

CHAPTER-3

PROJECTS, PRACTICES AND POSITIONS IN GOVERNING FLOODS

3.1 Introduction

‘Disaster response to floods in Assam has been under the purview of state government and local governments. Since the state and local government both know the unique geographical topography of their region and their citizens, they are best positioned to govern natural disasters’. (Emergency Project Officer, September 2019).

Writing about the recurring annual floods in Assam could be a challenging task mainly for two reasons. It occurs in a spectacular scale and its regular occurrence presence year after year. In this backdrop, this chapter explores the interventions made by the government to adapt to floods at a local regional space. In particular, this chapter engages with the disaster management policies of Assam which aid construction of floods as ‘governable entity’. The chapter focuses on the epistemic and material practices through which floods are regularized from the perspective of the government apparatus. By looking at the practices that go into anticipating floods, during the phases of both preparedness and during floods, I make an attempt to understand the everyday practices of anticipating the annual phenomena. The broader implications of these investigations are to argue that a hazard perspective to risk reduction regularize floods annually, from the perspective of governmental apparatus, but do not reveal the human experiences of its aftermaths. As Gaynor (2012) argues, to keep an eye on the emergent properties of the non-human entity offshore; it is necessary to immerse oneself to the complexities inshore. Contextualizing this argument in the social construction of disaster adaptation, from a governance perspective has merit. By examining the practices of planning and preparedness to floods will help to illuminate what goes into the politics of knowledge production of the non-human river vis-à-vis the humans. The politics that occurs at the governance level have layered effects and impacts on how people ‘experience’ disasters at the margins.

Flood in Assam should be considered is both as a spatial and temporal phenomenon. During the monsoon season, it causes inundation of the plains, making it a temporal event. The fact that it covers such a large landmass and causes massive devastation

which makes it a spatial phenomenon. Assam has experienced disastrous floods since the 1950's earthquake that caused a rise in the river bed of the basin, but the scale of devastation in recent decades in the years 2002, 2004, 2012, 2019 and 2020 was disastrous. Last year, in 2022, across the 35 districts in Assam, 32 districts were affected and an approximate of 5.5 million people were affected. Massive erosion, displacement of people, breach of roads and bridges along with human casualties mark the annual phenomena as part of the devastating floods in Assam.

In Assam, the existing disaster adaptation policy to floods, require governance of the phenomena, both at the temporal and spatial level. In other words, it means governance of floods is required to be constructed at such a scale so that it has a spatial and temporal reach. In this chapter, I examine the techniques of power of the state within the institutional capacity of disaster governance, by dealing with different regimes of practices- heterogenous discourses, laws and propositions that are assembled to serve an urgent need and with strategic purpose (Li, 2007, 264). Going beyond the conventional way of analyzing power of the state in its tactics to discipline and subordinate citizens; to govern life and death and to make its population governable, Rose (2009, 1) urges for an alternate thinking. According to him, in contemporary times, the analysis of power and politics where an imagined centralized state would have monopoly in exercising force in a demarcated territory is obsolescent.

The image of the state as a single national economy with its territoriality and governability is challenged by waves of new emergent ethical questions and their addressal- of the environment, of animal rights, of reproduction, of health, of everyday life itself (ibid, 2). Such interventions have disrupted the conventional notions of the relation between the state and the citizen, the political and the personnel and the sources of political legitimacy through power and citizenship. Current political thought compels us to look for alternatives while thinking about the contemporary forms of government. Drawing from Foucault's lectures on governmentality, Rose focuses on one form of analysis that do not focus on the transfixed image of the state but on the maxim of 'conduct of conduct'. It refers to the attempt to shape human conduct by calculated means. Shaping the conduct of people is different to that of discipline that seeks to reform through coercion. With the will to improve the welfare of the population or to improve its condition requires distinctive means (Rose, 2009). These means refer to the

techniques through which desires, aspirations and beliefs of improvement are inculcated in people so that they behave in their self-interest but is actually conducted by the State.. To gain consent, the tactic of persuasion might be applied but no disciplining is ever attempted. In governing from a distance when power operates at a distance, people do not know that their conduct is being conducted (ibid, 4).

In other words, the scholar implies that analytics of the state need to focus on nodes of connection between strategies and techniques directed for intervention, its operationalization and transformation of rationalizes schemes, programmes, techniques and devices that seek to shape conduct of actors, to achieve certain ends/goals. Therefore, governance is not only about individuals in power or the imaginary of the state that exert direct, sovereign, and coercive control over a territory, but rather the unconsciously produced and reproduced norms of the population, thereby enabling governance from a distance (Rose, 1996, 327-356). Such line of thinking benefits the study of disaster and its management policies to unearth the logistics of risk and security. Further it helps in understanding how the sensational presence of disaster and its mundane existence that materialize through daily practices of governing disaster creates normalization and control of disaster.

3.2 Conceptualizing governance of disaster

The entry point to understand the knowledge dynamics in governance of floods is drawn from Tania Murray Li (2007). To understand the interface between policy and action in the process of adaptation to floods, Li's analysis of the rationale of the development schemes in the context of Indonesia would be helpful. Rather than condemning the intervention programmes, the scholar focuses on the ways the intervention programmes get entangled with other processes and relations and becomes contemporary sites of struggle. Li (2007, 1) writes, 'The outcomes of improvement schemes are not always bad. Programs of improvement often brings changes that people want-more roads and bridges, fewer floods and diseases, less corrupt and waste.....I seek to understand the rationale of improvement schemes-what they seek to change, and the calculations they apply...the inevitable gap between what is attempted and what is accomplished'. Moreover, the scholar highlights the persistence of the intervention schemes to improve, despite its shortcomings and failures.

The merit in analyzing the intervention programmes to serve an urgent need is the necessity to frame problems in such a way that it is tenable to technical solutions. In order to do so, programmers have to carve out an arena of intervention to which modes of calculations can be applied (Li, 2007, 2). Hence, programmers address certain issues and exclude some. In its own right, this point of translation, where an issue is simplified and other factors are excluded, creates layers of reality for those who are receiving these programmes.

Such a framework helps to analyze the practices of governing floods, how floods are defined, how floods are made a technical field, how adaptation programmes are constructed and who has a say in it? Flood is a compelling context where the social production of improvement policies can be observed as a process and also how it shapes the conduct of the target population. The annual occurrence of floods in Assam, as well as its adaptation and mitigation is a technical field of disaster management. At the same time, experts within the domain of science, geology, geomorphology, and hydrology extend their disciplinary contributions to minimize disaster risks. Therefore, the context of annual floods in Assam provides the relational context to analyze the transferability of knowledge production into disaster risk management to produce desired outcomes and minimize any potential threat to its citizens.

Governmentality studies tend to refer to ‘assemblage’ as a central concept to visualize interventions to achieve desired outcomes. Given its vitality, Foucault (1980, 194) describes ‘assemblage’ as discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions which are assembled to produce strategic outcomes. The term ‘assemblage’ is employed, ethnographically by Li (2007) to bring to light the labour of how diverse elements are forged together to intervene in forest management on east Indonesian islands.

Drawing from the scholars, the meaning of assemblage in this study refers to the varied ways of how an array of elements are brought together to render ‘flood’ as a stable category. Following the stabilization, various practices are employed yet again to anticipate and prepare for the annual phenomena prior to the onset of the monsoons. An analysis of socio-material assemblages to flood adaptation, bring to focus the everyday practices to analyze how these elements/practices are organized to represent control of a

natural disaster. The socio-material assemblages to flood governance, in the context of this study, refers to the processes of predicting the possibility of floods with technology and its preparedness and recovery practices with documents.

