We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,300

Open access books available

172,000

International authors and editors

190M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities

WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com

Question of Livelihood in the Light of Disaster: With Special Reference to Flood of Bahraich, India

Keyoor Pathak and Chittaranjan Subudhi

Abstract

Floods in India is a repetitive one due to natural reasons like excessive rain and man-made mistakes like encroachments of water bodies, heavy rain-falls and so on. The chapter is based on a field study of Bahraich, a district of eastern Uttar Pradesh, India. Interestingly, the district shares its boundary to neighboring country Nepal that influences the occurrence of floods in the region. The district is also prosperous in water resources such as the great Ghaghara river and many small and big ponds and lakes are in the district that becomes a cause of sorrow in the rainy seasons. The key concern of the chapter is to understand the challenges of livelihood of the rural communities which is annually threatened by devastative floods.

Keywords: capital, flood, disaster, livelihood, vulnerability

1. Introduction

We do not see our hand in what happens, so we call certain events melancholy accidents when they are the inevitabilities of our projects (Stanley Cavell)¹.

India, a country of rivers and is a big centre of the flood. It is a regular and the most destructive disaster in India. The earliest evidence of devastative flood dates back to the flood of the Indus Valley Civilization that sabotaged the great civilization. In independent India, the first major flood was recorded in 1953, and following the flood's impact first national policy on the disaster was set up in the year of 1954. Notably, India accounts for 1/5th of the global lives' loss, and around 30 million people are evacuated every year. The area vulnerable to flood is more than 40 million hectares, and the average area affected is 8 million hectares². Whatever the disastrous flood has done vandalisation should not be measured only in economic terms; however, from 2011 to 2016, INR 144665.79 crore has been estimated as the total damage in the country. In 1953, total damage around INR 52.40 crore had been reported,

¹ Ted [1]. *Acts of God: The Unnatural History of Natural Disaster in America*. Oxford University Press, New York.

² *Flood: Trends & social Impacts in Indian Context*. https://www.ssvk.org/koshi/analytical_articles/joshi.pdf Accessed: 19.09.2020

while in the year of 2016 it reached to INR 57291.098 crore. The most vulnerable states to flood are Uttar Pradesh, Bihar, Assam, West Bengal, Gujrat, Odisha, Andhra Pradesh, Maharashtra, Punjab and Jammu & Kashmir. Uttar Pradesh, Bihar, West Bengal, and Assam account for 17 percent of India's geographical area but disproportionately account for 43–52 percent of all flood-prone areas of the country [2].

Iwasaki [3] has reported that, these floods or cyclones severely squeezed people's livelihood. It affects the traditional economic base of the family that changes the family's main source of income [4]. Sina et al. [5] mentioned that, displacement due to flood is a major challenge of restoring the livelihood which needs timely assessment in building resilience in livelihoods. The aid packages are usually short-term fulfill of the needs of the victims but rarely focus the long-term revival of their livelihoods. The current institutional mechanisms are lagging behind the large-scale post-disaster reconstruction [6]. These frequent occurrence of floods have caused a blow to the livelihood resilience of the poor and marginalized sections [7]. The severity of the disaster can be reduced with the help of local and national commitments [3] along with the intervention of livelihood diversification programs in the flood affected area [3]. Along with this, social cohesion is playing a pivotal role for restoring the livelihood of disaster-displaced people [8].

Bahraich (part of eastern Uttar Pradesh) is one of the districts which have been under the regular influence of flood for decades, but in recent years, an alarming increase in the devastation can be visited in the region. It has serious repercussions, such as displacement, migration, poverty, hunger, unemployment, diseases, and many more issues. People are compelled to accept the tragedy of their life and trying to compromise themselves with the unfortunate socio-economic condition.

