored'*. On being questioned about the long time-frame it takes to clear one's name from the D-voter list, Mr Deka stated that it was one of the many problems of a poor area and shifted the blame to the judiciary (particularly the Foreigners' Tribunal) for not providing a quicker solution (Block Development Officer Dhemaji District, 2016).

At the senior level of the bureaucracy, the Deputy Commissioners are mostly oblivious to the content of the D-voter list. Having never inspected it themselves, 7 out of 8

deputy commissioners interviewed for this study authoritatively stated that D-voters are mostly young men from Bangladesh. The Deputy Commissioner of Dhemaji estimated that there were around 500 D-voters in the District with a 50-50 ratio, stating that, '*Dhemaji is not so easy to travel to*'. Four of the Deputy Commissioners, in fact, were visibly shocked when they were told that 69% of the total D-voters are women. And the Deputy Commissioner of Goalpara continued to maintain that the majority of D-voters in his district are males, who, according to him, are occupying the areas bordering the state of Meghalaya (Deputy Commissioner Goalpara, 2016). In a similar conversation with the sitting Chief Minister of the State, Shri Tarun Gogoi, Mr Gogoi stated, '*the BJP makes D-voters a big political issue, and they never say that D-voters are mostly women because it goes against the political construct of the hordes of Bangladeshi men illegally migrating to India*' (Chief Minister Tarun Gogoi, 2016).

It is now seen that the youth from Assam prefer migrating to states outside of Assam in order to bypass the administrative hassle that can potentially threaten their status as bonafide Indian citizens. Most of these youths get absorbed as semi-skilled and unskilled manual labour in the metropolitan cities of Delhi, Bangalore, Chennai and Cochin. However, the backlash against 'north-eastern youth' in these cities has become highly prominent and troublesome in the recent years. This backlash has been a concern for the government of Assam since 2012, after a major episode of violence against North Eastern youth in Bangalore and Mumbai. A minor rescue operation was initiated by the Assam government at the request of the Chief Minister Tarun Gogoi, to seek the safe return of Assamese youth from the violence-prone regions (Chief Minister Tarun Gogoi, 2016; Chief Operating Officer ASDMA, 2016). However, the scarcity of alternative livelihood opportunities within the state of Assam is a significant reason why the youths returned to the metropolitan cities soon the situation was under control.

At the same time, the Deputy Commissioner of Kamrup Metro, Dr. M Angamuthu, asserted that, '*if our tribunals decide that a person booked under the Act is, in fact, a foreigner we will employ push-back as a strategy to deport them out of the Indian territorial boundaries*' (Deputy Commissioner Kamrup (M), 2016). Push-back is a

non-authorised strategy where border personnel use physical force to remove a person from Indian territory by pushing them across the international borderline into the territory of Bangladesh. Such strategies are used in places where there is a non-presence of patrolling forces on the Bangladeshi side, usually in the dead of the night, so as to go undetected. Due to the presence of combat weapons upon the personnel engaged in the pushing strategy the victim is unable to return to India without risking their lives. The validity of push-back strategies has only been mildly debated among academics and in the judicial system. However, in a 2002 judgement, the Supreme Court of India strongly suggested that the Government of India must adopt long-term strategies to stop the flow of migrants from Bangladesh to Assam. Although there is no data on which the Supreme Court based its judgement of the ‘flow of migrants’, it authoritatively derived its conclusion from the political narrative surrounding migration in the State.

There is a strong belief that anyone who is unable to cope with the flooding is not an Assamese, as the aboriginal Assamese communities are well adapted to living with the floods. *‘Assamese tribes like Bodo and Missing purposely make their houses on the polls to overcome the annual flooding situation’*. Therefore, by deduction, *‘all those who suffer or migrate due to floods are those who have come to live in Assam recently (possibly from Bangladesh) and are therefore not accustomed to the floating lifestyle of the state’*.<sup>31</sup>

Among the street-level actors, there is a high semblance of the political belief that the communities living in flood-prone areas who are migrating and leaving their ‘motherland’ to go to states outside of Assam are illegal Bangladeshi migrants who should not have been there in the first place. This belief stems from the mindset that Assam is a fertile plain and that the floods, even if they are devastating for a short time, bring water for paddy irrigation and easy access to fishing. As one of the Election Officer put it in the district of Dhemaji, *‘Assamese people will not migrate to work for*

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<sup>31</sup> The interviewee chose to remain anonymous for this part of the interview.

*other people; we have enough rice and fish in the field, a true Assamese is content by nature'* (Anonymous Interview, 2016).

## 7.2 Politics of relief

It is a public opinion in Assam that local businesses who are handed contracts are those with a good relationship with local Members of the Legislative Assemblies. While there is no documentary analysis of this correlation, I realised that there are no publicly advertised tenders for supply procurement.<sup>32</sup>

The ambiguity of this situation was further highlighted through an interaction that occurred at the DC office in Bongaigaon. In between the interview with the Deputy Commissioner, Bongaigaon, a man (pseudonym Abdulla) walked in with an verbal complaint that the relief stock sent to this area was of low quality and the local business who got a procurement contract was a man of dishonest character, only selected due to his kinship with a local political leader. The DC Bongaigaon quipped and asked him to *get lost*, adding that if he had a valid reason to believe this he would have brought the complaint *formally written* on a piece of paper.

The DC Bongaigaon told me, *'there is always a competition in getting these government contracts because they think that there is hardly any audit on the quality of supplies. The contractor may assure something to the government but supply something completely sub-standard. Errors are made, but mostly immense care is taken in handling relief procurement. Everyone in the administration realises that they are poor people, displaced from their houses and we tend to do as much as we can to ease their situation. The distribution of relief is a humanitarian task and the Assam administration is capable of reaching even the remotest in the area to distribute relief'* (Deputy Commissioner Bongaigaon, 2016).

While we were in the middle of this conversation, Shri Pani Bhushan Chaudhary walked in with Mr Abdulla, who had been shown in previously. The DC greeted Shri Chaudhary and introduced me to him; then the two started to discuss the election,

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<sup>32</sup> E-procurement does not have any archived tender on supply; the FCS website does not exist The Public works and Fire and Emergency department procurement orders do not match the relief articles. The district websites do not have any current or archived tenders.

before reverting to the man's complaint. Shri Pani Bhushan Chaudhary, a leader from the Assam Gana Parishad, had been an elected MLA from the Bongaigaon district since 1985. He discussed the concern of Mr Abdulla with a degree of conviction that came from being an elected representative for over 30 years. The DC obliged and asked Mr Abdulla in a tone of assurance if he could send a formal written complaint on paper, stating that then an inquiry would be made. Mr Abdullah left the office. Shri Pani Bhushan stayed a bit longer and had a cup of Assam Black tea. After Shri Bhushan had left, Mr Abdulla returned with a complaint written in Assamese. The DC glanced at it and passed it to me (knowing full well that I cannot read Assamese script). He then reverted to Mr Abdulla and said that the complaint was not stamped: *'get a (revenue) stamp fixed first'*. The DC explained to me that, *'they try to avoid such inquiries because they result in nothing and merely waste the working hours that could be utilised elsewhere. The process of revenue stamps or paying a nominal fee to send in a formal complaint are some of the essential barriers to prevent people from making it a 'national pastime' (Deputy Commissioner Bongaigaon, 2016).*

Due to the nature of the relief being humanitarian assistance, people displaced due to disasters do not have a right to judicial recourse, in the case that the relief supplied is inadequate, absent or sub-standard. The accountability of the government is only limited to an administrative inquiry into the process of procuring relief supplies. There is an absence of a substantive right here, and the procedural right is available only when a collective action administrative complaint is filed by a member of the public. The capacity of a person to file a claim is dependent upon direct and indirect influences, which include that the complainant should be one of the aggrieved party and should be a resident of the place where the relief-supply in question was allotted; they should have appropriate financial means at their disposal to pay the appropriate revenue stamp fee and should indirectly have the support of a local MLA or such.

Another interviewee while preferring to stay anonymous added, *'ensuring good-quality supplies is a difficult task; by the time we are able to make all the inspections of the designated shelters the floods are already here, and there is no time to replace the sub-standard supplies that may be there. Sometimes, even where the inspections are made a handful of high-quality supplies are shown to the accessor for sampling.*

*The inspection accountability falls on the Circle Officers and the Deputy Commissioners, and sometimes we delegate the task to the ADC and SDOs or BDOs, but there is so much work and so few people. Sometimes the person assessing has their subjective notion of quality, how do you judge that?'*

Although there are no objective standards for the quality of supplies, the insufficiency may result in an electoral backlash. The supply contractors in Assam also work as crowd managers and community pleasers. They can use their clout as relief suppliers to swing the voters in favour of the party with which they associate. For example, in Dhemaji, one Mr Sunil Pegu who was introduced by the Dhemaji District Commissioner as an entrepreneurial farmer said that, *'if supply is sub-standard people will not vote for us (the candidate he associates with)'* (Pegu, 2016). From an administrative point of view, it is mainly immaterial who the supplier is if the suppliers or their competitors do not halt the process of relief or impose an additional burden of administrative review.

