

DIALOGUE
QUARTERLY

Volume-19 No. 3 January-March, 2018

Subscription Rates :

For Individuals (in India)

Single issue	Rs. 30.00
Annual	Rs. 100.00
For 3 years	Rs. 250.00

For Institutions:

Single Issue	Rs. 60.00 in India, Abroad US \$ 15
Annual	Rs. 200.00 in India, Abroad US \$ 50
For 3 years	Rs. 500.00 in India, Abroad US \$ 125

All cheques and Bank Drafts (Account Payee) are to be made in the name of "ASTHA BHARATI", Delhi.

Advertisement Rates :

Outside back-cover	Rs. 25, 000.00	Per issue
Inside Covers	Rs. 20, 000.00	„
Inner page coloured	Rs. 15, 000.00	„
Inner full page	Rs. 10, 000.00	„

DIALOGUE

QUARTERLY

Editor

J.N. Roy

Associate Editor

Pranav Kumar

ASTHA BHARATI

DELHI

The views expressed by the contributors do not necessarily represent the view-point of the journal.

© Astha Bharati, New Delhi

Printed and Published by

Dr. Lata Singh, IAS (Retd.)

Secretary, Astha Bharati

Registered Office:

27/201 East End Apartments,
Mayur Vihar, Phase-I Extension,
Delhi-110096.

Working Office:

23/203 East End Apartments,
Mayur Vihar, Phase-I Extension,
Delhi-110096

Phone : 91-11-22712454

e-mail : asthabharati1@gmail.com

web-site : www.asthabharati.org

Printed at : Vikas Computer and Printers
Naveen Shahdara, Delhi-32

Contents

Editorial Perspective	7
Vajpayee Passes Pway: End of an Era of Gentility in Politics About this Issue on Disaster Management	
1. North-East Scan	
Let's Talk about Climate Justice	11
<i>Patricia Mukhim</i>	
Recognizing Multiple Community Affiliations: A Way out of Identity Conflicts in Northeast India	14
<i>M.P. Bezbaruah</i>	
This Song Must not Fade	17
<i>Pradip Phanjoubam</i>	
2. Disaster Management in India: Problems and Prospects	19
<i>Prof. N. Vinod Chandra Menon</i>	
3. Critical Pedagogy of Disaster Research	33
<i>Amita Singh</i>	
4. Disaster Risk Governance and MODDI Effect	47
<i>Prof. Santosh Kumar</i>	
5. NDRF: Saviour in Disasters	53
<i>K.M. Singh</i>	
6. Challenges of Disaster Management Act 2005 with Special References of Flood Control—Need for an Alternative Disaster Management Policy	60
<i>Pankaj Kumar Jha</i>	
7. Revisiting Burhi Gandak Breach at Begampur in Samastipur District of Bihar-1986	70
<i>Dinesh Kumar Mishra</i>	
DIALOGUE, Volume-19 No. 3	5

8. Odisha has Successfully Reduced Heatwave Deaths, but the Challenge is Far from Over <i>Ranjan K. Panda</i>	84
9. Response for Chemical Industrial Disasters <i>Dr. Muzaffar Ahmad</i>	90
10. Treating Animals as Living Entities <i>K. M. Singh</i>	94
11. Unprepared for Flood Disasters <i>Himanshu Upadhyaya</i>	102
12. Medical Preparedness for Emergencies and Disasters in India <i>Dr. Muzaffar Ahmad</i>	110
13. India's Great Secular Confusion <i>Michel Danino</i>	114
14. French Perception and Evaluation of Indian Literature in the Eighteenth Century <i>Ravi K. Mishra & Uma Shanker Pandey</i>	128
15. Metaphysico-Epistemological and Ethical Issues in Postmodernity <i>Sanjay Kumar Shukla</i>	142

Editorial Perspective

Vajpayee Passes Away: End of an Era of Gentility in Politics

Atal Bihari Vajpayee passed away on August 16, 2018, aged ninety three years. A span of political activity commencing in 1957, when he was elected Member of Parliament, to 2006, represented an epoch in Indian politics. Out of this he was leader of opposition since 1967 and the Prime Minister for nearly six years.

Reams will be written in his eulogy and achievements. TV channels will also spend countless hours in enumerating his qualities and landmarks in an illustrious career of fifty years. His efforts at improving Indo-Pak relations as Foreign Minister (1977-80), Pokharan Nuclear Test (1998), overcoming post-test US and Western hostility; giving a new push to relations with Pakistan and neighbours and commitment to enhance India's profile will be the main achievements. His oratory, dignity, courtesy and sense of humour and poetry will form the staple of his personal qualities in these discussions.

However, none of these sufficiently describe the significance and meaning of his persona and politics. He straddled the epoch in Indian politics where grace, dignity, and consideration gradually gave way to contentious, abrasive and personal animosities. Vajpayee was essentially a product of the parliamentary politics and did not rise from ranks of either the BJP (BJS) or the RSS. Hence, courtesy towards all, genuine democratic temperament and liberality defined him. No wonder, he is often described as a politician in Nehruvian democratic tradition. Even when BJP gradually started promoting 'Hindutva' since eighties, he remained ambivalent and uncomfortable with it. According to Sudheendra Kulkarni (Indian Express – August 17, 2018), when in the Chintan Baithak (2004) in Goa to analyse the cause of defeat of the NDA government in 2004 elections, many believed that the weak commitment of the Vajpayee government towards Hindutva was the main cause. During the break, he laconically asked Kulkarni “Yeh Hindutva Kya Hota hai?” (What does Hindutva mean?). He ran the

NDA government far from the divisive and narrow constraints of Hindutva to the chagrin of its proponents.

