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List of Publications

1. Dutta, M., & Das, A.K. (2022). ‘When Oranges becomes sweeter’: understanding climate variability, situated knowledge and development in an Eastern Himalayan region.of.India..Third.World.Quaterly..<https://www.tandfonline.com/doi/full/10.1080/01436597.2022.2140037>.
2. Dutta, M. (2022). Assemblages and Documents as Tools for Managing Complexity: A Study on the Practices of Adaptation to Floods. *Explorations, ISS e-journal*,6(1),118-129.

Addendum

Statement of Correction/Modification:

1. Name of the candidate: Ms. Mridusmita Dutta
2. Roll No: SOP17106
3. School: Humanities and Social Sciences
4. Department: Sociology
5. Title of the thesis: Governance of Disaster: Floods, Adaptation and Dwelling in Dhemajji district of Assam.

External Examiner II

Chapter	Comments	Response
1	1. What were the human interventions to control floods undertaken during the Ahom days?	Originally descendent of the ethnic Tai people, the Ahoms ruled Assam for six centuries (1228-1826) before the British took over. The water management practices during the reign of the Ahoms were mainly driven by agricultural expansion and to protect the lowland villages (Gait, 1906, pp. 117). These factors influenced the construction of bunds along the floodplains to protect their habitation and agricultural lands. Building of embankments against the annual floods received royal patronage since the 15 th century. Several Ahom rulers undertook ambitious projects of embanking small and at times big tributaries of the Brahmaputra (Gait, 1906, pp. 83). During this time, embankments to control floods were aimed to expand wet-rice cultivation deploying corvee labor (a form of unpaid

labor instituted by the Ahom state on its subjects) in the Brahmaputra floodplains (Guha, 1967, pp. 56). This is discussed in the 5th chapter (pp. 127-130).

2. We are aware that the intensity of annual floods has changed. In this context, it will be important to provide some statistics/information about the floods as well as of the Brahmaputra. Addressed in the thesis (pp. 6-8).
3. The study relies heavily on non-local (non-Assamese/non-Indian) literature. What could be the reason for doing so? The study makes an extensive review of the Assam Disaster Management Manual 2015, but no attempt is made to see how the manual is being studied by local scholars and other stakeholders. Taking both the concerns together, it is important to mention that the study have referred to Indian and Assamese scholars to contextualize and historicize the issue of floods in the Brahmaputra floodplains, both in the 1st chapter (pp. 6-8) and in the 5th chapter (pp. 127-129) while discussing briefly the issue of floods and hydraulic infrastructures.
The objective of the study goes beyond studying floods as a naturalized/objective phenomenon, the existing literature on floods (Indian literature) frame this event as a bio-physical hazard. However, I am aware the wider debates of such literature as for instance, on the political ecology of the state and how political economic processes, state and non-state actors, the bio-physical nature interact to produce floods as hazards. This dissertation goes beyond studying the Brahmaputra floodplains in terms of how it is turned into a form of commodity or deal with the

questions of scale, power and role of the river as a natural resource in rural livelihoods analyzed through the livelihood approach.

This study focuses on the flood/disaster management practices of the state as governmental interventions that set out to improve the adaptations practices of the flood affected people by assembling diverse elements. Here, the disaster manual 2015 is the primary document that lays the basis for assembling diverse elements. Thus, this manual exemplifies the knowledge making practices in adapting to floods. A detailed textual analysis of the same by local scholars and other stakeholders is absent. This gap in existing literature also stems from the presumption/research question where study of floods/erosion is understood only in its bio-physical form.

4. Based on this study, what are the policy measures the study would like to suggest?

This study suggests the following measures:

- a) There needs to be coordination and communication among the flood preparedness practices of each district, especially Lakhimpur, Dhemaji and Dibrugarh. This is pertinent while building hydraulic infrastructures like bunds, geo-bags to control floods in each district. Exchange of information of the

same will help better preparedness to know how the water may hit the adjacent local places.

