

Mapping Vulnerabilities: The Narratives of Structural Violence

By

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The term vulnerability is multi-dimensional, and its narrative usage unveils a palimpsest of meaning. For an advanced search, Google offers nearly ten dimensions of the term ‘vulnerability’: assessment, analysis, detection, index, model, management, theory, factors, resilience and scanning. Each of these dimensions had around 4.5 to 6 million hits which clearly indicates that a huge volume of research exists on vulnerability itself. When narrowed down the search to ‘mapping vulnerability,’ it gives nine new dimensions and around 3.7 to 4 million hits. This vast range of existing research on dimensions of vulnerability indicates the exclusivity of different ‘situations’ related to and generating vulnerabilities. While perusing the titles under ‘mapping vulnerabilities’ in web based search engines, it is starkly noticeable that most scholars talk about methods and indices on how to capture the nature and intensity of vulnerabilities in many different parts of the world, and a majority of these studies focus on climate-related crises, such as changes in the sea level and other catastrophic threats, exploring the incidence of threats and the impacts of those threats in terms of risk or possibility of loss. Therefore, it is important to understand how these vulnerabilities are created worldwide by corporate capital in a nexus with international power houses and organisations in this globalised world. Vulnerabilities are rooted in certain geographies and in certain economies, mostly in Asia, Africa, and in Latin America, where the scale of poverty and associated problems are already significant. Research reflects the concern and care about the vulnerable people around the world, and researcher takes upon the ethical responsibility of remedification with the belief and hope of changing the direction of discourses towards a better, liveable world. Faith in urban planning creates a vision of ecologically sustainable, socially inclusive and socially just cities. This optimistic outlook motivates developmental infrastructure in rescuing the reality. However, with the grim empirical reality it is difficult to perceive the idea of a better future where we would be able to stop creating vulnerable situations and stop pushing a chunk of people, especially the poor or disadvantaged, into vulnerable situations across the globe

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irrespective of the countries' geopolitical and economic conditions. The ways in which human endeavour is changing the earth piece by piece, the future is not encouraging at all; rather they are very depressing.

The term vulnerability raises more questions than giving answers while mapping the socio-politico-economic impact of vulnerabilities. There is no dearth of literature on the procedures and strategies of mapping vulnerabilities. The contextuality of vulnerability like heat islands or water scarcity in cities to floods in the river basin areas gives useful insights into how to map the differential impacts of these threats on different community groups across class and gender through the lens of intersectionality. Thus, it is important to question the process of creating vulnerabilities, otherwise, one may get lost in the process of measuring vulnerabilities rather than looking into the structural processes vis-à-vis structural violence, which create these situations. Structural violence define the processes which create vulnerable situations, as they are rooted in the political and economic structure of the national as well as global economies and lead to an unjust world. There are not many remedial solutions available and even if it does, such solutions would be ignored in favour of technology, capital-driven development and material progress. The markers of planetary crisis have already crossed the tipping point in the context of biodiversity loss, ecosystem alteration, global warming and rise in sea level. As researchers, the priority is to critically look into the ground reality and understand how practices of managing both natural and manmade environments can marginalise people and push them into more vulnerable situations. It is important to analyse and explain how inequality works at every scale to make some people vulnerable for the benefit of others, especially those having power and the means to consume more ruthlessly and carelessly. We do not even engage ourselves much in discussions about the vulnerabilities of non-human species in the anthropocentric world, although this aspect is equally important for the survival of human life on this earth. Neo-liberal economy has created new narratives of development by prioritising visible infrastructural development such as building roads and flyovers, national highways, airports, dams, residential apartments and brand new smart cities, leaving out human development. Development in the true sense of the term is all about realising human potential and capacity building. However, the social development necessary for such progress has now taken a back seat and has become coterminous with material development, although such accomplishment does not add much to the quality of life; rather it increases inequality and violence, and creates disorganised societies where community, in the true sense of the term, is lost.