Besides, his role in making the BJP a main line political party from the margins cannot be underestimated. It was his lasting service to BJP, otherwise shunned by the Congress, and liberals. His decision for the Nuclear Test (1998) and subsequent subtle steps to manage the fallout, set in motion India's strategic upswing, consequences of which are still being played out. He was genuinely modest and courteous. Only time he acted firmly, but with least amount of fuss, was when in 1997, K. Govindacharya, Gen. Secy., BJP allegedly described Vajpayee as mere "Mukhauta (mask)" and L.K. Advani the real force in BJP. Without much ado, K. Govindacharya quietly faded out of politics, for he had challenged Vajpayee's dignity as a person, politician and leader built over forty years.

It is very difficult to assess the impact of a Prime Minister in his times in today's contentious world. But after Nehru and Shastri, no other Prime Minister enjoyed the respect and adulation of people as Vajpayee did. He was quintessentially a product of parliamentary politics and enjoyed an unusual goodwill across the political spectrum. His death above all brings end to an era of gentility, values, consideration and grace in Indian politics.

It is tragic that the present generation of politicians, activists and commentators find it difficult to relate to him, as they have neither seen nor experienced what grace, honest differences and mutual respect in politics means. For today's generation in politics lacks democratic temperament and empathy. As Gandhi and Ambedkar would differ strongly on issues and principles and yet find an agreement. Nehru and Subhas Bose would differ about policies of Congress and correspond extensively, yet when Kamla Nehru went to Switzerland for treatment, she was received at station by Subhas Bose and his aide who looked after her although. As Gandhi and Rev C.F. Andrews will correspond over ten years on religious 'tolerance' (Andrews) and 'equality' (Gandhi) without affecting personal respect for each other. Similarly, Gandhi and Rabindranath Tagore differed and exchanged views over the methods and contours of Independence struggle by Gandhi, and its social and political consequences. Yet areas of agreement and mutual respect were larger than disagreements and Gandhi called Tagore 'Gurudev' and Tagore gave Gandhi the title of "Mahatma" by which he is known today. What appeared as differences, were products of sensibilities of a general fighting for freedom of the country and a sage and thinker

concerned about the values and aesthetics of a society and country. Today's writers, and alas some thinkers, seriously discuss differences between Tagore and Gandhi which lacks both perspective and class. The final verdict was that of Tagore, who left the living symbol of his ideals, the Visva Bharati (Santiniketan) to the care of Gandhi after his death. So much for their differences.

In his own ways Vajpayee was product of this tradition and the present generation of politicians weaned on contention, impatience and thoughtless social media are not expected to relate to him or understand him. Both as a person and politician Vajpayee was unique and difficult to emulate.

About this Issue on Disaster Management

Disaster Management is moving from the margins to centre stage, due to diversity, volume and destructiveness of the disasters caused by nature, and man himself. The fall out of climate change is gradually awakening the people and governments, to mitigate the sufferings caused. Apart from the traditional flood and earthquake template, the nature of new disasters and intensity is now being better understood.

Latur (1993) earthquake; Orissa-super cyclone (1999) (2004), Uri Earthquake (2005), Mumbai floods (2005) were only the precursors of the current (August 2018) unprecedented rains and flood in Kerala, causing unprecedented suffering and casualties.

Due to these, India woke up early to the need for preventing, and mitigating the consequent damage by setting up a systematic structure to meet the challenge. The result was setting up of the National Disaster Management Authority (NDMA 2005) by an Act of Parliament and similar structures at the state and district levels. India is now well integrated with international efforts in this regard.

National Disaster Relief Force (NDRF) has played significant role and its importance has led the government of India to increase its strength from 12 to 16 Bns in August 2018. The issue is meant to apprise the readers the importance of the subject. We are lucky to have three members of the first NDMA contributing to the issue.

—J.N. Roy

North-East Scan

Let's Talk about Climate Justice

Patricia Mukhim*

On July 18, 2018 last when I landed at Guwahati airport from a trip to Delhi, I found the temperature unbearably hot and certainly much more severe than Delhi was at that time. Assam is getting hotter and this is perhaps the first time that five people have died on account of the heatwave in the State. The mercury was soaring between 38-39 degrees on July 18. Two days later, the mercury in Shillong shot up to an unprecedented 29 degrees. Thankfully the rains have brought down the temperature to a comfortable level. So yes, we all know what climate change is because we feel it and experience it. The cloudburst that resulted in instant flooding in Mumbai or even Kerala have become a national challenge for the State has to set aside resources to rebuild lives and cities. But we tend to forget the rural hamlets and the crops and livestock that are devastated at one strike of the weather God.

So, when Prime Minister Modi says: "The climate has not changed; it is we who have changed," a la Donald Trump, you wonder how India will deal with these irregular weather phenomenon which bring with them frequent natural disasters, floods, droughts, hurricanes, new and more potent diseases and which hit the poor, the sick, the elderly and the indigenous people worldwide, the most. It is ironic that the bulk of the mineral wealth is located in the land of indigenous people.