In the aftermath of a disaster, relief contractors and suppliers often emerge as a sympathetic veneer who foster the gratitude, recognition and acclaim of the disaster victims towards particular political ends. The aura of compassion surrounding these actors is in fact highly political. The sympathy they bestow upon the people in need imparts them power and dominion, augments their standing, garners continuity and remembrance, and most significantly, obtains the leverage they need to determine the exclusion, inclusion and flow of money and goods.

For bureaucratic actors this strengthening of contractors as politically manipulated actors is obscured for two reasons: firstly, most of them maintain that the tendering is a blindly-reviewed process while agreeing that people who have been given the tenders in the past are generally aware of when and how to file winning tenders. Secondly, if a political actor is looking to gain widespread support through the distribution of relief then they make sure that the relief material is not sub-standard. However, what if the political actors are willing to marginalise individual communities to create a populist view of themselves? What happens when the politically charged contractors and suppliers thrive on a narrative of othering? And what if the people in need of relief

have absolutely no political participation like in the case of D-voters? I will take up these questions again in section 8.3, where I analyse the state data at the Revenue Circle level to demonstrate the difference in relief work in main-lands and river-islands.

From an elite bureaucratic point of view, the problem of uneven relief distribution has been resolved by making relief available only through designated shelter areas. To claim relief, a family or its representative must physically come to the designated shelter and get their relief package under the watchful supervision of a street-level administrator. It is only in extreme cases of emergency, where communities are stranded in remote areas, that the essential relief is air-dropped until the SDRF, NDRF or Army can complete a rescue evacuation operation. During the floods, the government, as well as individual households, rely on wooden boats as a means of evacuation and transportation, thus earning the famous title of the ‘floating population of Assam’. The use of dingy boats also makes it convenient to reach remote river islands and places that are sparsely connected with roadways. The picture below shows two dingy boats, one used by people for their regular transportation needs, and the other used by the Army personnel (here seen patrolling the river around Bangladesh border).

**Picture 6: Dingy used for regular commutation from main-land to the river-island.**





**Picture 7: Boats used for everyday commutation by the Border Security Forces**



Both boats are in themselves a security hazard, which as per the administration is 'irrelevant'. If the people can be transported out of a heavily submerged area to a safe location, it remains irrelevant how the process is achieved (Chief Secretary Government of Assam, 2016).

In certain ways, this process of forced displacement or evacuation is very similar to the journeys of the Mediterranean boat-refugees arriving in Europe, except that this movement is temporary and within the boundaries of one's own country.

There is a profound sense of dissatisfaction within the bureaucracy with its capacity to respond to disasters. This disappointment is visible through every yearly flood report submitted by the district administration to the State Secretariat. Nevertheless, the

dissatisfaction does not translate into a drastic change in the way that relief responses are provided but is more of an empty sympathetic view towards those displaced. The emphasis is always on letting people act like dynamic actors who can decide their future even when faced with imminent displacement. Moreover, the displacement is but a *'temporary displeasure which occurs every year for three days'* (Chief Secretary Government of Assam, 2016). The displacement is also justified within the administration as a necessary inconvenience caused by the floods, which bring the fertile top-soil for the paddy cultivation. *'It is like you leave your house for temporary renovation and return to a better structure'* (Project Officer DDMA Dhemaji, 2016).

That structure – of highly fertile alluvial soil – is however not the only thing that floods beget, as the submergence washes away every little material aspect of life that a household has gathered. It washes away the land and it washes away the documentary trail that can prove their right over a piece of submerged land. And it indeed washes away the right to be citizens. It is not a coincidence that 66% of the residential houses in Assam are constructed using thatch or bamboo with a sheet of asbestos as a roof for protection. At the individual household level, the non-expensive housing made using farming left-overs is recoverable, and the amount of ex-gratia relief from the state is sufficient to overcome such losses.

Most of the officials interviewed empathised with the disaster victims; they also reflected a myriad of mixed opinions regarding the delivery of grant-in-aid. For example, Shri Rajendra Kumar, who had retired as the Commandant General Home Guards & Director Civil Defence in the State of Assam, explained that the *'disaster victims are often self-styled victims'* who seek *'floods as an opportunity to seek monetary compensation packages'*. He explained that the, *'government is bound to provide exgratia financial support to anyone who has suffered flood damage to life or property... this compulsion becomes higher in the case of media presence and social sympathy.... But most often the people who are most affected are also the ones who choose to live in flood-prone areas and engage in a calculated risk to obtain the exgratia support. Part of these payments is then utilised to buy cheap land in some other vulnerable region, and the whole cycle of compensation repeats in a loop'* (Kumar, 2016).

Several other officials agreed with the prevalence of this phenomenon of using exgratia payments as a *'money making opportunity'* (Deputy Commissioner Kamrup (M), 2016; Project Officer DDMA Chirrang, 2016). However, there was also a subtle reflection upon the humanitarian nature of these grants amid the rampant poverty and laagered development. This was evident from the remark made by another bureaucrat: *'yes it is possible that some clever people do this, but it is not right to call these people opportunists in the real sense. They are living in chronic poverty, and this is just one of the means by which they can overcome some of their hardships'* (Deputy Commissioner Dhubri, 2016).

The scheme of providing ex-gratia compensation to the victims of flooding does not take into account the conditions of landlessness and displacement due to landlessness. Nevertheless, it provides a venue to seek grant-in-aid for flood damage caused to the house or homestead. The guidelines provide that a maximum of 50,000 INR assistance will be provided to each household for tangible property losses and 2000 INR for intangible losses (such as the loss of clothes/utensils etc.).

However, the grant-in-aid is a discretionary commodity, and the Chief Minister has a significant influence in declaring how much aid will be given to each household in each flood year. The CM Relief Fund works through donations, including aid donation made by the Central government and international agencies during particularly devastating calamities. The number of people receiving assistance under the scheme is determined by the visibility of the calamity. For example, the Chief Minister can promise 2 Lakh rupees of assistance to every household losing land/crops or houses due to flooding, or he may specifically earmark funds for a particular district that is more visible in the media during a particular flood year. He can also utilise this funding to sway the voters during floods before the election season. The grant-in-aid distributed under the CM Fund is a highly discretionary media-popularised event with no uniform objective criterion on its distribution.

## **Conclusion**

These findings are unsettling at several levels. First, any instance of migration in the state is complexly tied to the political construction of 'illegal Bangladeshi migrants'.

Therefore, the host society tends to look at the migrants as non-citizen aliens. This host-migrant relational complexity is very intense in situations where the migrants do not have existing social capital in the new area of settlement or where they have lost their own land to river erosion, thus becoming long-term or permanent migrants. This relational complexity is intensified through the parameters of gender, age and race. And as mentioned earlier in this chapter the procedure for alleging that a new migrant is in fact a foreigner, without having the responsibility to prove that claim, gives an undue advantage to the host community.

Secondly, there is structural indifference towards the issue of depriving migrants of their citizenship. The Constitution of India creates an affirmative obligation to provide enabling circumstances where migration within the country can be efficiently undertaken without discrimination or fear of being annihilated from political citizenship during the process. This obligation becomes exceedingly crucial in vulnerable geographical areas prone to annual disasters, as one's inability to migrate outside of a vulnerable area decreases one's ability to adapt to the changing climate circumstances. However, the state neglects this obligation not just by delaying structural development but also by creating barriers to be recognised as a citizen – and thus holding a constitutional right of freedom of movement.

Third, there is a continuous tussle in terms of passing the burden from one linear level to another or across departments of the governance apparatus. For example, the Election officers in the field candidly spoke about how the courts and the judicial magistrates in the foreigners' tribunal have a duty to determine the status of people alleged to be foreigners, restricting their own role to that of a clerical nature, bereft of the power to make a judicial review of the situation. In the process, the responsibility is passed across a horizontal line of administration.

Similarly, at the middle management level of block development officers, and the higher management level of the Deputy Commissioner, the practice of enumerating D-voters is an '*secondary business that needs to be dealt with due to the peculiar political*

*condition of Assam*'.<sup>33</sup> Therefore, despite the presence of an enabling right that guarantees freedom of migration from geographically vulnerable locations, the functionality of that right is critically constricted in the state of Assam.

Thus, although theoretically one may say that people migrating due to climate change are dynamic independent actors capable of deciding their own destiny (Black et al.), this construction of 'dynamic independent actors' is undoubtedly an exaggeration in a society that is structurally indifferent to those who are at the threshold of climate change-related disasters.

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<sup>33</sup> Interviewee choose to remain anonymous for the discussion on D-voters in the state.

## Chapter 8 Influence of Demography and Social Capital

In the current chapter, I focus on the role of demographic factors such as *age, gender and membership of the particular social group*<sup>34</sup> in determining the variation in protection response that climate migrants receive. As discussed in the previous chapters, the capacity of the state to respond to instances of displacement and migration is institutionally limited, and severely reduced by political interference. The political narrative of illegal Bangladeshi immigrants pushes certain ethnically and linguistically differential communities to the margins of protection. In this chapter, I continue to discuss how elements of ethnicity, religion, and gender determine the relegation of some communities to the margins of welfare and response programmes and normalise the process of ignoring the plight of particular communities.

