

## Conclusion

The study has portrayed a chequered history of natural disasters in colonial north Bengal with an aim to provide a social dimension of the disasters when human vulnerability had been intensified to such an extent that governmental and private charity also fell short. The day to day survival of the victims of the disasters had demonstrated a complex continuation of mutual cooperation and conflict between the distressed, market and administration where 'entitlement' and survival had been redefined in accordance with the ability of the distressed to cope with the calamities and duration of recovery which was further depended on the deteriorating condition of public health and altered market system. During and after the time of disasters when reliefs were administered by the Government, which introduced a method of test-work as a means to distribute relief was hardly concerned about the physical conditions of the 'workers' who had been already famished and weakened by the prolonged starvation and homelessness. Thus recovery from the distress and restoration of pre-disaster order amounted to a long and complex chain of events which sought for not only the material mitigation of the distressed through the allocation of limited 'relief' and 'charity' but to establish and consolidate the 'morale' of the victims. This would have been possible only through the demonstration of sympathetic attitude and fellow feelings. The colonial endeavours of relief had lacked the both, rather displayed an attitude of superiority and 'governance' while proposing and executing any remedial measure.

Sometimes the contradictory official reports had prevented the administration in collection of accurate information, which obstructed the formation of any comprehensive policy to mitigate the disasters. The victims of cyclones and earthquakes had received little support from the Government in the name of 'relief', which had been justified by the administration by blaming the 'nature' itself which had destroyed and impaired the governmental machinery to undertake any effort to rescue the victims. On the other hand the official pronouncement of famine resulting from drought had come very late until there was any death or severe crisis of retaining life. The government did not feel the necessity to declare famine which was caused by the floods.

Although floods had carried away many lives and caused serious damage to the property but there was hardly any initiative taken by the administration to elevate the condition of people. During the severe floods large scale destruction of crops had been taken place when the food-prices had raised upto the famine prices and in many places famine condition were prevailing. But there was neither any official pronouncement regarding famine nor any initiatives had been undertaken by the government to regulate market or trade during the period of floods.

It is evident from the above chapters that rivers of northern Bengal had gone through considerable changes since the eighteenth century. The riverine transformation in terms of change of course and opening of new *char* lands had not only introduced changes in the ecological system but had also brought out significant changes in the agrarian and demographic profile of the region. The natural diversion of the rivers induced by the quantity of rainfall had been substantiated (or more appropriately) distorted by the human interference in form of railways and embankments. The consequent rise and fall of water in the rivers had made themselves vulnerable for the poor's who resided on the banks of the rivers for their day to day survival. It has already been shown that the moribund rivers or deltas had contributed to the deterioration of public health and agriculture. By the end of the first half of the twentieth century the majority of the rivers of northern Bengal had lost their earlier flow and velocity. The floods and change of river course had complemented to each other in this direction, because sometimes floods induced the change of river courses due to sudden increase of water resulting from unprecedented quantity of rainfall and sometimes this increased amount of water found a new way to move further towards a more open spaces. But increasing numbers of population over the centuries and successive civilizational hazards were also instrumental in causing a river to die or reappear with full fury, none of which was favourable for human settlement. The dying force of rivers had appeared as a great obstacle for navigating the relief-boats which were carrying food grains for the famine victims. It had been admitted several times by the colonial administration that swallowing of river beds and decreasing quantity of water had acted as a chief hindrance to the movement of relief -boats in the interior of the villages. Although the famines caused by prolonged drought did exhibit a saga of human negligence of restoring rain waters for the dry season, but it simultaneously demonstrated the meagre expansion of necessary primary communication system which even at the turn of the nineteenth century overwhelmingly

depended on the bullock cart's, whereas the trading centres, ports were already connected by the railway networks. But the furflung interiors of villages in northern Bengal did not witness any comprehensive development of transport and communication. Improvement of communication in terms of railways expansion was only aimed at the extraction of natural resources and fulfillment of commercial and imperial interests. Natural disasters such as earthquakes, cyclones and floods had serious affected the railway networks by damaging the railway lines and stations in northern Bengal. Therefore, relief operations during the earthquakes and floods did not receive any support from the railway networks, rather during the time of floods railway embankments and rail-lines were destroyed. But despite of expansion of railways in different parts of northern Bengal till the end of the nineteenth century, the colonial endeavour to conduct the famine-relief through the railway networks was not successful enough because the interior areas of northern Bengal had not been connected with the railways which on the contrary had only connected the areas of high commercial value in terms of commodity extraction and revenue generation.