How are the scarce resources of this country going to meet these growing needs even as food and water security stare us in the face? The ground water level in Punjab and Haryana has declined by two to five meters. The Central Ground Water Board has found that 82 per cent of areas in Punjab and 76 per cent in Haryana have seen a

*The writer is Editor, The Shillong Times.

substantial fall in the water level. This is based on the Board's data compiled between 2006 and 2015, followed by findings in 2016 and 2017 for the two agrarian States. These are the States that grow a substantial amount of food crops.

Those coming to Meghalaya gripe about the fact that Shillong and its suburbs are not what they used to be. Of course they are not! We are unthinkingly cutting down trees to make way for concrete structures without replacing those we have cut. Did our ancestors not teach us to plant anything but only to use the saw or the axe to cut down everything around. And we are paying the price today.

Also if Meghalaya continues to dig its fossil fuels mercilessly and mine its limestone without any attempts at reversing the effects then climate change will descend on us even faster and with disastrous consequences. But mind you, it's not only coal and limestone that is mined even within forest reserves. Our people are mining sand from the rivers without a thought at how these destructive anthropogenic activities will hurt our river systems.

Apart from destroying nature by cutting down forests we are also a generation that mindlessly continues to generate non-recyclable plastic waste and to dump them at landfills that are not sustainable. This is the biggest challenge that governments face today and the solutions seem to evade us. Truly humankind is at a crisis point.

So yes, climate change is the newest challenge today and to meet this challenge countries have been meeting at Conference of Parties (CoPs) at several venues. It was in one such venue at The Hague, Denmark in 2000 when the word 'Climate Justice' was coined. Now this is a word that countries are not comfortable with since it entails putting money on the table to offset carbon footprints caused by massive industrialization. This money is meant to mitigate climate change impacts and create strategies to adapt to this phenomenon since those least responsible for causing climate change tend to be affected the most. Climate Justice therefore raises the level of discourse to a moral and ethical dimension and by extension to the political level where hard decisions have to be taken.

Climate Justice means not just talking about climate change as an environmental issue but gauging its impact and who it impacts the most and how economies dependent on depletion of natural resources need to be restructured. Climate Justice is premised on the fact that it is the unjust political and economic system which creates societal inequities and climate change. Without a focus on correcting injustice, work on

climate change addresses only symptoms, and not root causes. It also means that communities that have suffered at the expense of destructive economies must not suffer in order to reverse climate change and to reduce carbon footprints.

If climate change obviously affects the poor and indigenous peoples around the world the most then Climate Justice must be framed as a rights-based issue which demands a long-term approach at social transformation which again is a humungous obstacle, for it involves changing mindsets. Indeed, the ability of populations to mitigate and adapt to the negative consequences of climate change are shaped by factors such as income, race, class, gender, capital and political representation. People from low-income communities have few, if any, adaptive resources. We have seen how when environmental disaster (Tsunami) strikes, it is the poor fisher folk of Tamilnadu and those in precarious circumstances who have neither the resources nor the insurance cover necessary to bounce back from those disasters, that are at the receiving end. And even if given assistance they often receive an unequal share of the disaster relief resources.

Since the last decade, natural disasters have become more frequent. Even before governments can respond to one crisis and rebuild cities devastated by floods, hurricanes etc., another one somewhere strikes.

The risks posed by climate change are manifold, but water security is a crucial issue. The changing rainfall patterns, frequent droughts create stress on groundwater. Where there are floods, water becomes undrinkable for many days until the floods subside. In many of our cities which are unplanned, even a minor cloudburst can be hugely disruptive.

Then we have food security risks due to water scarcity mostly but also because of crop failure and loss of standing crops due to flooding and other natural disasters. Our rural populations largely depend on agriculture and livestock farming. Any change in weather patterns hit our farmers hard. No wonder so many farmers die of suicide. Climate scientists also say that global warming result in the loss of nutrients in crops, vegetables and fruits. So, even while we eat food, there is a nutritional deficiency that we all face.

Climate change has brought in hitherto unknown diseases and compounded the effects of existing ones. Today there is increasing infections triggered by a hot and humid weather as well as poor nutrition. This is fatal for the poor as it involves hospitalisation expenses and a poor quality of life thereafter.

Many of us are unhappy with the frequent power cuts but climate change also brings energy security risks. Power generation decreases as water level in dams goes down or they dry up. States in the North East are all dependent on hydro-electricity but when the behaviour of our rivers are no longer predictable then even electricity production is fraught with uncertainties.

The more we study climate change, the more complex are its impacts. Hence, the semantics in seminar halls and plush offices must come to penetrate the common person who has to respond and reverse the process, wherever possible. For starters, we as small States should stop the big corporations from dumping plastics and packaged goods here. Plastic waste is the biggest challenge today because it lands up in our rivers and turns to methane which is toxic. Bulk use of water bottles at conferences and meetings and plastic cups for tea needs to be drastically reduced. We have to start somewhere. And we have to start at the individual and family level by making conscious choices.