2. Reviewing livelihood and disaster

Livelihood: the term 'livelihood' as a systematic study developed from basically the rural studies, since then it has been used in various dimensions in academia. The conventional meaning of the term is an economic activity, while in fact, apart from the economic aspect it comprises a wide range of issues such as ecological, political, cultural, environmental and so forth. The formal analysis of the term can be given as "a livelihood comprises the capabilities, assets (both natural & social) and activities required for a means of living; a livelihood is sustainable which can cope with the recovery from and shocks, maintain or enhance its capabilities and assets, both now and in the future, while not undermining the natural resource base" [9]. This analysis primarily consists of three concepts: capability, equity and sustainability; and these are interconnected and interdependent in its proper implication. Scholars emphasize the relationship as "each is also both and means.... linked together, capabilities, equity and sustainability present a framework or paradigm for development thinking which is both normative and practical" [9]. Here, through separate descriptions, the core meaning of the terms can be understood.

Capability: in the developmental studies this was firstly used and systematically studied by Amartya Sen as a theoretical foundation to understand human development, he maintains that income, utilities, resources, and wealth act as means towards an end not an end in themselves, further he states that development should be understood as the removal of major barriers to our freedom like poverty, illiteracy, poor economic opportunities and so on [10].

Equality: the traditional method of measuring the equity has been concerned with only relative distribution of income, while it keeps a vast meaning like property, opportunity and capability; and avoids discrimination on any ground [9].

Sustainability: there is a prosperous series of intellectual criticism on the developmental model in which production, employment, and poverty reduction are a key concern. It claims that this is mainly made for the welfare of the capitalism and market, and lesser responsible towards the people of the rural and marginalized communities. In recent decades, the developmental model moved to the diverse framework of the society and inclined towards the social, cultural and political field of the communities [9].

Hence, the term 'livelihood' does not merely denote the issue of employment or source of income, but the entire construction of a community viz., polity, society, culture, economy, wherein people live for centuries, comes under the periphery of 'livelihood'.

Disaster: The disaster is a natural phenomenon or just a deleterious consequence of human's unnecessary intervention in the natural world, which is a controversial debate across the world. Difficult to conclude that this is an 'act of God' or the human's self-made tragedy, but cannot be denied the fact that modern technological advancement has multiplied the intensity and consistent occurrence of the disaster. The term 'disaster' is derived from astrological science and has been understudies for more than one century, but in terms of its specific academic studies, it has expanded since the 1950s [11]. To formulate the term, the World Health Organization on Emergency and Humanitarian Action (EHA) states that a disaster is an occurrence a level of suffering that exceeds the capacity of adjustment of the affected community³. The Centre on the Epidemiology of Disaster, Brussels holds the view as "a disaster is a situation or event which overwhelms local capacity, necessitating a request to a national or international level for external assistance, an unforeseen and often sudden event that causes great damages, destruction and human suffering" [11]. Similarly, "disaster is seen as a process leading to an event that involves a combination of a potentially destructive agent from the natural or technological sphere and a population in a socially produced condition of vulnerability" [12]. There is no major dispute on the character of disaster as 'massive human suffering', but has big dissension over it is either 'man-made' or the 'revenge of god'. Of course, nature naturally generates a number of disasters like cyclones, earthquakes, floods, famine and many more, but the role of modern science and technology should not be overlooked that has escalated the pace of disaster [1]. For instance, the flood of Uttarakhand in 2013, and the Kosi flood of Bihar in 2008 are basically the consequences of unnecessary human encroachment in the domain of nature [13].

3. Glimpses of the tragedy

The history of flooding in the region goes back in the deep past. In the known history the region has been gravely affected by flooding from 1922 to 1925. 1946, 1954, 1955, 1960, 1961 and 1963 were also the year of flooding, but the flooding of 1969 was much more devastative than previous years. 1978, 1980, 1981, 1982 and 1983 were also the year of tragedy. In the year of 1983, the sudden release of water from Girija Bairaj of Nepal caused severe damage to the region, while this was not the year of heavy rainfall. Hundreds of people died due to the sudden release of water without any prior information. 1986, 87 and 1988 were not untouched by the flood. In the year 1990 flood-affected a few pockets of the region. In the year 1991, there was no flood, but the Ghaghara river induced soil erosion. Again, in the year 1992 floods made a catastrophe. In the year 1993, it broke the previous records. The