3.3 Framing flood as a ground for technical intervention

To anticipate floods, it requires different practices so that the futurity of floods is brought to the present. It requires social formations with people, making laws and discourses, a hierarchy of governmental apparatus, scientific propositions that make futuristic claims of disaster adaptation within the reach of the government. Framing of flood occurs at two levels: first, by delineating a discourse of disaster management at the local level by drawing from a regional disaster manual formulated and published in the year 2015. This manual guides how particular disasters need to be framed which in turn shapes the authorizations, inclusion and exclusion of factors, setting the criteria as to what would constitute a disaster. In doing so, the spatial character of flood is circumscribed into a field of intervention. Second, in decentralizing governance of disaster, various roles and responsibilities are enlisted to the local authorities, by the Assam State Disaster Manual (ASDM) 2015. These roles and responsibilities not only lay the conduct of the local officials but also the conduct of communities as to how do they need to prepare ahead of the floods. By forging alignments with communities, people are brought into the field of disaster governance without coercion. However, this is not to say that there is no contestation by the local people. But, the technique of forging alignment reflects how the will to improve the welfare of the people is realized at the exclusion of the traditional adaptation practices of local communities.

To govern from a distance, it requires various bureaucratic practices. In the context of flood adaptation in Assam to make rules for the proximate local areas from a distance require a point of convergence. Here the Assam Disaster Management Manual which was drafted and published in 2015 becomes important. This manual lays out the state objectives for disaster governance in Assam. The first introductory chapter delineates the prominent approaches to mitigate any disaster in Assam. Mainly there are seven pointers. The first pointer considers the role of mitigating disaster and emphasizes on the role of the state government. The second pointer includes crisis and emergency management to be the sole approach to crisis management. The meaning of crisis or emergency situation is not confined to natural or man-made alone, but also to border disputes, war or any

economic distress. The third and the fourth pointers lay down the roles and responsibilities for local authorities in each district. At this point, it is mentioned that if there might be any gap in the practice of the knowledge in mitigating natural and man-made disasters then the bureaucrats are expected to act in the spirit of preparedness in coordinated action. The following pointer, mentions disaster preparedness to have a place-based approach and urges a plan of action for every local government. The plan of action is charted out as to identify particular vulnerable places that require preparedness and mitigation measures, chalk-out capacity building programmes and keep an emergency stock pile of medicine, food, fodder, drinking water plan along with budgetary allocation of resources by the commissioners and the head of the departments. The sixth pointer encourages the planning departments to envisage plans for disaster risk reduction and to minimize damage caused by other hazards. The seventh pointer states that the Assam Disaster Management Plan drafted in 2015 supplants the Assam Relief Manual of 1976.

Making documents an ethnographic subject to analyze governance of disaster is often challenging. This is because of all theoretical and methodological perspectives, how can documents be treated as ‘field’? As Latour (1988, 54) opines, documents to be ‘the most despised of all ethnographic subjects, what merit lies in treating documents to analysis rather than collecting data from the field?’¹ With surging critique of understanding ethnographic fieldwork centered around notions of state, society, nation, culture and depending on ethnographic fieldwork and rapport building, frames for theorizing what constitutes a field site has changed (Clifford, 1988, Strathern, 1992, Gupta and Ferguson, 1997). On a similar tangent, bringing the focus to documents to be a site of ethnographic attention, Riles (2009, 5) treats documents as an ‘ethnographic response’ or as a technique that can be used to explore questions of production of knowledge and representation. In the context of the above, this study treats documents not as procedures/documentation in bureaucracy, but as a category that illuminates the knowledge making practices and representation by the state. In order to make an analysis of the disasters manual existing at the national, regional and local level, the following questions are interrogated:

¹ For a detailed understanding on how the limits of conventional fieldwork have created a shift to focus on new subjects for ethnographic research, see Clifford, J. (1988). *The Predicament of Culture: Twentieth-Century Ethnography, Literature, and Art*. Cambridge: Harvard University Press.

- 1) How does the manual construct adaptation to floods?
- 2) What assumptions are made in this process of construction?
- 3) What are the gaps, exclusions and absences that are inherent in the manual?

The Assam State Disaster Manual 2015 provides an understanding of spatial-temporal governance of floods. As highlighted in the introductory chapter, the Assam State Disaster Manual guides the conduct of local authorities to anticipate and mitigate disasters. Therefore, this document no longer remains a physical object but is transformed to standard practices of knowledge that give orientation to local actors to govern flood. Engaging with the subject of scientific documents, Latour and Woolgar (1986, 51) explain how scientists in a laboratory are consistently engaged in the practice of reading, writing and re-reading samples. They define this practice as ‘inscriptions’ and laboratory scientific work involve the practice of producing, re-producing and circulating these inscriptions. Inscription refers to ‘any item of apparatus or particular configuration of such items which can transform a material substance into a figure or diagram which is directly usable by one of the members of the office space’.

On a similar tangent, the Assam State Disaster Manual is an inscription of particular definitions/criteria of disaster that transforms the spatial character of floods (disasters in general) to a technical field for intervention. This manual formulated at a regional level is further produced and reproduced in different districts to define and direct control/mitigation of disasters.

The second chapter of the manual delineates the definition of disaster. Here disasters are catastrophe, mishap, calamity or grave occurrence in any area that may arise from natural or man-made causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to and destruction of property, or damage to, or degradation of environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area (2015, 3). The chapter then further delineates the major natural disasters in Assam considering earthquakes, floods, erosion, landslides/mudslides, storms, cyclones, climate change and global warming to be the major disaster risk in Assam. On the other hand, the manual makes a distinction that any threat to the ecosystem by humans may be termed as man-made disaster. Population growth, economic development and demand for better infrastructure are considered as

threats to the ecosystem. Beyond this cursory delineation of statement, the manual does not mention any particular source of anthropogenic threats to the environment.

The third chapter of the manual explains the management of disaster as a function of risk, which is a function of hazard and vulnerability. Following this delineation, the approach of disaster management at the level of governance involve continuous process of planning, organizing, coordinating measures for preventing threat of any disaster and mitigation/reduction of risk. This inevitably involves enhancing capacity building through research and knowledge management and to be vigilant in a state of preparedness. The principle of preparedness rests on evacuation, rescue and relief (during disaster) and evacuation, rescue and relief (post-disaster), rehabilitation and reconstruction. The manual then delineates the objectives of disaster management as follows:

- (a) Promoting a culture of prevention, preparedness and resilience at all levels through knowledge, innovation and education.
- (b) Encouraging mitigation measures based on technology, traditional wisdom and environmental sustainability
- (c) Mainstreaming disaster management into the developmental planning process by ensuring that different mitigation and preparedness activities are part of the regular development efforts and that plans at all levels from Gaon Panchayat to the state level have a disaster management component.
- (d) Empowering communities to play a major role in disaster management through greater emphasis on community self-reliance, planning and decision making.

Bringing this simple laying out of aims and objectives of disaster governance into critique or analysis is quite hard. As Strathern (2009, 181) echoes, how does one critique good practices, when it entails the double resonance of ethical behavior and effective action. The will of the government to improve the condition of communities from the annual phenomena of floods is undoubtedly an ethical and effective function on part of the government.