Recognizing Multiple Community Affiliations: A Way out of Identity Conflicts in Northeast India

M.P. Bezbaruah*

The recent violent incidents in Shillong, Meghalaya involving the Mahzabi Sikhs and local Khasi youth and the heinous lynching of two Assamese men at Dokmoka of Karbi Anglong district of Assam, show that the Northeast region continues to be prone to eruption of violent conflicts that can easily take an identity/ethnicity oriented turn. In a region inhabited by numerous creeds, tribes, linguistic and religious communities, each engaged in its strive for socio-economic uplift in an

* Professor M.P. Bezbaruah, Professor of Economics, Gauhati University,
e-mail: bezbaruah.mp@gmail.com

age, where connectivity, mobility and global exposure has raised everyone's aspirations higher, it is sometimes easy to point fingers at 'others' for one's unfulfilled aspirations. As hate and suspicion beget more hate and suspicion, the spiral of inter-community unease persists. In both recent incidents mentioned above, social media, with its unfiltered and unhindered capacity to propagate hate and rumor quickly, also played a very damaging role.

It is debatable which of 'geographical isolation and infrastructure deficit' and 'unfavorable social environment' has been more significant obstacle in the path of development of the region in the post-independence period. Despite the remarkable improvement of connectivity within the region over the last few years, the recent economic resurgence of the region in the present century is now threatened to be halted due to the gathering clouds of inter-community strife.

Reactive policies of the governments in the past to appease militant community movements for exclusive homeland and appropriation of other benefits have at best helped only in short-term firefighting. In the longer run these measures have encouraged lighting of more fires. Civil societies and community leaders have rarely shown the kind of far-sight and vision in helping the region in dealing with this vexed issue.

Let us take the case of Assam for illustration. In 1960 a violent conflict broke out between the Assamese and the Bengalis in the State regarding whether Assamese should be the sole official language of the State. The Assamese might have won that battle, but it is questionable if they won the war too. The fact that many tribal groups might resent imposition of Assamese, did not sufficiently dawn upon the Assamese community leadership at that time. Most Assamese in those years were oblivious of the possibility that smaller tribal groups could also harboured legitimate aspiration for development of their own language and culture for fuller realization of their identity. Resulting alienation of tribes, especially in the hills of the region, is often cited as one of the reason for subsequent demand for and final creation of several Hill States out of the territory of erstwhile Assam. Following the movement against illegal immigration primarily from Bangladesh in late 1970s, virtually all Muslims of East Bengal origin, many of whom had arrived even before independence, came to be branded as illegal Bangladeshi immigrants by many, if not all, common Assamese. Thus, a community that supported the Assamese during the language strife of 1960s and

1970s, began to be alienated rather than inducted into the greater Assamese nation building process. Over the last few decades the language based bitterness between the Bengalis and the Assamese in the Brahmaputra Valley seems to have given way to a tendency towards assimilation. There has been growing mutual respect for each other's culture and language, and also instances of inter-marriages, which are more easily accepted. But the controversies relating to the impending Citizenship Amendment Bill 2016 now threatens to undo these positive achievements of the recent past.

It is time for community leaders and civil societies in the region to realize that xenophobia and exclusion is not the way forward in an increasingly connected world of the twenty-first century. The idea of multiple affiliations of individuals should be the building-blocks for a harmonious and prosperous coexistence of communities in a multi-ethnic multi-cultural region like the Northeast India. Dr. Dhrubajyoti Borah, a former President of Asom Sahitya Sabha, the most prominent literary body of the Assamese, in a seminar in Gauhati University attempted to define the Assamese as a community inclusive of anyone who use Assamese as the first, or the second or the third or even the fourth language. Taking a cue from him, I would call upon our community leaders to recognize that a community need not be defined in terms of those who are born into an exclusive 'indigenous' community. For example, a person who speaks both Bodo and Assamese can be accepted as a Bodo-Assamese or and Assamese-Bodo. Large numbers of people of Nepalese origin in Meghalaya speak Khasi fluently. Instead of treating them as outsiders, Khasis will be better off in the long run by recognizing them as Nepalese-Khasis and including them in their broader community. Such illustrations can go on. The idea of multiple community affiliation is almost akin to individual having more than one mobile phone numbers or having two or more bank accounts. If having multiple bank account or mobile phone numbers is not illegitimate, multiple community affiliation should also be socially acceptable. Redefining communities incorporating multiple affiliations will be more inclusive, though overlapping to some extent. Once we get used to the idea, the overlap will cease to be a quandary. For the system to be accepted widely, it will be necessary not to demand primacy of one of the affiliations over the other. Community leaders must come forward to shun supremacy of one affiliation over the others, so that smaller communities need not fear hegemonic intrusion of numerically larger communities.

In fact the idea is not entirely new. It is in practice in many countries already. In the USA and Britain it is common to refer to one's racial and community profile as African-American, Indian American or Asian British. Nearer home, Bhutan has inducted the immigrants settling in its southern part as Southern Bhutanese.

Instead of treating people who came from outside the region as 'outsider' and 'denizens' permanently, finding a way of respectable assimilation and accommodation in the cultural spectrum of the region can soften primitive xenophobic tendencies and clear the path of engagement of all in the process of robust socioeconomic progress.