The remainder of this chapter is divided into three parts: the first part discusses the lifestyle differences that add to the household vulnerability and increase the need for government support. The second part analyses the social capital in the river islands and the functional scope of the schemes analysed in this study. I do so by drawing attention to the revenue circle level data within each study district. The third part looks specifically at the gender of migrants and those who benefit from the state's action.

It is argued that these micro-variables have an innate influence on not only creating vulnerability but also determining who receives support to overcome their vulnerability. The existing structures of governance continuously victimise certain classes of people. This structural marginalisation makes them highly vulnerable to climate change and takes away any agency a person may have in determining their life choices (including basic choices of residence and livelihood). Thus, in ways discussed in this thesis, the governance deficit continuously creates a class of climate change victims.

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<sup>34</sup> In international humanitarian law, demographic factors – gender, age, religion, ethnicity, nationality and membership of particular social group - are central to persecutory state behaviour and paramount in the determination of refugees' rights.

### 8.1 Means, Manners and Vulnerability

A farmer in the Majuli Island of Jorhat district commented, *'it is good when the flood comes, I sit on my terrace and fish from the balcony, I do not even have to go anywhere, it is like a mini-vacation'*. On the same island, Bishnu Payen invited me to his family house, made of bamboo and on stilts. His wife had brewed fresh Apong and was eager to offer Assamese hospitality with a recipe of fermented fish and pork. Bishnu Payen explained that the water causes food to spoil quickly, so all the indigenous tribes have methods to ferment and preserve food. Unlike most of India, pig meat is a delicacy in Assam, and rearing pigs is thus a common practice, as is the practice of making houses on stilt (Bishnu Payen, 2016).

However, similar practices are not seen in lower Brahmaputra and the Central Valley. In Dhubri town, the habits of the Mishing are considered primitive. Babula (a.k.a. Rajesh Kumar), a local boy from the Rajani Revenue circle commented, *'have you seem them climb like a monkey up their houses, they do not even have stairs, just a bamboo pole and even old women climb so swiftly...that does not happen here in Dhubri (down-stream Brahmaputra), here people like to live in normal houses'* (Rajkumar Babulal, 2016).

In Dhemaji once again, Sheela Apang scorned the bamboo housing of the Mishing. When asked why the permanent house was not on a raised structure, she chided, *'we are not tribal, it is for them to live in those kinds of funny houses'*. In the lower valley in the city of Bongaigaon, the District Disaster Management Project Officer said, *'we tell people to adopt designs which will reduce their vulnerability to floods, but at times there is too much ego surrounding lifestyle. It is not like the Mishing or Hajon tribes, who have copyrighted the design for stilt houses; other tribes will not follow it because for them it is an identity issue'* (Discussion with Sheela Apang, 2016). Similar differences could also be seen in other non-tribal districts of Morigaon, Bongaigaon, and even Chirang. In the Chirang district under the Bodo Autonomous Council, the houses are built on raised platforms instead of stilts.

In Guwahati city, the urban dwellers are increasingly adopting raised housing architecture. One cannot but notice that new buildings, including commercial ones,

increasingly use the ground floor as parking space, while human occupation starts at the first-floor level. Dr Angamuthu, the Deputy Commissioner of the Kamrup Metro district, explained, '*Guwahati has the problem of urban flooding. The flood level is not high, but the water stagnates, and if you are living on the ground floor then not only is your property at risk, but you can also suffer from electrocution as a lot of the electricity network is underground, and even the overhead live wires sometimes break due to heavy winds. So, people automatically prefer living on higher floors for safety.*' (Deputy Commissioner Kamrup (M), 2016)

While the housing styles influence the vulnerability of communities to flooding, the state in India cannot interfere with non-permanent physical structures, such as those built in rural areas using mud, thatch and bamboo. In the tribal areas, tribal housing is excluded from the standardised purview of the national building code. This is done with the intention of not burdening poor households with design aspects of their buildings and also to allow communities to maintain their housing cultures. The only place where the state administrators can weigh-in is through the application of the National Building Code in Urban areas and in relation to new permanent structures constructed in other areas.<sup>35</sup>

89% of the households in the state of Assam live in rural areas and reside in non-permanent structures made from mud, bamboo, thatch and pre-fabricated materials. While on the one hand, these non-permanent structures reduce the risk of damage to expensive building materials during flash floods, they also increase the households' vulnerability to inundation danger. '*The state does not engage in extreme measures of penalising rural households who do not follow a specific building pattern just because the administrator may think that it may be more sustainable*' (Chief Secretary Government of Assam, 2016). The state can only promote specific sustainable

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<sup>35</sup> During the time of the field visit the City of Guwahati was hosting the South-Asian Games, and therefore all the hotels in the region were fully booked at the time of my arrival. Yet a colleague at the National Law School in Guwahati suggested that we should go and negotiate with a hotelier who was a known friend. The hotelier, on the grounds of anonymity, told us that not a single building in Guwahati follows the building standard perfectly, and it is their imperfection that the government employees often use to leverage hospitality benefits for state functions as well as their personal needs.



methods; if communities think that they interfere with their cultural or tribal identity than the state actors' role is restricted.

Commenting on the housing vulnerability, most elite administrators used words like *smart, clever and intelligent* in describing the Mishing raised-platform hutments, while the bamboo housing in rural areas was described as *easily relocatable, non-expensive and flood resilient*. The efforts of the state to promote sustainable housing are limited to ensuring fire-safety norms and transmitting knowledge about secured roofing due to the *Bordisila* season.<sup>36</sup> Both of these vulnerabilities – to fire and high-speed winds – are inherent to the non-permanent bamboo structures.

The project officers for the District Disaster Management Authorities also perceived that the vulnerability of specific communities is higher due to their lifestyles and occupational habits (Chief Operating Officer ASDMA, 2016; Project Officer DDMA Chirrang, 2016). However, this research, or any other work on the vulnerability in Assam so far, has not considered the lifestyle habits that may push communities to be more vulnerable. Nevertheless, it is apparent that the administrative actors do view some communities as *cleverer, and more adept and well-tuned to living with annual flooding*. Meanwhile people who are more vulnerable were often described as *un-original habitants, who have migrated from elsewhere and have not learnt the manners which can help them survive and thrive in Assam*.

The communities in Assam are colloquially circumscribed as being Tribal (constituting scheduled tribes of the region), non-tribal Assamese (composing of those who identify themselves as successors of Ahom Kings) and Migrants (those arriving from outside Assam during the colonial and post-colonial period). In these three categories of people, Tribal people, the Bodos and Mishing (which are the most significant tribes in the Brahmaputra Valley region)<sup>37</sup> are the ones who are most adept at coping with their geographical vulnerability. The Ahom, who are the non-tribal Assamese and have inhabited the state since the 13<sup>th</sup> century, while more modern, are still well-attuned in their lifestyle and dealing with annual flooding. The Migrants

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<sup>36</sup> It is a season marked by cyclonic winds and hail formation.

<sup>37</sup> The tribes are further divided into sub-groups, who are identified with their historic occupational activities. Like Sonwal is a Bodo tribe who dealt with gold (sona in Hindi).

loosely comprise those who were brought to Assam during the early 19<sup>th</sup> century by the British, to work in the tea plantations, as well as the immigrants allegedly arriving from Bangladesh and *elsewhere*; they are considered the least resilient (Project Officer DDMA Dhemaji, 2016; Project Officer DDMA Morigaon, 2016).

However, the assumed non-resilience of those arriving in Assam during the 19<sup>th</sup> and 20<sup>th</sup> centuries is only a rhetoric about the citizenship/migrant differentiation. There is neither any special policy to help reduce the vulnerability of those assumed to be more vulnerable nor any concern towards these migrating communities. As discussed earlier in chapter 7, people who migrate are quite likely to be termed *outsiders who do not belong in Assam*. The state actors display a *reduced responsibility towards these people*; because the status of these people as citizens itself is contested the state thinks it can ignore them without a strong backlash (Project Officer DDMA Bongaingaon, 2016). There are backlashes at times especially from minority leaders, *'but it often ends up in violent conflict, and the agenda is lost'* (Project Officer DDMA Dhubri, 2016).

## 8.2 Those who live on the river islands

*The people of char are always floating.*

Communities occupying the floating river-islands (*char*) in the lower and central Brahmaputra valley live a fluid life. The *char*, which is pronounced *shore* and can also mean 'margins' or 'thief' when translated from Hindi, are elusive and somewhat scandalous.

*'Why do you want to go to the Char...It is not advisable to go there; you are a woman and the people in char are so dangerous that even our police officers avoid going there... if you persist we will send someone with you but please be really careful and do not take anything valuable with you. The bangles you are wearing can cost you your limb. Those people are barbaric and thieves. They will commit a crime and disappear across the borders; it will be impossible for us to locate them. And do not, in any case, go there after sunset, the islands are dangerous spaces in the dark'.*

The statement above was the standard advice I received from every senior official to whom I expressed a desire to visit the river island. However, my field notes on the date of my first visit to a *char* village recall a different scenario.