The natural calamities had thus brought to fore an uncharted history of social and economic transformations which were not exclusively created by the natural disasters, rather the disasters had aggravated, intensified, and deepened the contradictions and conflicts which were prevailing even during the pre-disaster periods. To cope with the disasters through the temporary amelioration of systems or conditions did not provide any sustainable relief to the people of this region. The programme of rural reconstruction in the aftermath of the disasters (especially during the earthquakes and cyclones) was entirely different from those of urban reconstruction. The primary concern for the administration was to rebuild the seat of the Government located in the urban centres, and to repair the government buildings and offices which were the sites of control and power and from where the policies would be enumerated. The European population largely concentrated in the urban areas did suffer very little from the disasters except few instances. But the majority population comprised of the rural poor had to face the worst in terms of loss of property and lives than the Europeans and Indian elites and riches, and the subsequent story of rehabilitation and normalization had been reflected in a widely varied norm which was constructed amidst of the hostile markets, starvation and homelessness. The marginal nutritional balance of the poor rural people had received a severe setback during the time of floods and droughts which had made the distress so intense that obtaining even a bare subsistence became a

struggle between the poor and the mighty market which sometime went out of control of the State. Although the natural disasters have been regarded as 'class-neutral' phenomena but they were not 'class-neutral' in terms of sufferings and recovery, rather the disasters had introduced more uneven dialectics between the sufferer and the savior, who were both hit by the disasters yet not in same manner and when the communication between them was guided and dictated by certain unequal terms and conditions. Relief operations conducted by the notable rich families, zamindars, and landlords of the particular affected areas had shown the varied influence of the disasters upon different sections of the society.

Apart from the seasonal migrations, natural calamities had generated sometime large scale migration or displacement of population from the affected areas to the non-affected areas that had altered not only the existed demographic scenario of the affected region but to a great extent change the population profile of the neighbouring or distant regions. This process resulted in the creation of new lands of habitation one the one hand, and the desertion of old settlements on the other, and had greatly influenced the agricultural production and livelihood pattern as a whole. Displacement of the sufferers had affected their rights on property and belongings which had been left on the mercy and mutual arbitration between the nature and human on the one hand that how could one restore from the nature's force, and the market-State and society one the other hand that to what extend the victims could withstand the complex and critical bargaining systems emerged in the post-disaster period. The continuous occurrences of disasters were attended by selective or occasional relief measures and charity on behalf of the government but any comprehensive planning was still lacking any official support. Due to this reason, the severe disasters every time were met with serious costs on the part of the government as well as governed. The dislocation of ecological order caused by the disasters had affected the overall existing conditions of biosphere when trees were uprooted and boats were drowned in the storms, when buildings and houses were destroyed in earthquakes, when crops and plants were submerged and communication was disrupted and cattle were want of fodder in floods, when crops were fell short, prices had been raised and acute starvation had prevailed in famines. Disaster studies have mostly focused on the human aspects of the disasters, whereas the disasters had remarkable natural or environmental dimension which has shaped and altered the pattern of social ecology where natural occurrences had been observed, experienced and shared by the

human population in relation with the natural changes of environment. These natural changes are, however, not detached from the civilizational impact upon the environment which was exploited by the humans according to their ever increasing interests of control and ‘management’.

It can be observed from the above discussion that the study has shown a changing relationship between the environment, political economy and socio-economic pattern of a particular region namely northern Bengal, as a case study, where recurrence of natural disasters had introduced and developed a complex scenario of changing livelihood which was influenced by the changing dialogue between the state, market, production and social agencies during the period of disasters. The multiple frontiers of suffering of people caused by the natural disasters and successive human effort to control the recovery and relief was not only a part of environmental or socio-economic research, rather it formed the basis of the historical transformation of the region, as a whole, which was constructed and transformed by the natural disasters in many ways.

Although the above mentioned chapters have separately dealt with separate disasters like – cyclones, earthquakes, floods, and drought, but they aim at the exploring the multifaceted pattern of human vulnerability which was depended on the control of water, lands and environment. The present study has critically analyzed these crucial issues with their mutual and contradictory relationships which were influenced and disrupted in the pre and post-disaster periods in colonial northern Bengal. The dynamics of agrarian and trading activities had received a major blow from the disasters which transformed the market into a more hostile place where life had been bargained along with the commodities of consumption. Thus disaster history is not just the study of natural occurrences for itself but a study of anguish, sorrow and deprivation emerged from the dislocation and desolation on the one hand, and of recovery, rehabilitation, and management conducted by the Self, society and State on the other.