The introduction chapter of the Assam State Disaster Manual (2015) highlights its objectives in a sequence of (a) to (f) explaining their approach to disaster management. As Strathern (2009, 182) states, the highlighting the aims of an institutions in the format

of bulleting shows the well-intended aims of governance and is a characteristic of good practice. These objectives in the manual guides in the prioritization of different forms of creation and construction of disaster preparedness. The basic assumption that is explicit in the manual is that the threat of disaster is not only on the nature but equally on the subjects to strive for resilience. In sum, resilience is seen as an extensive capacity of every lay person to inculcate and act in the face of any disaster.

By constructing the paradigm of resilience, knowledge production becomes political when the nature of meandering rivers causing floods is foreclosed. By generalizing floods in the Brahmaputra floodplains to natural disasters like earthquakes, landslides and droughts is problematic. In doing so, not only the characteristics of the meandering rivers are excluded but why certain tributaries like Jiadhal is more prone to changing its natural course is not mentioned. Politics of knowledge to govern flood becomes implicit when such debates are foreclosed. When this annual phenomena is seen only from the lens of resilience as a capacity which can be achieved through technology, innovation and knowledge, disasters come to be seen as events shaped by the order of the society. Further, the stress on communities to be self-reliant and take necessary planning measures during the face of threats is seen as subjectification of people as they have no alternative to political opinions. Positing the subjects¹ as vulnerable, the discourse of resilience objectifies human force as a greater and un-contestable power (Cavelty et al., 2014, 5). In other words, using resilience as a category for disaster adaptation creates subjects.

As discussed in the preceding chapter, the Brahmaputra floodplains are in itself a complex socio-ecological system. The interrelations of human beings with ecosystems experience rising importance in sustainable land use planning and lead to the concept of socio-ecological system. Socio-ecological systems include both a bio-geo-physical component and the related local and regional actors. Their system boundaries depend on the context of the problem and can be either determined by environmental parameters or socio-cultural factors.

In order to accommodate the historical and geomorphological characteristics of the floodplains its governance require flexibility and a capacity to absorb and respond to the environmental perturbations the environment produces. On the other hand, the laying out of a specific designation for each disaster be it natural or man-made, which is done

¹ Subjects here refer to the people who are at the receiving end of adaptation programmes of disaster governance.

for making governance easier, oversee the temporalities of these disasters produced at the ground. This manual defines each disasters and attaches a concrete set of practices as well as roles and responsibilities of officials delineating their approach to disasters. Such an approach make floods as a phenomena that causes as to how to approach when the natural forces take humans by surprise.to the disasters as to how to approach inundation of landmass as an event at a particular place and time which can be adapted to with prior preparedness. The approach of how disasters are problematized is pertinent because problematization shapes the kind of goals that are to be included as a response to govern floods.

In thinking of managing environmental challenges, it is important how we define those problems and how it is then integrated in our institutional frameworks (Benson, 2015). The laying out the objectives in the disaster manual follows the sustainability narrative. This approach of environment management focuses less on the problems arising from chaos in the environment and more on finding a way to absorb the shocks of resource consumption and other kinds of environmental woes.

3.4 Local governance of disaster

When floods are circumscribed into a technical field by the Disaster Manual at the regional level, the following section examines how the district disaster plan derived from the ASDM is implemented in Dhemaji. As observed ethnographically, the riparian communities living along the edge of the floodplains become an essential component in the assemblage of disaster governance at the local space.

Under Section 25 of the Assam State Disaster Manual - 2015, a District Disaster Management Authority (DDMA) has been constituted in each district under the chairmanship of a District Commissioner. Each DDMA is responsible for implementing, planning and execution of all the guidelines laid down by the Assam State Disaster Management Authority. Additionally, in planning for disaster management at the district level, several concerned departments are organized for coordination and implementing disaster preparedness. The management of disaster risk reduction is a concerted and coordinated effort and dispersed across varied departments of the government such as Water Resources,

Veterinary, Public health, Public Works Department, Agriculture, Police. For a holistic and pro-active approach to disaster adaptation, specialized training programmes for different level of officers, employees, voluntary rescue workers are provided (2015, 12). Different departments work under their own defined logistics. As I discuss below, this pre-determined apparatus to exercise governance of disaster become entangled during interactions between various departments at the district and local level.

At the district level, forging alignments with villagers to govern better is given priority. This characteristic as observed in Dhemaji is similar to what Li (2007, 268) identifies in her study on forest conservation as well. She argues for parties that aspire to govern forging alignments with villagers under the term 'community' is crucial so as to govern the conduct of the villagers. In this process, the communities are autonomized in forest management programmes while simultaneously they are trained to be responsible. Rights to resources for people living at the edge of forests are allowed to have access to forest resources based on their performances.

On a similar plane, forging alignments with the villagers is suggestive of how in improving governance of floods a space is provided where the communities can deal with the government representatives and share their experiences of floods. Bringing communities into the realm of disaster governance allows communities to have a dialogue and suggest their local ways of adapting to floods. In Dhemaji, the sub-divisional office of Sissiborgaon was taken as a site to examine the assemblage of disaster governance at the local level. Sunbar Chutia (36) explains the forging of alignment with the villagers to govern floods every year. According to him, representation of villagers is formalized through the Village Level Management and Conservation Committee (VLMCC). Established in 2015, the president of the committee is the Gaonburha² and the Secretary is the Lat Mandal. Both these representatives are chosen to work with the government and are expected to work with the villagers in their respective villages on behalf of the government. The committee also includes a teacher from the village and one representative who need to be a permanent resident of the village. During the floods, the circle office is divided into a number of 'Lats' and the representative of the Lats known as the Mandal who need to assist the gaonburha in any circumstances. When the circle office in Dhemaji is intimidated of floods by sources in

² A gaonburha is referred to the village headman. This position is considered to be the lowest rung of administration in Assam.

the upper stream, the village headman is responsible for verification of the same at the ground. Simultaneously, in documenting the impact of floods, the village headman is responsible for preparing the list of people affected, number of houses damaged and livestock lost. However, the non-governmental representatives of the VLMCC need to provide their signature on the list that is prepared, so as to avoid any contestations regarding relief distribution and to contain the powers of the village headman.

When the situation of floods is severe, the State Disaster Response Force (SDRF) and National Disaster Response Force (NDRF) are guided by the VLMCC committee for any rescue operation. In making decisions, as for instance which houses need to be evacuated, number of houses submerged in water that require relief are certain areas where the VLMCC helps these disaster response forces. In explaining about the relevance of the VLMCC, Vikram Taid, an official at the Sissiborgaon circle office, maintains that the main function of the committee is land conservation of government land. If any land is occupied by the villagers then the report of the same needs to be submitted to the VLMCC, who further considers the authentication of ownership of land and submits the same at the circle office. Given their proximity to the villagers, the representatives of the committee viz. the village headman and the Lat Mandal³ are crucial during recurrent phenomena of floods as well.