*On the banks in Dhubri, six teachers take a depilated dingy towards the Bashaini hoping that they will not be caught in the rain. On a second dingy board, several other villagers – mostly families with small children - board to make it in time as the rains are expected that day. The dingy drop-off point is an eroded sand-dune, which is breaking off with the weight of the people climbing up to reach the island (picture 6).*

*The habitation in the village is a kilometre walk inwards. There are no roads, no electricity lines and no water lines. The houses and shops however, have stand-alone solar lightening systems, every house having one square foot plate of solar panels (picture 7).*

*The villagers of Bagadora tell me these solar panels were recently installed under the National Solar Mission of the Central Government. And I can see in action the Indian Climate Change Adaptation Action Plan, - promoting sustainable and low-carbon intensive energy options using solar panels.*

**Picture 8: The Drop-off Point on Bashaini Char**



**Picture 9: Newly installed Solar Panel on a Shop Roof**



*There is a tea-stall around which children are playfully gathered; it appears that they have not been to the school. The building of the school itself is new but empty. The doors and windows are shut, which makes one wonder if the teachers on the dingy boat and have reached their destinations at all. I am told the teachers arrived for election duty and not to teach that day. Right across the playground of the school is a Madrasa. The Madrasa teacher is inside and is eager to give a lesson to whoever may come by – child or adult. At a distance, some men are bent over a paddy field engaged in a collective farming practice, highly common to the char islands. There are no frightening people here, no hostile conditions at all, just the hospitable people who are eager to offer anyone chai in exchange for dialogue.*

**Picture 10: Newly constructed primary school in Bashaini Char  
(notice the closed doors and windows)**



**Picture 11: Madrasa in a make-shift hutment right opposite to the Primary School**



The local boy Rajkumar, who followed us from the mainland into the char, points to the far end and says, *'this whole land belongs to his grandfather, all these people here are cultivating my family's land ... but they are not tenants, this is how communities*



*live. We don't know what to do with this land. We live in Dhubri, so these people can live here and cultivate for their families. We do not ask them for rent, but they send us rice sometimes'* (Rajkumar Babulal, 2016). It was hard to decipher whether this was the truth or an exaggeration, although the local families seemed familiar with this boy and they greeted him by touching his feet.

The *char* communities have developed a system of social resilience due to their geographical vulnerability and governance obscurity. The people on the *char* treat land as a common cultivation resource and try to build self-reliance regarding access to food. Many households also send their youth to the main-land for daily-wage work to increase their household economic status. During the floods, if a part of the *char* is inundated and lost to the Brahmaputra river due to erosion, the displaced families are accommodated by friends and relatives living on the same *char* or on nearby *char*.

At Bashaini *char* the families suggested a trip to Bagadora –one of the larger *char* that faced recent erosion, which washed away the south-east land-mass. The *char* is right across the India Bangladesh border, and there are bamboo ridges that serve as a border fence inside the river while also assisting with sedimentary loss during floods. In the picture below the temporary structure that marks the India-Bangladesh border in the water can be seen.

**Picture12: Bamboo structure determining the India-Bangladesh Border**

On the way from Bashaini to Bhagdora, the dingy was intercepted by the Central Reserve Police Force, who wanted to know the intention of a seemingly well-dressed person on board a local dingy instead of a governmental boat. They were confused because people from the city do not come to *char* for tourism or for research.

In Bhagdora, a part of the island was eroded, and the families were displaced to the other side of a narrow dyke, which also acts as a bridge. The women of the families displaced ended up as D-voters.

Like Bashaini, there are no roads on this *char* either, although there was a Maruti car driving around with party-posters for Congress. The locals narrated that the *char* may have better prospects now as one of the contesting MLA belongs to it. There are lots of things happening, including school construction and solar panels. According to the government, both the Bashaini and Bagadora *char* are fully electrified and have had village roads for the last ten years. However, the locals laughed at this proposition, gleefully, stating that the state would have known the truth only if an officer would

have come to inspect the construction site. The group went on to elaborate that *'the local MLA was given a fund ten years ago for electrification; he kept that money ... only now under the solar panel scheme are the panels being installed, and some progress is being made on the school. It is after all the election season'* (Group Discussion Bagdhara, 2016).

Public spending on household consumption goods for electoral gains is a commonly known and well-documented phenomenon in India (Khemani, 2003; Wilkinson, 2006; Min, 2010; Scott & Seth, 2013). It is very palpable that the recent scenarios of construction and energy distribution in Assam and its river-island are part of the electoral strategy due to the Assam Assembly election unfolding during the time of the fieldwork for this thesis. It is well worth stating here that the State of Assam was under the Congress government leadership, led by Shri Tarun Gogoi as the Chief Minister from 17<sup>th</sup> May 2001. However, it was perceived that the BJP would manage to achieve a landslide victory in the 14<sup>th</sup> State Assembly Election and indeed, from 24<sup>th</sup> May 2016, after 15 years, the Bhartiya Janata Party assumed governmental responsibility with Shri Sarbananda Sonwal as the Chief Minister. It is thus likely that had this fieldwork been conducted a year before the state election run-up, the experiences might have been different. Nevertheless, it is undeniable that the *chars* and *char* dwellers are at the margins of development and governance.

On the way back from the *char* the dingy sailors were seemingly in a hurry to reach the shore. 20 minutes later a dark cloud covered the sky, and everyone was worried that if it was a *Bordisilla* (hailstorm, accompanied by cyclone-like winds), the dingy would capsize. Two of the passengers held up a plastic sheet to help covers. Even in the face of disaster, they showcased the comforting hospitality that Assam is famous for by offering the only life jacket in the boat to me and reassuring me that everyone in the boat was a good swimmer. The retired Block Development Officer, who lives right across the river bank in Dhubri, was waiting anxiously at the drop-off point when we arrived. On seeing me get down from the boat, he rushed to greet me and offered me dinner with his family. He informed me that he had been waiting on the shore for



more than 3 hours and was getting worried due to the weather conditions. I am not sure how he knew that I was visiting the river islands. However, I think that, just like it was astonishing for the CRPF officers in the afternoon, it must also have been surprising for every other person in the region who saw me, a non-local educated girl, getting in a boat and floating away to a *char*.

Nothing during that day's experiences on the *char* was anywhere close to the narratives of 'frightful, thieves' that I had been warned about earlier. And one must wonder how these narratives came into being. A little archival research into the historic police records shed some light on this. There were instances of murders, dacoity and disruption of public order and the alleged criminals had absconded to the river island, making it very hard for the then British administration to trace them. The records provide a somewhat detailed description of a police chase across the river and their disappearance into 'thin mist onto an unknown river island'. The elusive geography of the river islands makes them a perfect hide-out for alleged criminals and they were in fact used during the period of the Assam Agitation as terroristic hide-outs and planning spaces for the United Liberation Front of Assam militants. My retired source, Shri Rajendra Prasad, remembering his own strenuous encounters during his days as a young Indian Police Service Officer, corroborated the scandalous nature of the *chars*, while asking, '*can we ever be entirely sure about the nationality or intention of these people? So many of them were militants, and some groups even operated from across the Bangladesh border.*'

There are documented journalistic trails of interviews with ULFA members in the hard to locate *chars* and difficult mountain terrain. However, due to problems of access and a lack of geographical information, there has never been enough academic engagement with the lives of the people occupying the Indian *Chars*. However ethnographic and geographic work from the *Chars* in Bangladesh, especially concerning vulnerability and migration due to climate change, has started to take shape.

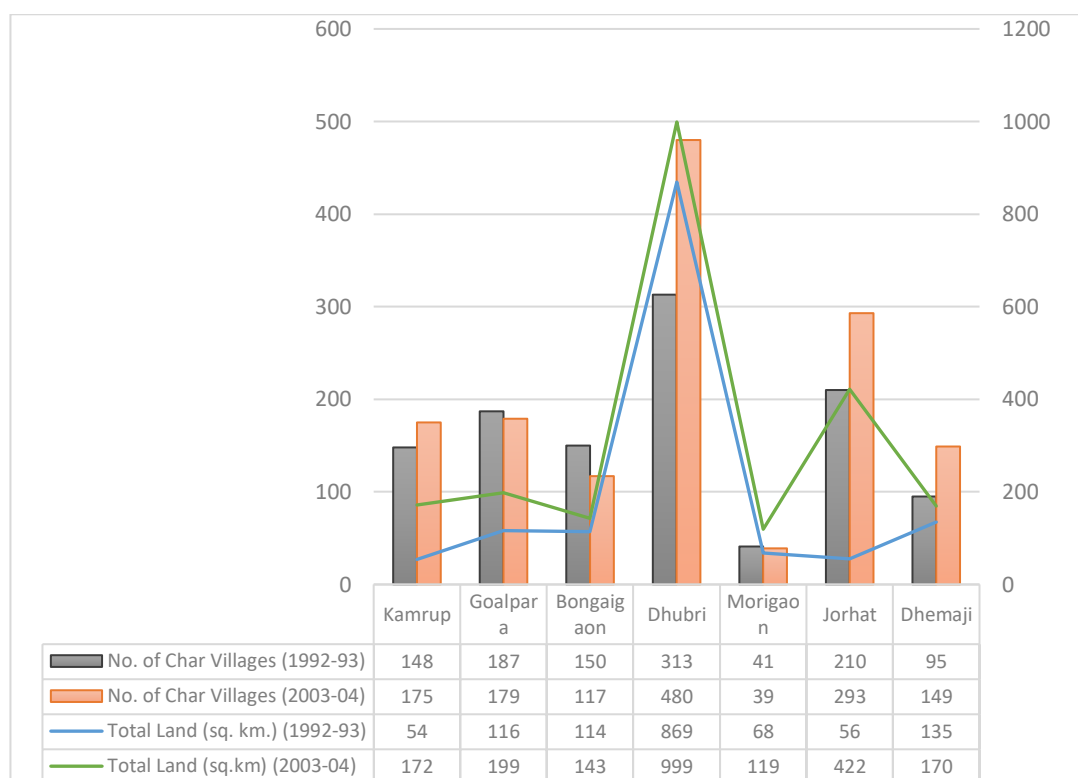
In Assam, the Indian administration has never been able to fully map and identify the river islands due to their temporary-existential nature. And while there is no hard evidence to validate the narratives that the occupants of the river islands are 'mainly