It is necessary to understand how people who are facing vulnerabilities created by us perceive these threats and how they decide to cope with these extreme events. In study on the *chars* of River Damodar, conducted with Kuntala Lahiri-Dutt which finally became the book *Dancing with the River*, we opted to understand how people of this area see these fluid and ever-changing hybrid spaces called *chars*; their coping mechanisms with the threats posed by the river; and ways of maximising their benefits from the experience of living

in those spaces. *Dancing with the River* metaphorises the act of synchronisation like performativity of dancing, either in a group or even just two people together, needs a lot of co-ordination, they have to know each other's body movements very well, and each of them has to predict the other's next step to be in full co-ordination. Similarly, the book traced the intimate relationship of these *char* people with the river and their understanding of the river, its moods and its uncertain behaviours especially during the monsoon season. All micro adjustments that they make with the river essentially develop out of their lived experiences. Geographers prefer to call this as the "experiencescape". The term adjustment has been deliberately used instead of adaptation in the way it is often used by planners and policy makers. Adaptation is a long-term phenomenon whereas adjustment is the bundle of short-term strategies to cope with vulnerabilities, which take place very quickly, sometimes without much prediction. On the contrary, adaptation takes place over generations and in a much more organised way, to adjust on a daily basis with vulnerabilities to gain a longer stability through practices of mutual coexistence. For example, adaptation developed by the indigenous communities. The deltas of the world, especially those located in Africa and Asia, were settled and flourished since ages because of the long-term adaptation to the cycle of floods faced over centuries. These people adapted with the help of technology like canal networks and small dams, but very slowly, with a holistic view of the entire river system and with sound geopolitical negotiations on the sharing of water, as the river often passes through many countries. The countries had to develop geopolitical stability to make those hydraulic systems sustainable over longer periods of time. Now, the systems of many rivers are compromised at different segments for the communities living in the upper and the middle catchments. As a result, deltas are now facing unprecedented problems, making it increasingly difficult for delta people to adjust with the changing river system and altered river ecology in the upper reaches of the river. In these encroached and disturbed river systems, the onset of disasters is often unpredictable and very quick, like the Glacial Lake Outburst Floods (GLOF) that happened in Uttarakhand and Sikkim in the Indian Himalayan region. Because of the indiscriminate interference in the natural system of the rivers, it has become far more difficult for riverine and delta communities to develop long-term adaptation strategies all by themselves.

Another example of adaptation can be observed through our lived experience and its juxtaposition to planning of the cities. Planners set out to change cities as per their prepared vision plans. They work on certain predicted growth patterns and their changes, and prepare the plan to adapt to those changes. However, the ground situations completely change within twenty- or thirty-years' time. Therefore, city planning is often bound to fail. For instance, the long-term planning for cities set at the turn of the twenty-first century could not anticipate the Covid pandemic situation especially the deplorable conditions of migrant workers working in different cities of India during the first phase of the Covid-19 lockdown in March–June 2020. Most of them could not stay back in the cities as they ran out of money to buy food and pay rent. They could not

benefit from free rations provided under the Public Distribution System (PDS) as they were migrants. They walked back or cycled to their native places thousands of kilometres away, sometimes paid hefty amounts of money to get back home, and lost everything they had earned in the city. No city plans in India had given much thought to the migrant workers, who number in the millions, and without whom, no city in India can survive. Migrant workers continue to remain vulnerable in our cities as urban planning hardly takes into account the needs of the migrants. When we talk about vulnerabilities in cities, we must talk about migrant workers and their vulnerabilities as well. One should question the benefits of long-term planning and adaptation policies as top-down strategies made by the state and its bureaucrat planners as possible solutions to vulnerabilities. We have interfered so much in the natural ecosystem that we really do not know how any further action is going to bounce back on us. People living in such vulnerable situations always have to adjust to unanticipated change. As a researcher, it is interesting to explore the narratives of these pathways—how people adjust and exactly what kinds of help they need from the state to make their adjustments easier. Research on these fronts can probably inform policies which are temporary, flexible and adjustable according to the local context. Grounded research can better inform the policies. That is why the prime responsibility as researchers is to understand the ground reality through participatory research, rather than just collecting a bunch of data which are sometimes not even completely accurate.

There was a time when researchers used to think of finding a permanent solution to all the problems created by nature, but over time it has become apparent that the more we think of permanent solutions, the more we create vulnerabilities, solving problem creates another. After Independence, it was in the economic design of developing the nation that improvement of the financial condition of the household would benefit all members of the family. However, by the end of the 1960s gender disparity in access to all kinds of resources within the family was observed increasing over time. By the beginning of the 1970s poverty was the main problem and the state went on formulating poverty-alleviation programs, i.e., generation of livelihood opportunities and employment creation would help people come out of poverty. In neoliberal India, however, even after gaining employment and working hard, people remain poor because the income is decreasing for a massive proportion of people engaged in the petty informal economy, and the price level is increasing. This has resulted in the phenomenon called the “Working Poor”—they work and yet remain poor. India currently has millions of such “Working Poor”. The Indian labour market has gradually reached a precarious situation, giving rise to a host of non-standard employments over the last three decades of liberalisation, privatisation, and globalisation. Extreme vulnerabilities faced by gig and platform workers in the shining cities of India dotted with skyscrapers, flyovers, shopping malls, and gated communities, is the newest addition to that list. In the heated cities of changed climate, with low pay, exposure to heat and water scarcity, these gig and platform workers are like foot soldiers of the city economy. How are we going to save these extremely vulnerable groups of

people from the forthcoming climate catastrophe? When we talk about heated cities, we need to bring in these intersectional class dimensions into the dialogue on mapping vulnerabilities.