This Song Must not Fade

Pradip Phanjoubam*

Bertolt Brecht once wrote: *Will there be songs in dark times? / Yes. / Of dark times.* These words, pregnant with his characteristic intuitive brilliance, have also proven prophetic. There is poetry in life, even in its darkest times. In retrospect, even the leanest and most agonizing periods of anybody's life becomes the subject for nostalgia: all the more reason for those in difficulty never to give up. But more literally, have there been songs in dark times? Even a cursory scan of the list of Nobel Prize winners for literature in the post-colonial era should provide the clue. For indeed some of the most powerful literature the world has seen have come out of the dark, poverty stricken, chaotic world of the newly decolonized Third World. The works of men like, Neruda, Walcott, Soyenka, Paz, Marques, Naipaul are evidence. Even though not Nobel Laureates there have been equally intense and powerful articulators of ideas like Achebe, Okri, Rushdie, Roy, Sen, Fanon.... The last named, Frantz Fanon, although his works were based on the conditions of Algeria of the mid 20th century are still considered a powerful portrait of oppressed and oppressor binary anywhere in the world anytime.

*The writer is editor, Imphal Free Press.

The question then should not be all about doubts as to whether there would be songs in dark times, but about the quality of the songs in dark times. The demonstrated answer has been, these songs can resonate with a brilliance that can break new grounds and indeed add new colours to intellect as well as literary creativity. Dark times produce a peculiar angst and yearning for rebirth that can only find satisfactory articulation through creative outlets and critical minds. Creative energy thus built cannot remain bound all the time and there always comes a moment of truth when “*Prometheus* (becomes) *Unbound*,” to use another analogy from the world of literature. But if Prometheus must become unbound sometime or the other then there is also another uncomfortable fact. The wait for the time he matures and takes courage to shed his shackles can be terribly long, sometimes too long for creative energy to remain kinetic. It may even cool and become dormant, perhaps never to awake again.

What is the nature of Manipur’s songs about its own dark times then? For dark times we are in without a doubt. Ours is no longer just a question of oppressor versus oppressed, for the line that divided the two is on the verge of vanishing. The oppressed and oppressors have become interchangeable. Here the mind is never without fear and nobody walks with his head held high. Few or nobody sings from the heart or speaks from the mind. In such a circumstance, even the idea of freedom is no longer a lived experience but reduced to seminar room rhetoric, signifying empty semantics more than substance. Our intelligentsia have been less than articulate, or else have lacked the courage of conviction to be open or honest. Will our creative spirit ever become unbound then? Will we ever know the true essence of freedom? We wish our bards and intellectuals would honestly sing these tunes someday in the near future. Our arts have had a taste of the energy that only dark days can generate – energy which comes from a yearning for freedom, or a will to resist oppression. It, therefore, also signifies hope and aspiration. When hope is murdered, this energy too will die. The question which all of us who love the place should be asking at this moment is, are all the mindless violence, petrifying terror, paralysing intimidations, monolithic corruption, institutional injustice, doing precisely this?

Disaster Management in India: Problems and Prospects

Prof. N. Vinod Chandra Menon*

Abstract

Disaster Management is a comprehensive process which consists of several phases like disaster preparedness, disaster risk reduction, disaster prevention or mitigation, emergency response, rehabilitation and recovery. In India, disaster management has evolved during the last decade of the 20th century after the devastating super cyclone in Orissa in 1999 due to several initiatives by the Government of India and multilateral and bilateral humanitarian assistance agencies, donor agencies, international and national non-governmental organisations, corporate sector entities and other stakeholder groups. The annually recurring disasters like floods, cyclones, drought, cloudbursts and epidemic outbreaks and the mega disasters like the Gujarat earthquake of 2001, Indian Ocean Tsunami of 2004, Kashmir earthquake of 2005, Mumbai floods of 2005, Kosi floods of 2008, Kashmir floods of 2010, Sikkim earthquake of 2011, Phailin cyclone of 2013, Uttarakhand flash-floods and landslides of 2013, Chennai floods of 2015, thunderstorms and dust storms of 2018 have all challenged the preparedness and response capacities of the government and the first responder agencies in India. This article tries to provide an overview of the process of evolution of disaster management in India in the last three decades and examines the problems and prospects for strengthening the practice of disaster management in India, in the context of global trends and best practices.

* Prof. N. Vinod Chandra Menon, Founder Member, National Disaster Management Authority (NDMA), Government of India & Independent Consultant (Disaster Risk Reduction, Climate Change Adaptation & Public Policy Analysis), Mobile: +91-98101-11328.

Introduction

Natural disasters which India used to face during the British period consisted mainly of droughts, famines and floods. The 1934 Bihar-Nepal earthquake and the occasional cyclones were seen as exceptions by the British who considered droughts, famines and floods as natural calamities which needed attention as these disasters led to crop damage when they occurred. The British administrators felt that the agencies dealing with agriculture must be entrusted with the responsibility of managing disasters like drought, famines and floods as they resulted in damage to crops and caused hardships to farmers. This practice was continued by the Government of India after India attained Independence and the Ministry of Agriculture, Government of India was given the mandate of managing disasters.