criminals’ or ‘majority militants’ or in any way ‘certainly illegal immigrants from Bangladesh’ these metaphors are commonly used. Questioning these claims, the Deputy Commissioner of Dhubri District asked, ‘*if these people are criminals then why does the NCRB (National Crime Research Bureau) not have data showing an alarming rate of crime statistics in these areas? In the same way as if you look at the D-voter list, you will find only a handful of D-voters in most of these areas, so if the government so strongly believes that the char dwellers are illegal immigrants, why has it issued them citizenship documents?*’ (Deputy Commissioner Dhubri, 2016)

As discussed in chapter 5, the political narrative of ‘illegal Bangladeshi immigrants’ is highly flawed. Nevertheless, there is a continued sense of suspicion within the general society as well as the bureaucratic elite about the people who occupy the *char* areas. This elusive and scandalous character has not been subjected to academic discussion and debate except by Gorky Chakraborty, who conducted a socio-economic analysis of the *char* in his works.

Interestingly, the Assam government included the *Char* as a specific subject requiring attention for development in its 7<sup>th</sup> Five-year plan (1983). Subsequently, a departmental unit was established in 1986. In 1996, this unit was made into a Directorate, and in 1998 the Directorate for *Char* Area Development was merged into the Welfare of Minorities Development. However, the only achievements that the Directorate can boast of are the socio-economic surveys of the region in 1992-93 and 2003-04. These surveys, however, are the only source of information about the Chars.

The following *char* provides a geographic overview of the known-*char* concentration in the study districts. The data below visualises the change in the numbers and the area of chars in the study districts. It is worth noting that the physical presence of the number of chars in each of these districts corresponds to 1992-93 and 2002-2003 data. It is highly probable that the number of chars has changed since then.

**Chart 9: Change in number and total area of char in study districts \* ^**

\* The data taken for Kamrup correspond to old Kamrup district

^ District of Chirang is the only study district with no marked Char

Source: Socio-Economic Survey of Char Areas 1992-93 and 2003-04

The demographic analysis of the data provided by these surveys shows a considerable increase in the number of families residing below the poverty line while there was a relative stagnation of the literacy rate from 1992-93 to 2003-04. The table below compares the data on poverty and illiteracy in the selected study districts.

**Table 18: Change in Literacy and Poverty Rates in the Char areas**

District	Literacy (92-93)	Literacy (2003-04)	BPL (92-93)	BPL (2003-04)
<b>Kamrup</b>	17%	15%	53%	68%
<b>Goalpara</b>	8%	14%	53%	68%
<b>Bongaigaon</b>	13%	12%	54%	68%
<b>Dhubri</b>	19%	15%	54%	69%
<b>Morigaon</b>	8%	19%	53%	67%
<b>Jorhat</b>	32%	61%	25%	64%
<b>Dhemaji</b>	14%	16%	47%	71%

Source: Socio-Economic Survey of Char Areas of Assam, 1992-93 and 2003-04, Directorate of Char Development, Department of Minorities Development

The growth in poverty is indicative of the poor performance of the welfare programmes, and the change in the char areas is indicative of the lack of structural development to mitigate the silt and river bank erosion.

The surveys do not provide specific data on religion and ethnicity, although this data is available through the village level census data. Given the fluctuating nature of the char themselves, and the resource constraints, this thesis did not identify each char village (1144 in total for the study districts). Instead, a demographic analysis of the revenue circles with a char majority in the lower Assam was conducted.

The analysis shows that the population in the revenue circles with a high char concentration are primarily Muslim. For example, in the South Salmara Revenue circle, the population of Muslims is 98%. Dhubri has 480 recorded chars, the majority of which lie in the South-Salmara Circle. In the district of Bongaigaon, the Boitamari revenue Circle and Srijangram Revenue circle both having a multiplicity of chars with a Muslim population of 69% and 66% respectively. It is worth noting here that in the district of Bongaigaon, the overall Muslim population is 50%. However, in the revenue circles, which have a multiplicity of chars, the population of Muslims is higher. Similarly, the Goalpara District has an aggregate Muslim population of 51%, while the Lakhimpur Revenue Circle has a Muslim concentration of 81%.

In the Upper Brahmaputra division in the District of Dhemaji, the total population of Muslims across the whole district is only 1.9%. However, in the Jonai sub-division, which has a multiplicity of river islands, this concentration is nearly 4%. The only exception to the Char population in the study area is seen in the Majuli Revenue Circle (now a district in itself), where the population is almost 100% tribal. It is an ST reserved candidate area.

The District Commissioner of Dhemaji Mr Victor Carpenter candidly stated, *‘the people in the region are well adapted to living with floods... when you see the beautiful pictures of decades-old bamboo bridges hanging over the flooded river it is from this region. These living bridges are a glorifying example of local engineering and the tribal way of living. You do not find that in the lower or middle Brahmaputra valley. You would find them in the upper-areas of Bodo-land neighbouring Bhutan where the*

*tribal concentration is higher or in the Karbi-Anglong district area, but not in other districts.*’ He also explained, *‘in the last years we have seen an influx of non-tribal non-Assamese population. They are Bengali and Marwari migrants. They are economically cleverer, but their lifestyles are detrimental to the ecosystem, and thus there are clashes.’* (Deputy Commissioner Dhemaji, 2016)

Answering the question, does the state try to negotiate peaceful living amongst the migrating and host community, the Deputy commissioners said, *‘no! But we try to prevent them from coming... you must have seen it is not an easy journey to travel to Dhemaji, the road... we are even thinking of barricading outside the district lines to stop and check the documentation of incoming migrants, but that is not legally possible, and there would be problems from civil society actors.’*

The Deputy commissioner himself was raised in the tribal areas of Karbi-Anglong and feels genuine about the loss of tribal identity and culture in the state. It is also worth mentioning here that out of all the Deputy commissioners interviewed for this study Mr Carpenter was the only one who viewed protection of tribal identity as the most critical issue and genuinely believed in the threat from migrants including those coming from other regions of India and being culturally different to Assamese people. For Mr Carpenter, the Chars are an example of micro-cosmic ecosystems that must be protected and used for developing biodiversity reserves. He suggested a meeting with Dr Bishnu Payen, the forest man of India, who has converted an entire river-island into a tropical forest. For him it is only the aboriginal tribes who can respect and revere his land so much as to revive a barren sand-dune and convert it into a tropical reserve (Deputy Commissioner Dhemaji, 2016).

In the middle Brahmaputra valley in the district of Morigaon, the population of Muslims across the district is 52%. However, the concentration of Muslims in the Laharighat Revenue circle and Bhuragaon Revenue circle is 60% and 91% respectively (Census India, 2011). The Bhuragaon Revenue Circle also has a large population who were displaced due to the massive erosion of approximately 17 villages (Deputy Commissioner Morigaon, 2016).

In the Middle Brahmaputra valley, there is undoubtedly a large majority of Muslim Bengali speaking people, who are identified as ‘*Miyaan*’, occupying the fragile river island ecosystem. In Lower Assam, the general concentration of Muslims in the districts across the Brahmaputra river is generally higher. The proximity of Lower Assam to the Bangladeshi border has added to the narrative of illegal Bangladeshi immigrants. And social and political groups have consistently questioned the legitimacy of these inhabitants residing in India (Home & Political Department, Assam, 2012). The administration, on the other hand, has carefully avoided any efforts towards the development or even identification of these areas.

As I mentioned earlier in chapter 6, there are 358 char villages that have not even been surveyed and thus any existence of rights and claims in these islands is contentious.

It seems that the inhabitants of the chars are unlike those living on the main-land of Assam. Politically they are invisible and administratively they are dispensable. In Lower Assam, where the chars are mostly occupied by a Bengali-speaking Muslim community, suspicion about illegal immigrants from Bangladesh or giving refuge to illegally trafficked family members from Bangladesh is strong. The residents of these islands live in obscurity with little to no livelihood options and no state support. Most households engage in community farming or work as daily wage labourers in the nearest town.