³ World Health Organization, 2002. World Disaster Report.

year 1998 was also the year of flood due to the sudden release of water by Nepal. The year of 2000 multiplied the pain of the region. Gopiya Bairaj of Nepal released water and hundreds of people died and thousands of displaced. In the last few decades, dozens of villages have been physically disappeared and the population is displaced by the flood and many more are under threat of disaster. A few of the examples of the villages that are already collapsed in recent decades or under the process are given below:

Collapsed village	Year of displacement	Number of displaced people
Khargapur	1968	10,000
Gangapur	1994	4000
Panchadupur	1998	4000
Baharpur	1998	5000
Silauta	2001	7000
Umaraiya	2001	3000
Bhauri Sipahiya	2002	8000
Munsari	2003	4000
Maikapurva	2003	6000
Sansari	2004	2500
Kapraul	2004	4000
Golaganj	2006	8000
Magraul	2007	7000
Pipri	2007	4000
Bansgadhi	2011–2012	6000
Tarapurva	2012	3000
Jarwal	Till the date	4000
Kayampur	Till the date	3000
Baundi	Til the date	3000
Jogapurva	Till the date	3000

Source: *Super Idea*, Sept.2012⁴.

4. Nature’s revenge or human’s mistake?

Tracing the reasons for the flood in the region, we find a few major human activities that induce disaster. If we blame nature for this disaster it would be an injustice, not only to nature but also to the people of the area. A sudden release of water by the government of Nepal through dams like Gopiya & Girija is one of the main reasons. The people claim if river water comes slowly in a natural way, it is lesser devastative compared to sudden releases from dams. The rapid flow of water comes only after the collapse of dams or highways or such kinds of big constructions, not by the natural processes of the flood. These unplanned and unmapped developmental projects have made hindrances in the ways of floodwater, therefore the water stuck up to 20–30 feet for many days. Apart from these, sand mining is also a major cause of soil erosion and changes in the direction of

⁴ *Super Idea*, Sept.2012. It is a local magazine of the district that covers regional news usually.

the flow of water. Illegal sand mining in the basin of the Ghaghara is rampant. And astonishingly, the nexus of the local public representatives, contractors and bureaucrats are involved in this activity as villagers claimed and were also deeply observed during the field study.

5. Loss of capital & vulnerability of livelihood

The loss of the community of the region can be best understood through the theoretical lens of Piero Bourdieu's 'capital' that he describes as "accumulated, human labor, which can potentially produce different forms of profit" [14]. Further, he classifies it in three sections as cultural, social and economic capital.

Social capital: "Social capital is the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition or in other words, to membership in a group" [14]. The displacement caused by flood displaces and damages not only the physical body of a community but also crushes the social institution and relationships like kinship, lineage that has been a product of centuries-old social interactions and behaviors. One villager Kamlesh Kashyap (Baundi, 35 years old man) asked "earlier we used to marry in our own communities, but now it is not possible, since most of the people of our community have migrated towards other states for their survival. We are left here and staying on the dams or roadside, so how is it possible to get a suitable bride or groom?". The structure of kinship and marriage were such kinds of capital they could face and challenge the problems of daily life through.

Cultural capital: cultural capital can exist in three forms as 'embodied state' (mind & body), 'objectified state' such as books, instrument, etc., and 'institutionalized state' like academic qualification etc. [14]. An around seventy years old man Shankar Kashyap of Jogapurva showed me the pity of the loss of cultural capital. "Till ten years ago we used to make our house by the wild bushes, unfortunately, it is not flourishing due to the annual occurrence of flood, so now we purchase it from other areas to build the houses. Similarly, there were several herbal plants that were useful in curing many diseases, and we also used to make domestic products like toys, pots etc. New generations have neither the knowledge of wild herbs-shrubs, plants and bushes nor have the knowledge of making all that thing". Here, we see flood excludes the community along with their traditional knowledge.