At this juncture it is observed that the district authority takes a back seat, distancing itself from certain elements of regional or local disaster policy agenda and decision-making process. What is observed in the process of governing floods in Dhemaji is that at the district level, after formulating the Dhemaji District Disaster Manual at the Circle Office of Dhemaji, the entire task of aiding the adaptive capacity of the affected communities is rested on the shoulders of the respective sub-divisional circle offices. According to empirical findings, local bureaucrats are responsible for taking swift action during an emergency and mitigating its effects. At the same time, institutional control over the sub-divisional level is administered through the release of funds. As for instance, institutional character of the state gets illuminated when in the dispatch of essential goods from godowns to the people affected by flood, the signature of the District Commissioner on

³ Lats refers to divisions of government land into slots for revenue collection. And Mandals refer to the government appointees who are responsible for doing land survey and settlement of land of Lats for a particular area of government land.

the produced document to distribute relief is mandatory. This practice is supposedly meant to retain a transparency of distribution of government relief. On the other hand, this prolonged process of communication from sub-divisional office to the district level increases real-time waiting of the affected people. The strategic use of the signature document, the autograph of the government bureaucrat comes to be understood as an instrument of political control (Reed, 2009, 163). Simultaneously, it transforms the affected people as subjects of the state's control mechanisms.

3.5 Performative politics of preparedness

In defining preparedness to floods, I operationalize the meaning of preparedness as the numerous apparatuses, regime of practices of technology and materiality of documents are involved at the governance level every year to imagine the onset of the annual floods. Preparedness is putting into action the various arrangements guided by the district disaster manual to create a sense of stability and security from any kind of risk or vulnerability. Performative politics of preparedness reveal the contingencies of the practices employed to govern floods.

3.5.1 Authorizing scientific knowledge for predicting floods

In coordinating preparedness for floods, the primary step is to predict the probability of floods by authorizing scientific knowledge. The recently adopted project of Flood Early Warning System (FLEWS) is an initiative to predict probabilities of flood. In predicting probability of floods, flood forecasting and warning system is an essential element in regional and national flood preparedness. Flood forecasting refers to a set of time profiles of river water levels at various locations. Forecasting is provided with the help of hydro-meteorological observation provided by weather radar satellite and automatic hydro-meteorological station network. The Central Water Commission is in charge of these systems. Flood warning involves making use of those forecasts by the officials to make decisions about whether warnings of floods need to be issued to the general public. The inputs and reports from this technology are supposed to provide the real time⁵ of probable risk to floods. As an official at the emergency department states, the Central Water Commission provides information on water levels of only the major rivers of the state, but FLEWS provide flood warnings for tributaries in the Brahmaputra floodplains.

⁵ In this context, real time refers to conception of time in atomist units i.e. as minutes of the clock time.

In this sense, the bureaucrats are at a better position to issue warnings of floods to clusters of villages through revenue/circle offices.

Here, it is pertinent to mention that the inclusion of FLEWS as a project for better prediction of floods with the help of science and technology is a shift that occurred at the international level. In January 2005, the United Nations convened the 2nd World Conference on Disaster Reduction in Kobe, Hyogo, Japan. An outcome of this conference was the Hyogo Framework for Action through 2005-2008. In this conference, the paradigm of disaster management was broadened from post-disaster response to an approach that included prevention and preparedness measures. These shifts at the global level influences governance at a local space such as in Dhemaji. Early Warning System is seen as a critical tool to enable governments and communities to be resilient and better prepared to floods. Cutting across this global space, this system was adopted by the Assam Government in the year 2009 and implemented in Dhemaji on a pilot basis in the year 2010.

Flood warnings are initiated by the emergency office at the District Commissioner's office in Dhemaji. The officials take into account the cumulative reports of meteorology, collected and analyzed by the North Eastern Space Application Centre (NESAC). On the other hand, given the fact that the FLEWS project reflects the changes that were initiated for disaster risk reduction at the global level, the Water Resource Department at each district have a system of manually monitoring the rise in water levels. At the edge of the river bodies at various banks incisions are made at certain levels to calculate the rise of water level.⁶ During the season of monsoons, a water reading man from the Water Resource Department would collect the water level rise readings at the banks daily and provide the report to the emergency office housed within the Dhemaji Circle Office. Therefore, both scientific and manual calculations are taken into consideration before declaring an emergency related to floods, as the one of the officials states.

Further, explaining the context of forecasting of floods, Monoj Chetia (46) at the Emergency department maintains, 'One of the major decisions we have to make is regarding the reliability of the available forecasts and bring it into the public domain so that the public can respond effectively. At the same time, we try our warnings not to turn

⁶ Rise in water level is measured by cubec metre per second.

out to be mere speculation because a record of false alarms would mean less people responding to future warnings. So we try our best to be cautious while initiating an alarm'. The process of authorizing scientific knowledge and analyzing the role of technology in predicting flood probability takes place in social context where technology is negotiated with subjective decision-making of the officials. Emergency Department has the responsibility of declaring an emergency⁷, and they are cautious to prevent any error that might occur in this performance. Therefore, declaring an emergency is more than a routine of anticipating floods.

Lohit Gogoi (45), the project officer at the emergency department in Dhemaji maintains, 'Given the personality of Brahmaputra and its tributaries as meandering rivers, predicting their course to minimize risk within the paradigm of disaster management is challenging for us. With the FLEWS project now, transmission of weather reports of Assam (to gauge precipitation) and meteorological reports from NESAC in Meghalaya give us a paradigm of scientific knowledge to rely on. Therefore, the FLEWS project is an explicit model of anticipating flood confining the future into a set of practices based on technology.

But the bounding practices of nature into a tight control wrestles in its own fragility. In recent years, climate variability have affected the cycles of monsoons. As Lohit Gogoi maintains, non-seasonal rains over the Brahmaputra Basin make us alert as there is an abrupt rise in the water levels as provided to us by the Water Resource Department, Dhemaji. There are reports of inundation at villages causing damage to people. Flood resulting from non-seasonal rains is not defined at national nor regional disaster management manuals. Similarly, there is a cursory mention of the phenomenon of flash floods in the disaster manuals both at the state and the district level. However, there is a tacit exclusion of providing a definition to flash floods. It was visible during the interview that the official was reluctant to divulge more on flash floods. This particular exclusion of governing flash flood or how it is dealt at the ground level became pertinent to explore. Since, the sub-divisional offices are at the forefront to mitigate floods, after the probability of the same is being announced by the emergency office, the following section discusses how flood is defined by the circle offices at a sub-divisional level.

⁷ Ethnographically, emergency is seen as a situation when water level in the river basins flow at higher level, having the probability of overflowing its river basin at any moment.

3.5.2 Flashfloods as fragile relays in assemblage

Flash floods overwhelm the adaptive capacity of governing monsoonal floods into stable constructions. I begin by asking the officials at the emergency office as how do they define a flood then? The moment of defining floods is embedded in the moment of declaring an emergency and to forecast the time when water would inundate landmass. This requires authorizing knowledge by assimilating technology and acknowledging the same as a base to escalate further decisions regarding the actions and decisions to mitigate floods. In preparing for the floods, the months of March-October is taken as a period of probable floods. Practically, any kind of information on the level of water upstream of the Brahmaputra in Upper Siang and Lower Siang is provided by the neighbouring state Arunachal Pradesh. As one official states, 'Increase in the water level in Pasighat (Arunachal Pradesh) raises the alarm here for Assam' (circle officer of Sissiborgaon, under Dhemaji district).