### **8.3 Welfare, Support and the Question of Existence**

It was evident on inspection of these chars that the communities living here are not a part of the government programmes that are supposed to benefit erosion affected families or flood victims. There are no MGNREGA initiatives, no Indira Awas Yojana Housing and indeed no structural barriers to control flood damage. Regarding compensation, it was not entirely clear how many of the people have received any state help. However, it can be deduced that as the land ownership in these areas is unsecured and land-data is unsurveyed there are no registered cultivation rights against which compensation can be sought. Even in the Upper Assam areas of Jonai and Majuli, which are Scheduled Tribe areas, the land rights are held through community and

cooperative ownership, which makes seeking compensation for loss of territory a complicated issue.

During the group discussions, it was seen that the families residing on the river banks tended to move inwards but close to their eroded piece of land. The proximity is kept to supervise the river flow and ensure that in the case of re-emergence of the eroded land it is not acquired by someone else. However, this is possible only in areas where there is empty fallow land available and sufficient social capital for the displaced family. For example, the Gaon Budha of Sutar Gaon acquired land 100 metres inwards from his eroded plot without opposition, due to the social clout he exerts. In the same village, other families had to move to Dhing or interior villages of the Laharighat circle. A similar effect of social capital was seen in Bhashaini Village, where co-operative cultivation was practised, and *char* families displaced due to floods and erosion were given shelter by the *Matbor's* family (GaonBudha, 2016).

However, social capital is not permanent when it comes to land resources, which are already scarce. It is often seen that while first, families will accommodate the incoming erosion victims on sympathy grounds, if long-term rehabilitation is not offered elsewhere, hostility between families will arise. As Nandita Hazarika explained, '*first they are a guest, then they are illegal settlers, it is challenging for the state to get involved in these community-dynamics*'.

In the absence of land-rights, displaced families are unable to claim compensation. The only avenue left for people displaced from this ecosystem is to seek a generous ex-gratia compensation following every flood season and to get themselves prioritised under welfare schemes such as Indira Awas Yojana (IAY). To seek ex-gratia aid, it is necessary for the state to acknowledge the rights of a person as a citizen as well as a displaced flood victim.

In the earlier chapters I showed that the feat of getting recognised as a citizen is a crucial and arduous task. In this chapter I will delve deeper into the acquisition of citizenship by the women of Assam, and how it inversely affects the assistance, aid and compensation they receive from the state.

Assam is a patriarchal society with only 13% of the total households headed by a woman out of a total of 853,374 households. This means that only 6% of the total women in the state of Assam are head of a household, while 94% of the women are part of male-led households. In general, birth registrations are not compulsory in India and, as household ownership and programme benefit documentation are attached to the biometric information about the household head, there is no incentive to register births or the existence of women members. In particular in rural areas, the documentation identifying women is limited to village panchayat certification that the woman in question is a daughter of a member of the village.

This becomes problematic when the woman gets married and travels to another village to join her husband's family; or when a woman becomes homeless and man-less due to the death of the guardian male member; or when she is deserted and excluded from the household. In the absence of any trail of documentation to prove their birth and lineage in the country, women are prone to being wrongly classified as D-voters. As seen in chapter 7, 69% of the total D-voter population are women.

During the group discussion in Dhobkura village, 13 women came forward to identify themselves as D-voters who are present on the D-voter list. Most of these women lamented the problem as being due to the '*unavailability of documentation to prove their birth or lineage from an Indian father*', a '*clerical mistake in writing the names*' and the tradition of giving a '*new bride a name of her husband's choice upon marriage*'. As the process of a name change does not include a state recognised system of public declaration in the newspapers, and as women lack identity documents, it becomes challenging for them to prove their citizenship and thus claim their rights in the event of migration or displacement.

Shakina Begum, a woman who was successfully able to seek a court judgement against the wrongful listing of her name on the D-voter list, spent 8 years regularly attending the Foreigners' tribunal and spent a total of 10,000 Rupees in lawyers' fees. Her judgement does not provide a rationale but simply states '*she is wrongfully listed on the D-voter list and the state authorities must reinstate her voting rights*'. The judgement makes no mention of the documentary proof that led to the decision.



In a similar vein, Fatima Bibi, whose name was on the 2001 voting list, but who suddenly found herself listed as a D-voter during the 2016 election drive, was disappointed that she could not vote. The reason for the listing was *probably* her migration from a char to a river-bank area with her two daughters after the death of her husband. She said that while the new community has integrated her and her daughter like their own, she could not show the documentation to the government officials when they asked for her identity papers. She did not have any.

On the other hand, Sudipta Mukherjee, the revenue circle officer in the state of Dhubri stated, *'women claimants are more likely to be attended to first in the public offices. I personally don't like watching a poor woman in my office area, so I always try to sort their problems out first. Plus in fact we have policies which make it mandatory for us to dispose cases of compensation and assistance where the claimant is a woman... even in the case of compensation for properties in joint ownership we prioritise cases where a woman is one of the co-owners and in IAY allocations the housing is always provided in the joint name of the husband and the wife'* (Revenue Circle Officer Dhubri, 2016). While it is true that the State of Assam does prioritise support for women, it is also necessary to understand that the state support under the schemes discussed earlier is only possible when a woman is in fact recognised as a citizen of the nation. In the absence of identity documents and voting rights, the efficacy of the woman-centric schemes is highly questionable. If a woman is a non-citizen or a doubtful citizen they do not have the necessary status to ask for state assistance, and due to the general fear of being enumerated as a D-voter, detained, or pushed back across the border into the territory of Bangladesh (a highly invasive and violent process of literally pushing doubtful citizens across the international line of control), there is constant inhibition in regard to asking the state for assistance.

## **Conclusion**

The current chapter discussed the influence of demography on the protection outcome; three elements of demography – ethnicity, religion and gender - were discussed to trace the occupancy of fragile areas. It was seen that minority groups are most likely to occupy the most vulnerable geographical areas due to their exclusion from the

mainland. The reasons for exclusion can be on the grounds of their non-tribal identity, which prevents them from buying land in tribal areas; continued poverty, which makes mainland areas out of their economic reach; and seclusion, due to a lack of identity documentation, which jeopardises their right to even seek state assistance.

Despite a profound realisation that resulted in several affirmative policies and a Directorate for char area development, these areas have remained physically vulnerable and the occupants of these islands are socially and economically trapped due to their vulnerability. The lack of state support in these areas has created concentric circles of victimisation with climate change adding further parallel circles of entrapment, discrimination and structural persecution. The nuances of governance of the margins – a marginal population and the margins of the mainland – need to be studied further. And these chars provide excellent starting points for this.

## Chapter 9 Conclusion

Climate change related migration is essentially an ethical issue which challenges our political cohesion, social limits to acceptance of the 'other', and commitment to the poorest of the poor who would either migrate or perish in the warming world. So how do we engage with Climate Change migration? At what level of governance should we aim to build capacity? And capacity in what areas are some of the necessary questions we need to ask. The finding of this thesis presents a reasonable caution against what new treaties, international orders, regional agreements and institutional arrangements can really achieve. Through the case study of Assam, I have come to show how bureaucratic redundancy, deliberate omissions, and methodical neglect by sub-state institutions determine the life and worth of a legal system.

It was seen that the elite bureaucratic actors serving at the frontlines of climate fragility can increasingly perceive climate change as a reason for exacerbated out-migrations and forced displacements. This increased perception has led to dedicated institutional changes and revising of policy agendas to accommodate the needs of climate migrants. However, despite the growth in policy documentation, climate migrants continue to receive uncertain and inadequate protection from the state. The thesis tried to answer '*why there is an uncertainty, non-uniformity and inadequacy in climate migration governance*'. I concluded that the neglect and omissions in the every-day mundane practices of the street-level bureaucrats, coupled with bureaucratic redundancy determine the policy outcomes. The everyday discretion, disregard and discounting exercised by the street-level bureaucrats are complexly influenced by a subtle value-judgement based on political and social subtext in which policies are implemented.

During the development and writing of this thesis the international dialogue on climate change migration has substantially shifted its focus from the need to channelize humanitarian interventions (use of UNCHR, OCHA and IOM) to the glorification of migrants as *dynamic actors* (use of disaster mitigation and developmental strategies). However, the political sub-text and marginalisation in the climate vulnerable areas illustrates that the communities most vulnerable to climate change cannot simply walk away from their vulnerabilities. Instead there are ghettos of trapped or displaced

populations that are suffering from a chronic protection deficit because the state structures perceive them as ‘outsiders’ or ‘inconsequential’ due to their social, economic and political statuses. There is no *dynamism* or aspiration in climate-induced migrations. People of Assam (and elsewhere) are not migrating because they want to live in a better climate, but because the ecosystem that have traditionally sustained their livelihoods and helped them survive is changing and pushing them further towards poverty. And thus, there will always remain a certain sense of desperation in climate migration which would absolutely challenge our own personal humanitarianism and ethics as we take this debate further.