We live in a consumerist society and to battle with the climate crisis we make frequent international trips to participate in the United Nations Conference of the Parties (UNCOP) and other such meetings, leaving a huge carbon footprint. Sometimes, the sponsors of international research grants such as the World Bank and European Union spend twenty to thirty per cent of their total grants on international travel for the collaborative teams scattered across the continents to attend two or three meetings in a year while the research project is supposed to focus on mitigating climate change and search for its permanent solution. That hefty amount of money could be better spent on easing the lives of people suffering from climate change. A research grant working on the sinking islands or deltaic ecosystem could not provide bio toilets as requested by the community groups to ease their lives. However, they chose to spend huge amounts of money on meetings and knowledge dissemination workshops for the travels of researchers and experts from all around the world. Are funding agencies really looking for solutions or do they just like to spend money under the aegis of their corporate social responsibility? The strategies devised by the United Nations and World Bank to 'save the earth' is really problematic. Sustainable Development Goals (SDGs) add more questions than answers on what to do. When we talk about the future, whose future are we really talking about—the future of those people who already enjoy a big chunk of the world's resources? What about the present? Can we even pretend that at present every person has access to minimum basic needs? In India, a huge segment of the population earns less than US\$2/day which is considered the minimum amount a person should get to meet his/her bare minimum needs. In contrast, the richest one per cent owns a huge share of national wealth, leading to an inherently unequal society. The SDGs are nothing new or something that we do not know. Nations have been grappling with these issues for a long time. The reason why these SDGs seem to be inadequate is because they do not clarify how to stop the global corporate capital from overexploiting the earth's natural resources and how to disconnect its channels of negotiations with the governments in power across different countries.

Before we think of the United Nations as the saviour of this earth, we have to check who the sponsors of the United Nations are. The maximum share of funds comes from the United States of America and other powerful economies of Europe. These countries together have created and are still creating vulnerabilities in all countries of the Middle East for the sake of control over petroleum, and other minerals in the countries of Asia and Africa. How can the United Nations talk about poverty alleviation when their funders are engaged in creating more and more poverty amongst low income people in many developing countries of the world through pauperisation of resources? These are just some fancy terms and lip service offered by international organisations, as they largely depend on these countries' financial contributions. How can we expect that an international organisation that continues to create

new vulnerable conditions in their member countries would be able to recommend strategies on how to rescue people from vulnerabilities? When we talk about local knowledge, what do we mean by that? In today's world nothing exists as purely local. There is a term to define this condition called "glocal" meaning every local is now connected to the global in some way or the other. Therefore, searching for pure local and indigenous knowledge is problematic for us. But one should not discard the importance of experience based knowledge of the local communities in many different contexts. However, even if local people can explain to us where the problem lies and how we are creating more vulnerabilities, who is going to listen to them? Can we protect anything from being destroyed unless our research feeds activism? The local people often feel helpless because the global capital of the neoliberal economy is taking over every inch of the earth, and we are all big facilitators of those expansions. We need roads for tourism even in the highly vulnerable mountainous areas like those of the young mountain called the Himalaya. We need more power for growing towns and other densely settled tourist spots dotted with resorts and hotels, and for that reason we do not want to leave a single river of the Himalayan mountains un-dammed. These processes have already destabilised the entire Himalayan ecosystem, created enormous vulnerabilities, and pushed people further into the crisis of getting access to natural resources. But who cares? We need to build physical infrastructure at the cost of livelihood resources of poor communities developed slowly over generations on the hilly terrain. Glaciers are melting fast, and springs and rivers are getting dried up because of the changing climate. Climate crisis is deepening the level of vulnerabilities already created by the process of structural violence in the name of development.