The National Disaster Management Authority (2015) mandates state coordination in providing information regarding any kind of natural disaster. So in terms of flood, the rise of water level or its probability is communicated from the emergency department in Dhemaji to the respective circle offices through message or e-mails. The information then percolates to the respective village headman (gaonburha) or Lat Mandals from the sub-divisional office. Following which these designated people mobilize themselves to the edge of the river to gauge the level of water for authentication. The reports are then submitted manually to sub-divisional office.

An official at the sub-divisional office, Ronojit Taid (39) maintains, 'Although we take cognizance of the report sent by the neighboring state of Arunachal Pradesh, sometimes a delay in transmitting the report from the emergency office posit a problem. As we have the provision of collecting water report manually, the assistance from meteorological forecasting is not of much use to us. There are instances when inundation occurs abruptly at night-time. Similar instances are also reported in the afternoons, when people are usually not in their homes'. Therefore, besides monsoonal waves of floods, these officials are bound to deal with the nature of flashfloods. The circle officer of Sissiborgaon states, 'To distinguish between these two events, we get a document on the water levels by 8 am from the village headman. I take that further to the higher officials to keep a record of the substantive rise in water levels. What we have been observing is

that few cycles of rain in the plains prior to the onset of monsoon reach a dangerous level threatening security; in such instances the satellite images of floods and water reports from Arunachal do not essentially overlap'. The process of translation of probable floods through images of satellites backed by large calculations flashing on the computer screen of Emergency Department in Dhemaji is not met with much urgency at the sub-jurisdiction level.

At this point, we notice how the non-human river enters and destabilizes the tools employed by humans to predict the probability of floods. When the abrupt rise of water levels owing to pre-monsoon floods, exceptions like these are not thought of in authorizing knowledge of how to deal with prediction and probability of floods. The abrupt formation of clouds followed by a light drizzle is not represented in abstract numerical propositions. Therefore, the framework of predicting an emergency concerning floods by the FLEWS project is not able to capture the runaway reality of the floods. Further, the fluidity and velocity of water is confined within the grid of practices and policies of disaster management which are both material and technical; but evaporates in the face of the natural forces unsettling the governing practices of humans. The scientific apparatus and the inter-networked modelling of the atmosphere across Assam and Arunachal Pradesh fail to comprehend with certainty the modelling of nature.

Therefore, in such contexts, it can be deduced that the linear symmetry of technology and its communication to lowest rung of governing disasters is not continuous. These glitches in communication of information between levels of governance occur because in circumscribing flood as a technical field, it is important to acknowledge that it is a peopled system. Simultaneously, the certainty of technology to predict probability of flood at the district level is transformed by the irregular volume of water in the river basin challenging the resilience practices about floods. It is in such contexts, Latour (2014, 110) makes an appeal that instead of settling for arbitrary technology/society divide and asking questions like what is social, what is scientific or technical, we need to engage with how humans or non-human's competence gets extended or modified.

3.5.3 Practices to prepare for emergency

Another technique of preparedness to anticipate floods include mock drills which provide a space to imagine and reflect vulnerabilities regarding floods. In other words,

rehearsing the techniques to act during an emergency is to create a sense of vigilance and awareness among people as to how to act in a state of emergency. As informed by an official in Sissiborgaon, rehearsals take place in the month of March every year. Generally, a village school is selected where such exercises/training are provided by the ASDMA with the help of the local bureaucrats. An observation of one such rehearsal in anticipating catastrophic floods was conducted in March 2019 at Sissiborgaon Lower Primary School.

Disaster management officials from ASDMA along with the circle officer were present during this rehearsal. The beginning of the rehearsal started with a speech by the circle officer emphasizing that the villagers need to cooperate with the government so that authorities can serve them better. He also stressed on the fact that since past few years the intensity of floods has increased and the cultural practices of adaptation is declining, so it is important for us to find new means of adaptation. The villagers are asked to gather at the premises by the village headman, who then explains the importance of learning new techniques to save oneself from any kind of risk. One disaster management official maintains, 'During floods, there are immense possibilities of us not being in a position to reach to everyone in a vulnerable position. Hence, it is our duty to provide them with preliminary techniques which they may use during times of emergencies'.

The mock drill began with the initiation of a shrill siren which was supposed to be a declaration of emergency. The demonstrator who was a representative of the NDRF compiled a stack of plastic bottles near him and demonstrated how to make a shaft made of plastic bottles. Explaining the use of the shaft the person maintained that the shaft would help them keep afloat in water. Given the fact that boats are not a regular thing among people these days, the willingness of the authorities was to aid the people to save themselves when the risk of floodwater emerges abruptly. In explaining the agenda, the demonstrator had undone the built shaft to demonstrate people to build the same again. The programme then focused on teaching the villagers on how to conjoin the plastic bottles (10X10) with a particular stress on how to tie the knots to make the shaft stronger and rigid. 'Providing such rehearsals creates a sense of vigilance, since not every household has an access to a boat. With the help of the VMLCC we get a set of volunteers who then carry this demonstration further to every household in selected villages who have greater chances of a washout' maintains the village headman. Such

programmes are usually clubbed under the objectives of the ASDM that urges people to be self-reliant in order to mainstream disaster management. These officials consider such techniques to be regular part of developmental planning process.

This entire simulation process of rehearsing an emergency sits awkwardly with the context of how people at the margins experiences floods in Assam. It is pertinent to note that simulations of disasters as a technique of risk management emerged after World War II in the context of civil defence. Gradually, these practices transformed the rationality of risk from civil defence to defence against environmental disasters, be it earthquakes, tsunamis or floods (as in this case). Therefore, the technique of simulation which is used for emergencies like wars (a man-made disaster) is conflated and applied to natural disaster alike which have catastrophic consequences.. As for instance, the famous duck-and-cover exercises were conducted by actors in the context of nuclear attack (Davis, 2007). Eventually, simulating disasters were extended to all kinds of natural hazards or to a pandemic started by a bioterrorist attack (Lakoff , 2007).

After the rehearsal was over, the circle officer revealed, ‘there is no particular mandate/rule to disseminate these rehearsals for disaster preparedness. But in association with the ASDMA, we promote a culture of preparedness so that people are prepared to be surprised during emergency’. Explaining the logics of preparedness further, one official stated:

‘We are supposed to engage with the preparedness practices in tandem to the monsoon floods when water encroach the landmass. However, the issue of flash floods and its intervention measures are ambiguous. The disaster manuals do mention about flash flood but do not delineate the efforts we need to make for the same. We are tied in that manner. There are reports from respective gaonburhas about water entering the villages. People suffer distress when the water comes unannounced. But according to reports when they subside in a day or a two, we have nothing much to do or bring to notice of higher authorities for recovery measures’.

3.5.4 Points of divergence to performative politics of preparedness

Locals gathered in the village field did not trust the state's initiative on the effectiveness of these methods. According to them, the shrill siren of the whistle to demonstrate an

emergency was equivalent to a situation of washout. This term referred to a situation when floodwaters have crossed the threshold of stability and have made considerable devastation. As one local actor exclaims, ‘we do not wait for floods to come and wash us away. We take the necessary precautions way before monsoons commence. The multiple waves of floods that occur during the monsoons compel us to stack our belongings, cattle and children at safe or elevated levels’. Ridiculing the initiative of simulating disasters another interlocutor states, ‘when water overflows the basin and engulfs us, we have an array of work to be conducted before the water level rises. Out of all these who has the time to sit and weave shafts? Also, would the government provide us with the plastic bottles or will they provide us the money to buy them?’