In 1999, the Government of India established a High Power Committee under the Chairmanship of Shri J. C. Pant, IAS (Retd), Former Secretary, Ministry of Agriculture, Government of India to recommend strategies for improving the practice of disaster management in India and suggest modalities for developing disaster management plans at the national and State levels. In October 1999, the Orissa super-cyclone ravaged the coastal districts of Orissa and damaged 1.6 million houses and resulted in the loss of lives of 9,887 people. The damage caused by the 1999 Orissa super cyclone was estimated at USD 4.4 billion. The Gujarat earthquake of January 2001 resulted in loss of lives of 13,805 people even though unofficial estimates indicate that 20,023 died in the earthquake. More than 166,800 people were injured and required medical attention. In the devastating Indian Ocean Tsunami of 26th December 2004, official estimates report that 10,136 people died in India with majority of the casualties reported from Tamil Nadu. Unofficial estimates place the figure of loss of lives in India due to the Tsunami above 18,000 people. After Tamil Nadu, the second most affected region in India was Andaman and Nicobar islands, where official death toll was reported as over 1,300, even though more than 5,500 people were reportedly missing.

The Indian Ocean Tsunami of December 2004 is considered as a watershed in the recent history of natural disasters as more than 250,000 people lost their lives in 14 countries in the Indian Ocean region due to the Tsunami. Led by multilateral and bilateral humanitarian assistance organisations, donor agencies, 169 national governments endorsed the Hyogo Framework of Action (HFA) 2005-2015 during the UNISDR World Conference on Disaster Reduction at Kobe, Japan.

The Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters identified the following five priorities:

Priority Action 1: Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Countries that develop policy, legislative and institutional frameworks for disaster risk reduction and that are able to develop and track progress through specific and measurable indicators have greater capacity to manage risks and to achieve widespread consensus for, engagement in and compliance with disaster risk reduction measures across all sectors of society

Priority Action 2: Identify, assess and monitor disaster risks and enhance early warning.

The starting point for reducing disaster risk and for promoting a culture of disaster resilience lies in the knowledge of the hazards and the physical, social, economic and environmental vulnerabilities to disasters that most societies face, and of the ways in which hazards and vulnerabilities are changing in the short and long-term, followed by action taken on the basis of that knowledge.

Priority Action 3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels.

Disasters can be substantially reduced if people are well informed and motivated towards a culture of disaster prevention and resilience, which in turn requires the collection, compilation and dissemination of relevant knowledge and information on hazards, vulnerabilities and capacities.

Priority Action 4: Reduce the underlying risk factors.

Disaster risks related to changing social, economic, environmental conditions and land use, and the impact of hazards associated with geological events, weather, water, climate variability and climate change, are addressed in sector development planning and programmes as well as in post-disaster situations.

Priority Action 5: Strengthen disaster preparedness for effective response at all levels.

At times of disaster, impacts and losses can be substantially reduced if authorities, individuals and communities in hazard-prone areas are well prepared and ready to act and are equipped with the knowledge and capacities for effective disaster management.

Three Global Frameworks in 2015

2015 became yet another significant year which witnessed three Global Frameworks getting endorsed by most of the national governments to

improve the quality of lives of the people. These three Global Frameworks are: the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030; the Paris Agreement on Climate Change 2015-2030 and the Sustainable Development Goals (SDGs) 2015-2030.

The Sendai Framework sets four specific priorities for action:

Understanding disaster risk;

Strengthening disaster risk governance to manage disaster risk;

Investing in disaster risk reduction for resilience;

Enhancing disaster preparedness for effective response, and to “Build Back Better” in recovery, rehabilitation and reconstruction.

To support the assessment of global progress in achieving the outcome and goal of the Sendai Framework, seven global targets have been agreed:

The Framework for DRR has set seven significant targets during 2015-30. These are:

Substantial reduction of global mortality during disaster by 2030, aiming to lower average per 100,000 global mortality rate during the period 2020-30 compared to 2005-15.

Substantial reduction in the number of affected people globally by 2030 aiming to lower the average global figure per 100,000 between 2020-30 compared to 2005-15.

Reduction in direct disaster economic loss in relation to global Gross Domestic Product (GDP) by 2030.

Substantial reduction in disaster damage to critical infrastructure and disruption of basic services through developing their resilience by 2030.

Substantial enhancement of the number of countries with national and local disaster risk reduction strategies by 2020.

Substantial enhancement of international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030.

Substantial increase in the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.

The Paris Agreement on Climate Change formulated under the leadership of the United Nations Framework Convention on Climate Change (UNFCCC) was targeted at strengthening the global response to the threat of climate change by keeping a global temperature rise in this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Further, the Paris Agreement envisages efforts to strengthen the ability of countries

to deal with the impacts of climate change. To reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework are being put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework.

The Paris Agreement requires all Parties to put forward their best efforts through nationally determined contributions (NDCs) and to strengthen these efforts in the years ahead. This includes requirements that all Parties report regularly on their emissions and on their implementation efforts. Efforts are also being made to prepare the Damage and Loss Assessment mechanism to address the adverse impact of natural disasters, especially weather related hydro-meteorological disasters. Several financial mechanisms like the Green Climate Fund (GCF) have been established to support the climate change adaptation efforts of developing countries.