Neoliberal economic practices demand the capital to move to places that offer cheap labour. Countries of the Global South compete with each other in showcasing themselves as cheap labour destinations. It is more like inviting foreign direct investors to come and exploit our labour. No labour laws, no minimum salary comes under consideration. Bangladesh and Vietnam did this in the recent past and became successful garment exporting countries, but at the same time they created a terrible situation for a huge number of garment workers toiling day-in and day-out in subhuman conditions without any kind of occupational safety at their workspace. In India too, the wage share has shrunk while profit share has risen sharply during the last decade. Livelihood vulnerabilities are quite explicit in the countries of the Global South. Every time I go to Delhi, the lush green lawns that line both sides of the roads in the city's elite neighbourhoods drive home this painful point. How do we spend so much water in a dry, parched city like Delhi on the maintenance of green lawns, while thousands of people fight every day to fill two or three buckets when the tanker comes? Delhi brings water from the *Bhakra* reservoir through canal networks and spends a huge amount of this water on the maintenance of lawns, fountains and swimming pools in the city. The 'Water Story of Delhi' should be written from the point of view of water justice. Similarly, in the resorts of Jaipur located in the extremely dry region, they maintain swimming pools for their high-end

customers. This gross injustice prevails in every city of this country. We misuse enormous amounts of water on a daily basis, while some people literally die for water. When basic urban services like water become scarce, it increases the vulnerability of the poor people who have neither bargaining power over municipal supply, nor the money to access these resources in the market economy.

The mapping of vulnerabilities is also not free of bloodshed and death. In the war situation, Russia destroyed the reservoir which used to supply water to a large part of Ukraine. Israel has destroyed the water supply system of Palestine. In Pakistan, the farmers from Punjab province and the people of Karachi have taken all the water of the River Sindhu and the entire delta of the river has dried up because not enough water flows up to that point to join the sea. The erstwhile rich farming community of this delta has given up farming because of the lack of irrigable water. Transgression of salt water is destroying the land, and the river is retreating due to lack of enough flow to the sea. Flood itself is not a disaster. It was rather a blessing for many different parts of the world historically. Floods deposit silt that make the land fertile. The earliest civilizations opted to live in flood plain areas so that they could easily grow crops. They believed that if there is no flood, there is no fresh silt. They used to pray for the flood. They did not build their empires on the riverbanks, because they knew it could get inundated and the river could erode the bank. Now, we have built big dams to control the rivers the way we want. As a result, we are facing man-made floods, when those reservoirs cannot hold so much water during heavy monsoon rains due to siltation. The silted reservoirs release water to protect the dam and create floods for the entire downstream areas. The images of the tsunami of 2004 have perhaps disappeared from our memory, whereas the fact is that such a big event could happen again anytime in the future. Traditional communities left the areas closer to the river and the sea uninhabited. They used to pay attention to natural events and organise their communities accordingly. However, with advanced technology, we disregarded local wisdom and thought we could build anything anywhere. We could bring water from the aquifer located hundreds of kilometres away to the middle of a desert to create a city like Dubai. The city of Dubai is now turning to depend on big desalination plants to create a sustained supply of potable water, as the distant regional aquifers have already been exhausted.

If we talk about the extractive economy, how could we neglect the ruthless exploitation of minerals in India, mostly from areas covered by forests and settled by powerless tribal people? We have given a fancy name for it—the ‘greater common good’. Flood does not affect the rich, heat island does not affect the rich; mining does not affect the rich. Rather they benefit from all these activities which create vulnerabilities for others. The most mineral rich areas of our country are the poorest in terms of per capita income, as well as other human indicators. Therefore, we need to question from a holistic point of view to understand—who benefits, and at whose cost. The time has come that we focus more on the processes that lead to the creation of these vulnerabilities rather than just measuring them. Mapping these processes is

extremely important. Mapping vulnerabilities means mapping of the processes which create vulnerabilities. The stories of mapping vulnerabilities are stories of inequality and injustice too. Livelihood vulnerability is now not only a case of the Global South. In the developed countries of the Global North, the proportion of poor, unemployed, and homeless people is also increasing at a fast rate. But its proportion is undoubtedly more in countries of the Global South, and we cannot deny that fact. The narratives of vulnerabilities are narratives of structural violence. The structural violence creates all kinds of injustice which marginalises the poor and helpless people and pushes them more and more into abject poverty and to deplorable situations. We must start talking about the structural violence and the resultant processes in the political economy which create vulnerabilities for certain groups of people and benefit the others. Lastly, Mapping vulnerabilities need multiscalar perspectives to understand vulnerability differentials at each scale, space, and time. Further, the contexts are significantly important to understand vulnerabilities. The 'one-size-fits-all' kind of idea does not help much to solve localised problems which are different from each other in many ways. We have to discard the idea of using a universal model for mapping vulnerabilities put forward by some international organisations; rather develop our own contextual models.