Economic capital: "economic capital is at the root of all the other types of capital and that these transformed, disguised forms of economic capital, never entirely reducible to that definition, produce their most specific effects only to the extent that they conceal the fact that economic capital is at their root" [14]. Lakshmi Devi (Jogapurva, 50 years old woman) told the pain of her life how she lost her ornaments while flood water entered into the house. "I had some gold & silver made ornaments that I used to keep within the soil of the room so that no one could steal. I had purchased it by savings from my rigorously earned income. It was kept for the days of crisis or ceremony like the daughter's marriage or disease of the family members, but the spate of water entirely wiped out my house along with my ornaments. When floodwater came in, I was in my farmland that is why I could not save all that".

The vulnerability of livelihood: the term vulnerability is widely used but is basically a vague term and its meaning varies across the disciplines. However, it may be considered as "vulnerability is an individual or group's reduced capacity to cope with,

resist, and recover from the impacts of a natural or human-made hazard”⁵. From the lens of the given definition we just look at the story of Sunil (Baundi, 40 years old man) who asked “I had ten bigha farmland in which I used to cultivate crops affluently. Now every year water is stuck in the land so now we are neither able to cultivate in that nor sell since purchasers will give a very little amount of money. Even we are in confusion we should start a business or migrate towards the cities or should continue in risky agriculture. Going to other cities is difficult since I have four small children. Due to the dearth of money, I am not able to provide quality education. We are just trying to alive ourselves...nothing more”. The present and the future of the communities of the region is in dark. Several farmers have changed their production of crops. Sukhan (Jogapurva, 45 years old man) told “earlier we used to produce wheat and rice like commercial crops, that was helpful in fulfilling my livelihood issues, but now I am compelled to change my agricultural production, in which there is no benefit and cannot properly fulfill the need of my livelihood. Flood has converted my fertile land into desert, so now I just plant watermelon in my farmland”.

Losing all forms of *capital* and displacing from its native places, the communities of the area are in the process of just being a gathering of the people or crowds in different cities or nearby places. They are uprooting from its age-old livelihood sources that were sustainable in its nature. Their vulnerability arises grave questions to the policymakers and academicians. What would be the future of such communities in terms of health, education, employment and etc.? What can we expect from such communities in the domain of creativity and productivity, which are the core value of human civilization?

6. State & its machineries

A public representative of the district, Rajesh Tripathi (Bahraich, 50 years old, man) told: “There is no strong long-term planning of administration, they just work during the flood, and once the flood is over, they get rid of their responsibilities”. Here, the response and action of the local administration can be understood as in the three periods, before the flood, during the flood and after the flood. There is a serious dearth of long-term planning and preparedness before the state, so cannot be denied the fact that it is the very reason for the ravage of the flood. The eyes of the administration open just after the coming of the disaster. During the disaster, local administration works only as an agency of relief distribution like biscuits, plastics, rice, gram, matchbox and etc., unfortunately, discrimination in terms of caste, class, gender and so on, in this allocation is also clearly visible. Astonishingly, the role of the administration in the post-flood period is much more deleterious than the flood. Corruption in rehabilitation processes, social-conflict induced by the official’s work-culture, unemployment, diseases and so many socio-economic problems rapidly emerge in this period. For instance, massive soil erosion takes place during the disaster, which erases the demarcations of farmlands of the people. They go to the district’s land department offices for the re-demarcation of the farmlands, but officials demand a heavy amount in bribe, which is very difficult for the people, who had recently been ruined by the flood. Therefore, they try to manage it on its own community-based understating, but several times it turns into social mayhem. Sluggish and irresponsible practices of the administration can be noticed

⁵ Nani Maiya Sujakhu, Sailesh Ranjitkar, Rabin Raj Niraula, Muhammad Asad Salim, Arjumand Nizami, Dietrich Schmidt-Vogt & Jianchu Xu. 2018. *Determinants of livelihood vulnerability in farming communities in two sites in the Asian Highlands*, *Water International*. <https://www.tandfonline.com/doi/full/10.1080/02508060.2017.1416445> Accessed: 18.09.2020

in the settlement of sources of survival, like fishing, agriculture and so forth. Apart from the rampant corruption and irregularities in the rehabilitation and relief process, another important feature is, which is totally absent from the public policies; government is ignorant of the loss of social and cultural capital, their central policies move around merely economic capital.