There is a great sense of disbelief among the villagers that the issue of flashfloods is a phenomenon that could be prepared ahead of. Villagers exclaim that these flashfloods are a result of the release of water by dams constructed upstream in Arunachal Pradesh. People at the margins have had experiences when volume of water in the river basin have swollen abruptly and washed away their cattle. ‘There were instances when it was not the season of monsoons, yet the dams constructed upstream release water from reservoirs inundating our villages. These contexts are not considered or discussed by the officials and they ask us to gear up for an emergency?’

A performative approach to resilience that do not take into consideration these particularities, differences in experiences, singularities to construct resilience as an all-encompassing approach to prevent risk and hazard is problematic (Brassett et al., 2015, 38-39). This is because the varied practices of governance to foreground everyday situations through practices, experiences and materialities combine to form a dense network of resilience on one hand but remains ambiguous and ambivalent on the other (ibid, 38-39). In a similar manner, in Dhemaji, the assemblage of all-encompassing practices to mitigate and evade disasters by drawing from national and regional disaster manuals, scientific technology to predict floods, rehearsals enacting ways to conduct during disasters, distribution of relief and compensation are characterized by uncertainty and ambiguity at sites where logics of adaptation are applied.

3.6 Practices of governing floods through relief and compensation

Depending on how a disaster is problematized in turn shapes the selection and performing of goals for recovery and reconstruction. The politics of constructing disasters solely as a function of hazard and risk shape and creating a binary of natural, social and the political create complexity in post-disaster recovery (Cretney, 2019, 500). The following section, discusses the role of documents in the governing of the spatial character of the floods in everyday practices. In analyzing the everyday practices to govern floods, the surfacing of contexts where documents fail to measure the flow and ebb of floodwater, show how non-humans enter the collectives of humans and thwart the methodological separation between nature and the social. The tacit exclusion of these contexts, reveal how disaster looms at the back when the act of governing oversee the elusiveness of water in determining the present.

According to Sunbar Chutia (38), Assistant circle officer of Sissiborgaon, the primary intervention to govern and mitigate floods after it inundates lands, lies in the dual mechanism of providing compensation and relief. Compensation, which is mostly in the form of cash is supposed to help people reconstruct the damage they have incurred. Distribution of compensation is done in post-flood stage. Relief refers to the distribution of essentials among people to sustain themselves until water subsides.

These governance techniques essentially require tools to collect, validate and calculate the quantity and amount of compensation to be released and to whom. On asking the respondent, how and what factors are considered before providing relief and compensation is considered, he explains that ‘washout’ is understood in equivalence to a catastrophe that have transcended the threshold of adaptability of the affected people. ‘Washout’ is a particular designation by the governmental apparatus to facilitate distribution of relief and compensation.

Here, the excessive focus of the governmental apparatus in viewing ‘natural disasters’ as an intrusion to the social systems is problematic (McMahan, 2013, 2). To make a point, the scholar brings up the context of industrial disasters, which happen within systems and have a direct impact on humans, but in the long run lead to environmental pollution. By giving a designation to intrusion of non-humans forces into social systems as natural disaster there is a tendency to close the debate of disaster in anticipating disaster by the

governmental apparatus or asking people to learn to live with risks. This practice exemplifies the ontological view of bureaucrats reinforcing the nature/society binary. What emerges from this binary is the reluctance to see why floods may occur due to our modifications to ecological systems of the river. When disasters happen, it is convenient to say that floods were anticipated but it exceeded the margin of anticipation.

Besides, distributing relief and compensation during floods, rescuing people caught in the deluge is a responsibility of the government. In a situation of 'washout' and after water starts to overflow its banks, the NDRF and SDRF teams are intimidated and kept on alert to carry out rescue operations. The village headman provides the first hand report of floods overflowing the basin, to the circle office. This is followed by the process of evacuation of affected people in villages. With the help of the revenue department, a village school is finalized beforehand which serves as the relief camp to house the affected people. At field duty, an official from Sissiborgaon accompanies the village headman to verify the situation of inundation. In the next stage, the village headman and the Lat Mandal are asked to prepare a list of affected villages, people and livestock lost. Alternatively, when incessant rains occur for 2-3days, the NDRF and the SDRF with the guidance of the village headman use motorboats to evacuate people stuck in houses. As stated by a Lat Mandal in an interview in Pomua village:

'It is also during floods that we get to know the strength of the embankments. During my tenure, I have not encountered any breach of embankments, but have dealt with cases in the field where water seeps in through the crevices in embankments in a short span of time. This phenomenon escalates a sense of panic among the villagers. In such situations it is challenging for us to evacuate people on time and simultaneously arrange for their relief from government funds'.

During floods, the circle offices of the sub-divisions in Dhemaji are the trustworthy functionaries in governing floods. As water makes its way into the villages, a report of the same and the level of submergence of villages is communicated with the District Commissioner of Dhemaji. This procedure is seen as a formal intimation to the local bureaucratic level to initiate further action and agency over the dynamic and meandering rivers across the district.

During fieldwork in the monsoons when the villages are affected, the efforts made by the sub-divisional offices revealed their ontological frame of creating the boundary of nature/society. Following the everyday practices of the governmental apparatus to govern the spatiality of floods during its course of occurrence brought to the fore the tools that were employed to make the chaotic environment a stable construction. I describe the practices through which the personality or the form of flood is bracketed out and the catastrophic event is brought into a working definition so as the society can be secured from devastation.

After the report of inundation is sent from the sub-divisional office to the circle office in Dhemaji, the ensuing activities are once again dictated by the district disaster manual. The manual mandates an inter-relation between departments by assigning them roles and responsibilities and aid the District Commissioner to govern the annual phenomena. Revenue and disaster management department, health and family welfare department, home department, public work department, transport department, food and civil supplies department, information and public work department, agriculture department, social welfare department, water resource department, power department, education department, panchayat and rural development department are responsible to undertake their respective duties in meeting the objectives of the district disaster manual.

Following the suggestion of the Assam State Disaster Manual 2015, each district has to envisage a disaster management plan, according to the nature of the problem. In Dhemaji, this formal layering of departments is constituted with the circle officer of each sub-division being the sole decision-maker with assistance from the revenue department of Dhemaji. This committee is responsible for planning, implementing, and monitoring of relief and rehabilitation during the floods. The forging of alignment with local communities is formed through the association of the Village Land Management Conservation Committee (VLMCC) to aid monitoring and verification of water levels across the rivers. This local committee is also required to support the circle officers in relief and rescue operations. Of all the organization of departments to mitigate flood, the significant responsibility of generating funds or financial resources to mitigate disasters rest with the DC of each district.

The existence of these protocols determines how the governmental apparatus will respond to floods. The aforementioned demarcation of the model of governance is

interesting because it reveals the agency and how officials respond to the recovery and reconstruction operations. After sending the ground level report of inundation to the DC, the role of the officials is to prepare for relief distribution and take stock of the basic essentials that are to be dispatched. Additionally, the construction of make-shift tents at the selected village school is undertaken. Formatting the reality of devastation caused by floods through documents provide a stable governance of the Brahmaputra floodplains. 'The legitimacy of this process guarantees a transparency to our compensation' maintains Topon Chamua, a respondent from the Sissiborgaon circle office. He further states:

'We try our best to avoid any kind of corruption while providing relief and compensation. Only the affected people receive our aid whose name is enlisted in the document provided to us by the Lat Mandal. The non-state members of the VLMCC are responsible for making a count of the number of villages affected; number of houses and number of families affected and prepare a list. This list is very crucial for us as it is forwarded to the DC for release of essentials from the government godowns'.