Seventeen Sustainable Development Goals (SDGs) have been identified to continue the efforts for consolidating the outcomes of the Millennium Development Goals (MDGs). These Seventeen Sustainable Development Goals are given below:



The Sustainable Development Goals (SDGs), otherwise known as the Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. These 17 Goals build on the successes of the Millennium Development Goals, while including new areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice, among other priorities. The goals are interconnected – often the key to success on one will involve tackling issues more commonly associated with another.

The three Global Frameworks: Sendai Framework for Disaster Risk Reduction (SFDRR), the Paris Agreement on Climate Change and the Sustainable Development Goals (SDGs) need to converge for tackling the common problems like poverty alleviation, vulnerability reduction and sustainable development of the weaker sections by improving the effectiveness of delivery of services. However, this convergence is not happening because of the nodal institutions mandated for achieving the objectives of each of these frameworks working in their own silos.

In the following sections, the problems and prospects of strengthening disaster management in India are reviewed based on the experiences in the first one and a half decade of the 21st century.

The Weakening of Institutional Legitimacy

The downgrading of the status of the Vice Chairman, National Disaster Management Authority (NDMA) to the level of the Cabinet Secretary, Government of India and those of the members of the National Disaster Management Authority (NDMA) to the level of Secretaries in the Government of India, the downsizing of the strength of members and keeping the position of the Vice Chairman vacant for more than four years have all resulted in crippling of the NDMA. The State Disaster Management Authorities are headed by the respective Chief Ministers in States and Lt. Governors in Union Territories. The downgrading of the status of NDMA Members to Secretary level in Government of India has weakened the level playing field with respect to the Chairmen of SDMAs. The Gazette notification downgrading the status of the Vice Chairman and Members of NDMA is enclosed below.

अधिसूचना

नई दिल्ली, 18 सितम्बर, 2014

सा.सा.नि. 669(ब).—केंद्रीय सरकार, आपदा प्रबंधन अधिनियम, 2005 (2006 का 53) की धारा 75 की उप-धारा (2) के खंड (क) के तहत पठित उप-धारा (1) द्वारा उल्लेख किये गये व्यक्तियों का इलाज करते हुए, आपदा प्रबंधन (राष्ट्रीय प्राधिकरण के सदस्यों की पदावधि और सेवा की शर्तें तथा महासूचक समिति के सदस्यों को भत्तों का भंडार) नियम, 2006 का और संशोधन करने के लिए निम्नलिखित नियम बनाती है, अर्थात्:—

1. (1) इन नियमों का उल्लेख नाम आपदा प्रबंधन (राष्ट्रीय प्राधिकरण के सदस्यों की पदावधि और सेवा की शर्तें तथा महासूचक समिति के सदस्यों को भत्तों का भंडार) द्वारा संशोधन नियम, 2014 है।
- (2) ये राजपत्र में प्रकाशन की तारीख से प्रवृत्त होंगे।
2. आपदा प्रबंधन (राष्ट्रीय प्राधिकरण के सदस्यों की पदावधि और सेवा की शर्तें तथा महासूचक समिति के सदस्यों को भत्तों का भंडार) नियम, 2006 के नियम 3 के स्थान पर, निम्नलिखित नियम रखा जाएगा, अर्थात्:—

3. **सेवा और सेवा शर्तें**—(1) राष्ट्रीय प्राधिकरण के सदस्य के रूप में नामनिर्दिष्ट कोई व्यक्ति, ऐसे वेतन (वेतन निकूल अधिकारी की सेवा में वेतन को पदावधि, महंगाई भत्ते, आवास, विद्वाना सुविधाओं, यात्रा भत्ता, छुट्टी यात्रा रिवाज का हकदार होगा, जो भारत सरकार के सचिव को अनुज्ञेय है और ऐसी छुट्टी का हकदार होगा, जो केंद्रीय विधिन सेवा (छुट्टी) नियम, 1972 के अंतिम सरकारी वेतन को अनुज्ञेय है।

(2) राष्ट्रीय प्राधिकरण का कोई सदस्य, जिसे अधिनियम की धारा 3 की उपधारा (3) के अंतर्गत राष्ट्रीय प्राधिकरण के उपसचिव के रूप में परचयित किया गया है, ऐसे वेतन (वेतन निकूल अधिकारी की सेवा में वेतन को पदावधि, महंगाई भत्ता, आवास, विद्वाना सुविधाओं, यात्रा भत्ता, छुट्टी यात्रा रिवाज का हकदार होगा, जो संशोधन सचिव को अनुज्ञेय है।

[स. सं. 44-23/2014-एन.टी.एन.-II]

डी. बी. सी. सर्वो, संयुक्त सचिव

टिप्पण: मूल नियम भारत के राजपत्र में अधिसूचना संख्यांक सा.सा.नि. 598(ब), तारीख 27 सितंबर, 2006 द्वारा प्रकाशित किए गए थे और अधिसूचना संख्यांक सा.सा.नि. 544(ब), तारीख 30 जुलाई, 2014 द्वारा परंपार्यालो संशोधन किया गया।

NOTIFICATION

New Delhi, the 18th September, 2014

G.S.R. 669(E).—In exercise of the powers, conferred by the sub-section (1) read with clause (a) of sub-section (2) of Section 75 of the Disaster Management Act, 2005 (53 of 2005), hereinafter referred as Act, the Central Government hereby makes the following rules, further to amend the Disaster Management (Term of Office and Conditions of Service of Members of the National Authority and Payment of Allowances to Members of Advisory Committee) Rules, 2006, namely:—