### 9.1 Findings

While determining the methodology for this research three predictions were made (See the conclusions to chapter 3). These predictions were expectations about how the government should respond to climate change migrations and were based on a thorough review of existing literature. In this section of my final chapter I revisit these predictions and analyse the *real* state of governance in the light of my findings. By doing so I appropriate the distance between *law as is* and *law as ought to be*. Thus, taking the opportunity to move the debate on climate migration forward towards how best the gap between *agendas and implementation* can be realistically bridged without the overwhelming desire to create new institutions.

My first assumption was – the framing of climate change migration as a developmental issue rather than a border security issue by the central Indian government will positively influence the sub-national perception and engagement with climate migrations. This would mean that the state actors would disassociate themselves from the security narrative, which sees environmental migration as a source of conflict in Assam. But instead the state actors would associate climate migration with the development deficit in the State.

Mirroring Central government’s perception, the elite actors in the Assam Secretariat have been pro-active in bringing institutional change which can respond to the complex synergies between development, climate change disasters, and migrations. There is a fully functional Assam State Disaster Management Authority (decentralised

up to District level). Assam is one of the few states in India which has created a new institution as per the mandate of the Disaster Management Act of 2005. There is a mix of bureaucratic and non-bureaucratic staff employed in ASDMA. All the non-bureaucratic project officers of ASDMA are qualified developmental professionals with previous experience in non-governmental organisations, development support and welfare advocacy. The sub-state has also created Flood Early Warning System involving private partnership with members of public. The state has successfully collaborated with Indian Space Research Organisation to create Flood Hazard Index and visually present Flood devastation in the state by curating an Atlas of Flood Vulnerability.<sup>38</sup> There are identifiable flood-zonation in every state district. The state is also one of the first states in India to achieve MGNREGA presence in every rural village. It has successfully bided for creation of two smart cities (Guwahati and Jorhat) in 2016 and already have the Guwahati Smart City Body fully constituted and staffed. The state has also revised its compensation policies to accommodate people displaced due to flood erosions. It has identified the beneficiary household in every districts and curated a list of compensation packages that since need to be approved by the state assembly. The state elite-actors have pushed for enhancing their knowledge base by studying 'livelihood diversification options to promote in-suite adaptation to climate change'

Yet despite all these mammoth institutional changes which reflects the elite-perception of climate change and related displacements, the response to the citizenry has been limited and inadequate. Given that most of these changes occurred simultaneously in 2011-2012 it was worth taking a note and asking why the progress has been so abysmal. I came to a conclusion that the framing of climate change migration as a development issue, rather than a border security issue, has a mixed influence on the elite bureaucratic actor's perception and engagement at a sub-state level.

While the sub-state actors share the central government's concerns about framing climate migration as a sub-context to the larger development issue there is also an

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<sup>38</sup>Bihar is the only other state which has a Flood Hazard Atlas following Assam's successful imagining of its own vulnerability

added nuance of security complex. This security complex occurs due to Assam's position as a border state and its continued identity struggle. The security narrative visibly affects performance of key development programs and is even used to escape accountability for responding to certain groups of people. For example, I discussed the Right to Freedom of Movement [Article 19(1)(d) of the Constitution of India] as an enabling policy which allows all the Indian citizens and recognised foreigners a freedom to move within Indian territory without impunity. The sub-state recognises that the right is an essential human right and a basic condition which allows families to move out of their vulnerable geographical spaces into a more resilient environment. However, the bureaucratic redundancy and compartmentalisation at the street level colludes with the security narrative of 'illegal Bangladeshi migrant' and reduced some pockets of citizenry to 'doubtful citizens'. Now because the right to freedom of movement is available only to those who are citizens or in ownership of alien visas, the 'doubtful citizens' lose their right to movement and are condemned to living in fragile ecosystems, until they could prove their status as citizens.

It is however, well worth reminding the reader that this is a specific problem in the case of Assam due to enactment of Illegal Migration Determination (and Deportation) Act of 1986. The procedures under the IMDT Act mandate street-level election officers to enumerate and report people who are 'allegedly migrants from Bangladesh'. Such allegation under the Act do not require a formal complaint procedure or even a physical/political or social proximity to the 'alleged migrant'. The law under IMDT puts the onus of proof of citizenship upon the person whose citizenship is challenged. Once an election officer, following their mandate, declares a person to be doubtful, they cease to exist as citizens for the purpose of welfare programs. Even the most well-meaning Election Officer or Block Development Officer cannot reverse this procedure of law without judicial intervention from the Foreigner's Tribunal. The general duration for establishing citizenship rights under a Foreigner's Tribunal is 8 years (and litigation expenses). Thus, while the elite actors in the state may convince themselves of their development-oriented approach towards a 'dynamic climate migrants' in reality the bureaucratic action is embroiled in a politically motivated legal tragedy which strips the 'dynamism' away from a migrant.

Similarly, once again taking the development approach the sub-state actors identify building of embankments, dams and reservoirs as a strategy to mitigate inundation thus reducing scenarios of temporary displacement, entrapment, and long-term migration caused due to repeat flooding. But, the absence of structural development in areas which are most fragile, such as the river-islands, is justified by asserting that *those areas don't need development, they are occupied by thieves, thugs and illegal migrants who should not be there at the first place*. Such potent is the security narrative that even the most senior officials would rationalise lack of development by comparing communities *worth* (as a citizen) and the public expenditure of an otherwise poor state.

The second assumption in the study was that the existing political rhetoric surrounding migration would negatively impact the protection of the communities that are perceived to be 'outsiders' or 'non-Assamese'.

It was highly visible during my field research and while analysing the state data that the state has a morbid affair with the term 'migration' and associates it stanchly with 'illegal Bangladeshi migrations'. This reflected in bureaucratic actor's reluctance to publicly speak to me about migration and migrant protection. Even the most senior officials wanted anonymity while engaging in direct discussions on migration, irrespective of the fact that we were not really discussing the more contentious cross-border migration. Senior officials preferred to use the term flood victims or displacement victims. These terms were also employed to describe people who engage in voluntary cyclic migrations, to avoid the social stigmatisation and political criminality associated with the term 'migration'. It was a paradox which looked at its 'dynamic climate migrant' as a 'victim'.

The political influence was highly potent in the relief process. The availability of relief is reserved based on political clout. I demonstrated that in relation to relief policies street-level actors hold strong political considerations and seek to strengthen their own political/power position in the society. The street-level actors claimed that sub-standard relief can jeopardise the political interests of the parties with which they associate publicly. This also means that the areas that have limited political participation, or a low number of voters in general receive modest or no relief.

For example, the river-islands which face a continuous flux of involuntary migration do not attract any special provision for the protection of the *char populations* during or post-disasters. There is a relatively higher number of D-voters (doubtful citizens) in these geographical spaces and thus a relational lack of political presence. The only *char* with a designated shelters and relief camps was Majuli (which was made a district during the writing of this thesis). Majuli Island, as the heart of the political and cultural life of the Mishing community, is also one of the few *chars* with strong political representation.

And while the state elite actors speak highly about the separation of powers, in a Montesquieu fashion, the theory is bargained in everyday administration. Sometimes due to matching political ideologies, sometimes due to the personal relationships and goodwill between the ruling government and the state actors; and sometimes because it is easier to ignore large numbers of flood victims than to respond to them.

The final assumption of the study was based on the influence of demography. Since certain demographic characteristics, such as gender, age and membership of social groups, can lead to increased levels of vulnerability to climate change displacement and also strongly contribute to the inability to migrate out of collapsing ecosystems, I expected that the state would be aware of this differential vulnerability and would have differential policy outcomes aimed at protecting the most vulnerable.

My analysis demonstrated that the state actors understood the variations in vulnerability based on demographic factors. There was an enhanced understanding of the gendered perspective of climate vulnerability. The district disaster management officials attributed their increased awareness of the gendered aspects of vulnerability to the presence of Mrs. Nandita Hazarika as their COO. It was also seen that the state has adopted pro-active strategies, such as the joint allotment of permanent land-tenures or housing benefits under the Indira Awas Yojana, or prioritisation of rehabilitation grants for women applicants etc., to protect vulnerable women. However, these policies are not necessarily implemented, as most women residing in the state do not have any identity papers to make a claim, prove their existence or even be represented in a democracy. Thus, the institutional structures eclipse the policies aimed at



benefitting women and instead produce abrupt and callous results on a continuous basis.

Similarly, the lifestyle and demographic characteristics of the people who live on the *Chars*. It was seen that despite the well-known and thoroughly documents physical vulnerability of these islands the schemes discussed in this study had a very minimal and inadequate implementation. Every officer interviewed for the study was able to perceive and understand the climate vulnerability of the river-islands but none of the officers was keen to prioritise project deliverance in the river-islands, as they found them hard to reach. Similarly, no Deputy Commissioner or Senior secretarial officer from the Department of Revenue or Department of Disaster Management, ever attempted a planned relocation from these islands due to the fear that it might lead to massacres like the one witnessed in Nellie during 1983. Thus, physical vulnerability of the *chars* was an issue that goes beyond the state's ability to respond in any meaningful way.