To further explain the practice of recovery during floods, the interlocutor showed a list of flood affected people, prepared for the year 2018 which are usually kept as records. The list consisted of a tabular record of six columns under different heading such as serial no, name of the affected village, name of the person, sub-division, relief camp allotted and lastly, duration of stay at relief. Prakash Taid, a respondent at the Sissiborgaon Circle Office, puts it with a concerned face.

'We cannot deny to the fact that the people on the ground are often angry, resentful and frustrated when our officials are there to distribute relief. After the list of people who qualify to receive relief is verified and approve by the DC, the godowns under Food Corporation of India are directed to release the basic essential food items according to the amount that is sanctioned to be released. By the time, it is loaded on a truck to make its way to the allotted village, it takes around two days. Delay in this process, results in affected communities being resentful. Sometimes, there is violence and manhandling of officials too. Generally, we do not report such cases of violence'.

It is in contradiction to the very nature of preparedness which the discourse of disaster management attempts to practice when people had to wait for relief. Documentation is the key to distributing relief and compensation after floods.

At the same time, communication from the sub-divisional office to the district level through the transfer of documents and vice-versa do not match the temporality of floodwater. Discussing the challenges of analyzing a present moment that is elusive, Miyazaki (2009, 206-207) discusses the gift giving and receiving ritual of indigenous Fijian community. The act of giving and receiving gifts to each other is a way of attending to or facing each other. He examines two documents, document A being the record of the gifts and the recipients to receive them. Document B was the record that kept a record of the gift exchange, after the act was over. So there was a temporal difference in both the records that were maintained. Examining the Fijian gift exchanging documents, the scholar articulates that this ritual creates a temporal sense of anticipation to both the parties. This anticipation is temporary and ends when the ritual is over. Going through the same mundane ritual every year and keeping a record of the same for the Fijian ritual participants is a replication. Miyazaki further argues that this act of replication is a method of apprehending the present moment. He contends that giving attention to the act of replication and the objectification of the moment is a technique across different forms of knowledge (ibid, 223).

On a similar tangent, the act of giving and receiving relief and compensation is an act of attending to the experiences of loss and chaos of communities at the margins by the government. The act of making a list of the affected people and their location into tabular form and passing it to higher authorities and the granting of relief from the highest authority down below is not only a social reproduction of documents. This act is an objectification of the non-human river after the floodwaters overflow its banks. The formulation and documentation of people at the sub-divisional office is a part of an everyday practice of anticipating and mitigating floods by the government. After dispensing relief or compensation to the affected people, their moment of governing flood is over. Therefore, the temporality of the governmental apparatus is different to that of the communities living along the edge of the river.

For the communities who are at the receiving end of relief and compensation are subjected to a period of waiting, resultant of the elaborate process of communication

between layers of governance. When the act of receiving aid for recovery from the government, is not achieved in the present moment of the deluge, the anticipation from the government by its people is not met. This leads to disappointment among the people and hence do not anticipate receiving compensation as well. However, this is not to say that the affected communities turn into subjects of the state. As I explain in the succeeding chapter elaborately, there is a continuous dialectics between their subjectification and having agency of their own.

Simultaneously, the repetition of the same procedures of governing the annual occurrence of floods, through the techniques of compensation and relief foreclose the ever present fluidity of floodwater. By excluding the agency of the non-human and simplifying emergencies like breach of embankments, dykes, bridges as exceptions of the river to social systems is a social and political ordering of the humans.

The symmetry between human preparedness to floods and the non-human river is constructed on the techniques of recovery and reconstruction. But this artificial divide between material and natural force do not match the temporality of how people experience floods. As for instance, Khagen Doley (56), of Pomua village do not anticipate receiving compensation from the local government. In his opinion, photographic documentation of the livestock loss is the criteria for getting compensation for livestock losses. He replies sarcastically:

‘Are we fortunate enough to keep our cameras ready to capture our loss? In a chaotic situation of getting our people, pigs, goats and chickens to a higher elevation that we build within the house, sometimes we are bound to let go of our livestock. Also, I may not be lucky to take a photograph of my bull being swept away while grazing in the field’.

Reiterating a similar experience, Pranab Doley, (45) of Pomua gaon gives a genuine complaint. ‘Beside houses, the categories that qualify for compensation include loss of livestock and agriculture, such as paddy and cash crops. Will we get our compensation, if we say our bamboos were sloshed by floodwater? Specifically, when tracts of land with bamboos are sloshed into water, how will the government take of measure of that?’

Such complaints of the respondents who are in anticipation of compensation but do not receive these measures at the present moment shows the limitations of repetition of bureaucratic practices. Communities are apprehensive about the government's inability to categorize the various forms of loss caused by multiple waves of floods because there are no categories for them to fall into. As for instance, Vishal Pegu (41) was one of the receivers of compensation from the authorities. But it was his brother, Prakash Pegu (39) who was eligible for the compensation but missed by a criterion. His front-yard, during the night, was filled with water reaching up to his chest. In the morning when a representative of the Government came for inspection along with the village headman, water had receded. The only remnant of floodwater was marked by a muddy front-yard with leeches. Prakash Pegu did not qualify for compensation because during the process of inspection by an official and the village headman, water was not found. It is in these instances, the construction of floods into a technical domain for intervention overlook the elusiveness of water as a medium.

The sub-divisional office at Sissiborgaon complies with a mundane practice when it comes to preparing lists to document floodwater impacts in villages so as to initiate the recovery process by distributing relief. Comparing the documents from the previous years that are being kept at their offices, I could observe a repetition in the format that is used every year. The rows and columns and the heading that is being used to anticipate governance during washout uses the exact format every year. It is only that the names of affected people and villages that change. Engagement with documents to format and make a uniform categorization of the annual floods is similar to what Riles (2009, 22) mentions, documents as ethnographic artefacts that can be used to think through the kind of response they represent. Although there is no contention that documents are used in bureaucracy to rule better, Riles argues that organizational documents cannot be seen as objective accounts alone, instead they are accounts that are locally produced and used.

According to the circle officer of Sissiborgaon, their work environment during the chaos of floods is hectic. They are tied to work according to the detailed aims of disaster management that is being laid out by the state government. Even though a detailed aim of promoting a culture of preparedness is emphasized as one of the mission areas in the state manual, implementing the policy of disaster recovery has to go through a process of layers in governance. 'DC would never give away funds without a detailed format of the

basic essentials along with the quantity, amount and for the number of days relief is to be given' states the official. Stocking of essential goods prior 'washout' is not feasible although there are instances when certain stock of medicine for humans and animals is allowed to be kept at the sub-divisional office. This designation that government assistance will only be available if stability is thwarted at the margins has implications

These internal complexities influence governance at the local level. The disaster manual of Assam clearly states the role of the DC (mentioned above) in the allocation of funds. The manual emphasizes the importance of audit systems by highlighting the specificity of controlling financial resources by a single individual. Therefore the practice of auditing funds and resources is an integral part of the practice of good governance.