- b) Create a new or alternate paradigm through which we can provide an equal footing to people's experience or knowledge where both modern scientific technology and traditional knowledge can have a conversation.
- c) The flood management practices of the state need to treat the river with an ethical perspective and acknowledge its right to flow in its natural course. This will further lay the basis of environmental justice as well.

5. What is the rationale of choosing Dhemaji district?

The geographic location of Dhemaji makes it prone to floods every year. Secondary literature reveal, the sudden drop of the slope of the river Brahmaputra, from an altitude of 3,000 meters in Tibet to less than 150 meters in Arunachal Pradesh, after which it enters Assam, exerts enormous pressure in the immediate floodplains of Dhemaji. Besides, its geographical location, the rationale for choosing Dhemaji also lie in the fact that Pomua village in Dhemaji district expressed the change in the personality of floods and their adaptation to the same. This emergent reality in Pomua guided

selecting Dhemaji as a site for study (A detailed rationale of choosing Dhemaji is discussed in the introductory chapter, pp. 45-46).

6. What are the positive impacts of the introduction of the Flood Early Warning System (FLEWS) since 2010 at Dhemaji?

As Central Water Commission gives the information of water level of only the major rivers of the state, leaving out the tributaries contributing to flooding, the administrative machinery was left clueless for issuing warning to the specific revenue circle or village. This problem has been resolved with the initiation of FLEWS project as the flood warnings are location specific i.e. the revenue circle/cluster of villages that are likely to be inundated due to flood is identified. Apart from the location specific information the water level of minor tributaries monitored by different organizations are also taken into consideration under FLEWS. Such combined information helps the administrative machinery in alerting the revenue circle officers and concerned village headman-the rivers that are likely to cause floods. This aids to take necessary precaution by them in advance for preparedness and response activities for the people residing in those areas. Second, the FLEWS project facilitates collaboration with North Eastern Space Application Centre (NESAC) to monitor

embankment breaches during pre and post floods.

7. Who is qualified for compensation and who is not is decided by the government officials based on evidences during inspection. Can the villagers give evidences using mobile videos and pictures?

Narratives in the third chapter, discuss elaborately the paradox of the compensation/reconstruction efforts of the state to floods (pp. 85-87). When water comes unannounced it becomes tedious for the people to gather their families, livestock and belongings. Thus, when people are caught unprepared, documenting their loss so as to be compensated is not in their minds. When floodwater inundates villages, gathering evidences through mobiles is not a feasible option. This is so because not every individual/family in Pomua have the privilege to own mobiles and even if few individuals have mobiles they do not have cameras. In their daily rhythm of lives, mobiles do not take figure out as a necessity. As observed, the village headman and the headmaster of the primary school in Pomua had mobiles with high camera configurations. Henceforth, villagers contesting for their entitlements through mobile videos and pictures do not arise. At the same time, the officials who come for inspection lay emphasis on real-time inspection (rather than giving weightage to people's documentation) presuming that floods will remain for a good number of days. However, the abrupt

ebb and flow of floodwater is something that is not provided attention by the local authorities. This gap in knowledge in acknowledging the emergent character of floods shapes how people experience floods and hence disasters.

8. We are aware that the affected people are entitled to receive compensation based on assessment by the government officials. This study maintains that flood compensation remains largely 'a pen-and-paper-exercise'. Why is it so?

The delay in people getting their compensation in due time, so as the affected people can recoup, remains a serious grievance of the people towards the government. Despite the existence of a good governance policy to mitigate disaster, the internal complexities of governance offshoot its intended efforts (this is discussed in detail in the 3rd chapter, pp. 83-89).

Providing relief and compensation remains a core element of disaster/flood mitigation. When government assistance is not able to make people resilient during times of crisis, it not only thwarts the anticipation of people towards the government but also shows how the social construction of flood preparedness and mitigation in the floodplains makes governing natural resource (the river) difficult. Hence, the term-'a pen-and-paper-exercise'