## **9.2 Contribution of the Thesis and Recommendations**

The problem of climate change migration is inherently complex. There are differential definitions and attitudes towards the role climate that change plays in influencing migration. In turn this had led to a multiplicity of interpretations, perceptions, and responses about effective climate change governance at several levels. The research on the governance work on climate migration falls within a futurist 'what ought to be' paradigm, despite the strong scientific consensus regarding adaptive and survival migration due to climate change. Scholars have not developed a generalisable account of how governments tend to respond to wicked issues and why the solutions provided are non-uniform and inadequate despite the chronic nature of environmentally affected migration.

The thesis has highlighted that the national and sub-national governments have a varied and fluctuating perceptions and responses towards climate change migration. The central government may frame the problem as a developmental issue, but the state governments would certainly add layers of complexity and nuances based on their regional and geographical statuses. By engaging with governments at the sub-national

level I provide new insights into the translation and functionality of the existing policies and I contribute towards understanding the socio-political context in which policies are implemented. I have argued that there is always a political and institutional sub-text that not only creates climate vulnerability but also negatively influences efforts to meaningfully respond to climate change related migration and forced displacement.

The thesis sheds light on the State of Assam, which has been used in the security studies literature to exemplify ‘group-based violence due to environmental constraints’. While there is no strong evidence to suggest that the political violence in Assam is motivated by environmental or climatic change, this thesis has shown that the existing group-identity rhetoric and associated political struggles have negatively impacted the state’s ability to respond to climate migration.

Methodologically, this thesis is one of the first to utilise implementation data on key welfare programmes and Geographical Information System mapping tools to locate the gap between the elite agenda framing and the actual agenda deliverance. I drew on datasets for livelihood security, infrastructural development, citizenship data, and socio-economic data to provide a holistic picture of the protection gaps. This was also the first time that the State government of Assam shared a full-record of its D-voter list and allowed an analysis into the demographic and geographical character of the data. The findings have an influential impact in review and re-scrutiny of the National Registration of Citizenship process in the State.<sup>39</sup> By highlighting the marginalised situation of migrating women who often end up as unrecognised aliens or doubtful citizens due to a lack of documentary evidence I channelized media discussions on the validity of a flawed administrative process. I made a direct contribution by providing a sound bite to the most watched local News channel - Pratidin Times in April 2016 - contributing to a discussion panel on the NRC process in Assam, which was aired on 27<sup>th</sup> December 2016 News 18/North-East. An indirect contribution also was made through several pre-air discussions with Aman Wadud, a lawyer-activist in Assam who

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<sup>39</sup> At the time of submission of this thesis the first list of NRC data was published by the state after a thorough internal scrutiny following my recommendations to the Chief Secretary. The scrutiny however, led to a two years delay in first NRC publication. The final result of the NRC published register were not available at the time of submission and thus have not been incorporated in this work.

is actively working for the rights of D-voters. Wadud and I identified eleven D-voters in Karbi Anglong (although it was not my study area) and filed a collective judicial representation for the reinstatement of their citizenship rights in January 2017. The matter is *sub-judices* in the High Court at Guwahati.

The work in this thesis is truly inter-disciplinary and aimed at not only broadening our understanding of climate migration governance, but also providing a sound public policy advice. Based on this study, the state Secretariat of Assam sought recommendations for synergising climate migration into the existing Disaster Management and Developmental paradigms of the state.

### 9.3 Recommendations

The state of Assam benefits from a small mitigation responsibility, a functional district-level disaster management institution, and the utilisation of GIS mapping techniques to map its flood-vulnerability. The state has shown a progressive awareness of the climate change and migration nexus at the secretarial level. The publication of studies conducted by ASDMA to understand livelihood diversification needs and climate vulnerability is indicative of this awareness.

At this stage the state of Assam could establish an adaptation model of development that is resilient to future climate change while at the same time not increasing the carbon footprint of the state. Given that the state of Assam has already created an institution on disaster management with office bearers appointed up to the district level, specialising in disaster management and climate risk reduction studies, the state could utilise its existing setup in planning and strategising its response.

The state officials instinctively know that the communities living in fragile areas engage in cyclic and non-permanent forms of migration to strengthen their household level resilience to climate change. This knowledge should be expressly recognised by including sustainable voluntary migrations as an adaptation option in the State Action Plan for Climate Change and the Disaster Management Plan of the State.

The State Disaster Management Plan recognises the ‘all disaster-all department’ approach to hazard management. This approach must also be inculcated into the

district units, which benefit from an involved deputy-commissioner who is usually the line-manager for every state department at the District level.

To ensure that the line-officials and street-level actors understand the synergy and their roles in maintaining it, I suggest the adoption of the technique of mess-mapping. The process of mess-mapping involves mapping the political and administrative bottlenecks, including identifying the departmental nexus and communication networks that need reinvigorating for more closed cooperation, in the implementation of a policy. Mess-mapping is a cross-sectoral mechanism involving an *all department all officials* strategy, which is similar to the state's all department all disasters approach towards disaster management.

Districts should take an inventory of the existing programme outcomes and the barriers to those outcomes by using the geographical information system and over-laying it with the tools of mess-mapping. This would help in understanding the developmental deficiency and the reasons for such constraints in each local area (essentially at the village level).

For example, the mapping of employment generation under the MGNREGA policy using geographical information system would allow for clearly identifying the geographical impact of the programme and would help overlay and compare the programme's impact in geographically vulnerable locations. By adding elements of census data to this mapping analysis the state officials would be able to clearly see if the areas with the least programme impacts are essentially the ones that are also geographically vulnerable and occupied by minority communities.

As stated earlier, the State government has already made tremendous progress in mapping flood vulnerability, and in mapping the socio-economic data on scheduled tribes at village level. Both datasets were available on the open source Bhuvan software of Indian Space Research Organization and were used to generate maps in the current study. Overlapping this data with data on livelihood programmes, housing benefit programmes, and ex-gratia compensations would provide a highly visual and understandable picture for the state actors at all levels of governance.

The process of mess-mapping should be aimed at answering the following questions:

- 1) Can a community adapt to climate change with in-situ adaptation measures?
- 2) Can a community adapt to climate change with cyclic migration without the need for permanent relocation?
- 3) Can a community adapt to climate change with permanent relocation to nearby areas?
- 4) And finally, is there a chance that a community may become trapped in a collapsing ecosystem and may require planned rehabilitation?

An analysis at the village level would provide a baseline for adaptation, migration and relocation needs. This would help government actors in determining whether climate change adaptation can be achieved in-situ or if certain forms of migration or relocation are necessary. Each of these scenarios could be used to identify needs. For example, in areas where in-situ adaptation is possible the village level assessment might show a greater need for structural development to mitigate flood effects; or in areas identified as collapsed ecosystems, the local administrators might find it necessary to plan assisted rehabilitation. The determination of needs would allow the opportunity to match appropriate policy programmes. For example, in areas requiring structural measures, the state could prioritise funding for structural dam and embankment works under the MGNREGA scheme.

The next step in the process is solution mapping and accounting. In solution mapping the District Commissioner, with his team of Revenue Circle Officers, Block Development Officers, and the Village authorities must collaborate to identify solutions to the mess-map created earlier. The solutions should be identified by the street-level actors while an accountable time-line should be agreed at the district level for proper supervision. Once progress is made the data should be displayed using the technique of mess-mapping to clearly identify the progress and regularly monitor the barriers. The process of mapping would not only allow the state officials to see and monitor their own progress but would also help them disengage with sub-national politics and be more focused towards targeted policy outcomes. The inanimation of mapping would provide a layer of detachment from animated factors, which clearly interfere with the current policy outcomes.

## 9.4 Future Research Avenues

It is generally known that climate change is affecting hydro-metrological cycles across the world and forcing communities who are dependent on eco-system resources to use migration as an adaptive or survival strategy. In a changing global environment, forms of climate migration are inevitable. However, research has focused for too long on the need to establish a causal linkage and pressing for new policies. To me this is simply a push towards creating yet another institution with no guarantee of its functionality.

We thus need to tie climate migration to development and welfare policy analysis and question the inadequacy and non-uniformity in development and welfare schemes, which force vulnerable communities to relocate to survive. Marrying public policy to the dialogue on climate migration is thus an essential future step. Understanding the constraints at the sub-national level of governance is essential to assess how any international agreement on climate migration would essentially be delivered in a local context.

Second, research needs to focus on GIS mapping tools to identify geographical vulnerability and match these with data on development and welfare programmes. Often the reach of programmes into physically fragile ecosystem is limited – it is essential to explore the reasons for these limitations. Mapping the reach of governmental programmes is also important in terms of improving accountability and producing well-thought protection outcomes.

Finally, we need to study institutional limitations in the context of climate migration. It is intuitively known that an exponential number of people are displaced annually due to hydro-metrological disasters. We need to understand how governments respond to them before we can confirm a policy-area gap and jump to establish new institutions. The absence of knowledge about sub-state perception and implementation gap would only lead us towards a non-targeted generic approach which might not be suitable at all for the problem in hand. A more nuanced understanding of administrative behaviour is thus critical for addressing the issue of climate change migration, forced displacement and development.

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