Strathern (2009, 190) discusses how the aims of a good policy get deflected due to the self-organizing characteristic of the audit system⁸. According to her, an audit system has its own defined territories and rationalizes the external complexity outside its boundaries. She further explains, when a self-referential system⁹ is tied to an environment that is subjected to perturbations, the system distances itself from the external complexities through simplifying its representations. Its communication with the external system only occurs in communicating information specific to oneself (ibid, 190). In other words, an audit system takes in data (in the form of numbers) that is specific to its system and not what is happening outside the boundaries of the system. Similar to this, the audit system that requires quantification of devastation and loss to release resources for a policy goal, would communicate in the same language with the sub-divisional level.

There is transfer/communication of data of washout from a sub-divisional to a district level and vice-versa. Information or experiences of floods as for instance, the elusiveness of the medium of water, change of water currents, abrupt alteration in the course of the tributaries towards human habitation per se are either simplified¹⁰ or excluded¹¹ In the

⁸ Audit system as an ethics of good practice has its own production and reproduction of papers and documents. This characteristic sometimes structures the functioning of a good policy meant to improve the conditions of people. The reference to the audit system is used in tandem to the aforementioned characteristic as well to discuss how the process of knowledge production through documents shapes the epistemic thinking of disasters at the ground level.

⁹ Self referential system refers to a system that is concerned with only one's identity.

¹⁰ Simplification here refers to instances where officials listen to the complaints and plight of the affected communities but do not have the means to bring those grievances into the sphere of governance.

¹¹ Exclusion refers to the ethnographic instances where people despite being eligible for compensation do not receive the same due to their inability to produce documentation of their loss for verification.

above context, the silence over the repetition of the same format of lists to every year for quantifying loss and devastation is understood. The simplistic translation of the force of floodwaters into a tabular form of rows and columns through the method of replication, thus, become a routine of anticipating the annual phenomena for the officials at sub-divisional level.

3.6 Failure of Quantification of Floods

The practices of assemblage to govern adaptation of floods in Assam bring together an array of discourses, practices and materialities. The significant passage to disaster governance that occurs through the text of the Assam Disaster Manual 2015, provide an analytics of risk to mainly prevent and prepare for a potentially disruptive environment that can be caused by disasters. Identifying risk as a function of vulnerability and hazard, disaster, be it natural or man-made are classified in the manual. One of the central and longstanding problems in a hazard perspective of disaster research is its 'ahistoric' and 'atheoretical' approach to hazards (Quarantelli, 1983, 240).

In the above context, the meaning of hazard/disaster/ and its subsequent results of catastrophe cannot be placed laterally in the context of floods in Assam. As discussed in the preceding chapters, the generations of intervention that have been introduced to the Brahmaputra since colonial times would make floods to be considered as purely a natural ontology of the river. Rather flood in the Brahmaputra floodplains is required to be seen in terms of human-environment relationship. Therefore, at times studying temporal disasters like floods having an ahistoric approach might conceal the conditions of risk and vulnerability that are constructed by humans themselves.

As for instance, going beyond the hazard approach to wildfires, McCaffrey (2014) focuses on human-environment relationship in comprehending wildfires as a hazard. Discussing the human interventions into the forests in the form of human settlements and land-use patterns, he refers to these interventions as 'social construction of vulnerability'. When human settlements near forests do not allow natural phenomena of less intense and controlled form of forest fires, it leads to forest gather more dead leaves in high combustible form. When these materials react with high temperature it results to forest fires in high intensity. Hence, wildfire is a hazard but a specification of a dialectical relationship between human and environment.

In the above context, in knowing and formulating strategies to deal with the disruptive consequences of floods in the Brahmaputra floodplains, we have to think the dialectical relationship between human and environment. The spatial variability of Brahmaputra affected by the seismic activity of 1950 altered the hydrological landscape. Rising river beds accompanied by sediment load began to put pressure on the banks leading to aggravation of floods in the Brahmaputra floodplains. As Sarkar and Thorne (2006) argue the prior nature of the river was inherently dynamic as a meandering river and not that it attained its character after the 1950 earthquake. But what seismic activity did to the river was transform its temporality into sediment waves, which altered the river's fluvial morphology.

The political economy of hydropower development in Subansiri, one of the largest tributaries of Brahmaputra, has potentially altered the hydrological flow of the river. As Sanjib Baruah (2012, 47) argues, the strategic building of dams in the mountains and the foothills evoke a great sense of risk. Flash floods due to release of water from upstream hydropower plants –in Arunachal Pradesh and Bhutan have altered how communities experience floods downstream, especially in Lakhimpur and Dhemaji. What is more important is that the removal of boulders and pebbles for major construction sites like the Bogibeel Bridge and the Subansiri Dam¹¹ have affected the hydrological character of the river. The materiality of the boulders on the river beds regulate the water currents and check massive siltation from the river beds. The human activities of massive removal of these boulders have aggravated the problem of siltation for many villages. These anthropogenic activities stand out as harbingers of a calamitous future (ibid, 47). The assemblage of disaster practices mandated by the Assam Disaster Manual 2015 inherently makes a distinction of disasters through a hazard perspective reinstating the nature-society binary-

3.7 Conclusion

The challenge of writing about the annual occurrence of floods in Assam lies in its spectacular scale and yet in its ordinariness of constant presence every year. By emphasizing on a specific text that detail out the aims and objectives of disaster

¹¹ Subansiri Lower Hydroelectricity Project is an under-construction gravity dam built over the Subansiri river in Arunachal Pradesh. It is India's biggest hydro-electricity project taken up so far.

governance in Assam i.e. the Assam State Disaster Manual, this chapter examines the logics of governmentality of flood adaptation through an analytic of assemblage. In analyzing governance of floods through the logic of assemblage, this chapter discusses, how the good practices of governance lead to complex temporalities and subjectivities.

Following the Foucauldian emphasis on the ‘how’ questions of governmentality, this chapter examines how varied discourses and practices, scientific knowledge, materialities are drawn together to make floods a governable entity. Focusing on the primary text that lays down the aims and objectives for governing disasters in Assam, I delineate the practices through which the spatiality of floods is circumscribed into a technical field. A constant reference to the manual, in the everyday practices of preparedness and predicting floods, reveal how flood come to be seen only from a hazard perspective. Thus, from an administrative perspective floods are defined as ‘natural’ reducing the phenomena into a binary of nature/culture or humans/non-humans.

I examine three practices that are crucial for adapting to floods from an administrative approach. Ethnographically, these three practices are crucial to understand governance of floods vis-à-vis the power of the State. First, the practice of how scientific knowledge is authorized to predict the possibility of flood. Second how the villagers are forged into alignment within the governmental apparatus to create a good practice of governance. Third, how the conduct of the people are shaped through performance of exercises of preparedness. An analysis of these practices reveals the human centeredness in constructing a priori assumptions of how the flood will behave in the future. Although these constructions help govern environmental perturbations to a certain extent, it actively forecloses the dialogue of humans experience disaster/flood at the margin.

Going beyond the attribution of floods as ‘natural’, I question how do the bureaucrats define flood? In following the answers of this question, the focus turns on to illuminate the ethnographic contexts where the pre-conceived measures of preparing ahead of flood are challenged by the elusiveness of water. The constant challenge by the non-human to the social construction of floods is actively foreclosed to retain the stability of the assemblage. Instances of breach of embankments and dykes, bridges, roads are designated as ‘unusual’ or ‘unexpected’ which reveal the politics of disaster.

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