7. Conclusion

We should not hide our face from the fact that our unmapped and uneven developmental policies have multiplied the pace and intensity of natural disasters that subsequently sabotage the rural livelihood setup, which is sustainable in its form from the time immemorial. The need of the hour is to come out from such public policies that overlook the interest of the agrarian communities since India's around seventy percent population live in the rural areas only. Apart from policy-making, one of the major problems is in the implementation of existing policies, since the bureaucracy is indulged in extreme corruption and money-making through illegal sources that finally hampers the livelihood issues of the communities.

Acknowledgements

We would like to acknowledge the contribution of Harry Raj, who helped us in shaping the chapter.

Note

The researcher has changed the original name of the respondents to protect their identity and to maintain confidentiality.

Author details

Keyoor Pathak¹ and Chittaranjan Subudhi^{2*}

1 Council for Social Development (An ICSSR Research Institute, Hyderabad Regional Centre), Telangana, India

2 Department of Social Work, Central University of Tamil Nadu, Thiruvarur, India

*Address all correspondence to: chittaranjan@cutn.ac.in;
chittaranjan.subudhi@gmail.com

IntechOpen

© 2021 The Author(s). Licensee IntechOpen. This chapter is distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

References

- [1] Ted Steinberg, 2000. *Acts of God: The Unnatural History of Natural Disaster in America*. Oxford University Press, New York
- [2] Keyoor, Meenakshi R. J., & Subudhi C. 2019. Disaster, Development and Livelihood with Special Reference to Floods in India. *Disaster Advances* 12(5).
- [3] Iwasaki, S. (2016). Linking disaster management to livelihood security against tropical cyclones: A case study on Odisha state in India. *International Journal of Disaster Risk Reduction*, 19, 57-63.
- [4] Naithani, S., & Saha, A. K. (2020). Social capital and livelihood strategies in response after 2013 Kedarnath disaster (India). *Disaster Prevention and Management: An International Journal*.
- [5] Sina, D., Chang-Richards, A. Y., Wilkinson, S., & Potangaroa, R. (2019a). A conceptual framework for measuring livelihood resilience: Relocation experience from Aceh, Indonesia. *World Development*, 117, 253-265.
- [6] Daly, P., Mahdi, S., McCaughey, J., Mundzir, I., Agus Halim Nizamuddin, A., & Srimulyani, E. (2020). Rethinking relief, reconstruction and development: Evaluating the effectiveness and sustainability of post-disaster livelihood aid. *International Journal of Disaster Risk Reduction*, 101650.
- [7] Patel, S. K., Mathew, B., Nanda, A., Pati, S., & Nayak, H. (2019). A review on extreme weather events and livelihood in Odisha, India. *Mausam*, 70(3), 551-560.
- [8] Sina, D., Chang-Richards, A. Y., Wilkinson, S., & Potangaroa, R. (2019b). What does the future hold for relocated communities post-disaster? Factors affecting livelihood resilience. *International journal of disaster risk reduction*, 34, 173-183.
- [9] Chambers, R. & Conway, G. 1992. *Sustainable Rural Livelihood: Practical Concepts for the 21st Century*. Discussion paper No. 296. Brighton: Institute for Development Studies.
- [10] Kuhumba, S. 2018. Amartya Sen's capabilities Approach as Theoretical Foundation of Human Development. *Journal of Sociology and Development*. Vol.1(1)
- [11] Reddy, S. 2013. *Clash of Waves*. Indos Books, New Delhi.
- [12] Smith, O. Hoffman, A. Susanna, M. 1999. *The Angry Earth* (edited). Routledge, New York.
- [13] Bidwai, P. June, 2013. India Floods: A man Made Disaster. *The Guardian*.
- [14] Richardson, J., 1986. *Handbook of Theory and Research for the Sociology of Education*., Westport, CT: Greenwood