1. (1) These rules may be called the Disaster Management (Term of Office and Conditions of Service of Members of the National Authority and Payment of Allowances to Members of Advisory Committee) Second Amendment Rules, 2014.
- (2) They shall come into force on the date of their publication in the Official Gazette.
2. In the Disaster Management (Term of Office and Conditions of Service of Members of the National Authority and Payment of Allowances to Members of Advisory Committee) Rules, 2006, for rule 3, the following rule shall be substituted, namely:—

“3. Pay and service conditions.—(1) A person nominated as a member of the National Authority shall be entitled the pay (less pension in the case of a retired officer), dearness allowance, accommodation, medical facilities, travelling allowance, leave travel concession as admissible to a Secretary to the Government of India and leave as admissible to a Government servant under the Central Civil Services (Leave) Rules, 1972.

(2) A member of the National Authority who is designated as the Vice-Chairperson of the National Authority under sub-section (3) of Section 3 of the Act, shall be entitled to pay (less pension in the case of a retired officer), dearness allowance, accommodation, medical facilities, travelling allowance, leave travel concession as admissible to the Cabinet Secretary.”

[F.No. 44-23/2014-NDM-II]

G. V. V. SARMA, Jt. Secy.

Note: The principal rules were published in the Gazette of India vide notification number G.S.R. 598(E), dated the 27th September, 2006 and subsequently amended vide notification number G.S.R. 544(E), dated the 30th July, 2014.

An Extra Ordinary Gazette Notification No. 393 of the Ministry of Home Affairs, Government of India on 30th July 2014 made the tenure of the Members of the National Disaster Management Authority (NDMA) open for removal at any time by the Central Government if it deems expedient to do so. This was done by partial modification of the Disaster Management (Term of Office and Conditions of Service of Members of the National Authority and Payment of Allowances to Members of Advisory Committee) Rules, 2006 and introducing the Rules titled National Disaster Management Authority (Term of Office and Conditions of Service of Members of the National Authority and Payment of Allowances to Members of Advisory Committee Amendment) Rules, 2014.

The notification states as follows: “In the National Disaster Management Authority (Term of Office and Conditions of Service of Members of the National Authority and Payment of Allowances to

Members of Advisory Committee) Rules, 2006, after Rule 5, the following rule shall be inserted, namely:

“5A. – Removal.–If the Central Government deems it expedient to do so, it may remove from office any member of the National Authority, at any time.”

Needless to add, the possibility of removal of any member at any time, by replacing the earlier fixed tenure of five years, made them vulnerable to comply with any directions by the Central Government, without exercising their option to refuse if it is against the larger interests of the disaster-prone or disaster affected communities.

The decision by the Government of India to discontinue the National Emergency Operations Centre (NEOC) which was established at the National Disaster Management Authority (NDMA) in its formative years, the decision by the Government of India to take away the functions of the general superintendence, direction and control which was vested and exercised by the National Disaster Management Authority (NDMA) under Section 45 of the Disaster Management Act 2005 and reassign these to the Ministry of Home Affairs, Government of India, the downgrading and downsizing of the status of Vice Chairman and Members of the National Disaster Management Authority (NDMA), the overriding of the National Executive Committee (NEC) chaired by the Union Home Secretary, Government of India by the National Crisis Management Committee (NCMC) chaired by the Cabinet Secretary ignoring the provisions on the roles and responsibilities of the National Executive Committee (NEC) as mandated by the Disaster Management Act 2005 are some of the problems which have weakened the legitimacy of the institutional mechanisms for effective disaster management in India.

The neglect of risk assessment, risk identification, disaster risk reduction, mitigation and mainstreaming disaster management in development planning have remained as aspirational goals of the proposed paradigm shift. Most disaster affected communities continue to be facing the challenge of self-recovery as post-disaster damage assessment continues to be a subjective task of local officials. The exclusion of marginalised and weaker sections from the

processes of disaster preparedness, disaster risk reduction, emergency response, rehabilitation and recovery have been also a challenge for the disaster-prone and disaster affected communities. The recent experiences of thunder storm, dust storm, cloud burst and urban flooding have also exposed the weaknesses in the system of early warning, dissemination of real time now casting information to the disaster-prone communities and the preparedness of local first responders to address the emergency situations. The urban disaster risk in megacities and the failure of critical infrastructure due to urban flooding have posed serious challenges and exposed the weaknesses in preparedness and risk reduction.

Prospects for Damage Control and Reversing the System Failures

An inclusive, multi-stakeholder National Campaign on Disaster and Climate Resilience must be initiated to empower local communities to address the multi hazard risk in their local neighbourhoods.

Community Platforms for Disaster Risk Reduction must be established as multi-stakeholder coalitions to address the challenges of disasters, climate change and extreme events.

Sub-district level disaster management plans must be prepared through a multi-stakeholder engagement at the Block, Gram Panchayat and Village levels which are dove-tailed seamlessly with the Development Plans and Disaster Management Plans of the respective districts and State governments.

Baseline multi-hazard risk identification efforts must be initiated to understand the local risk profiles before integrating the development plan interventions like design, development and construction of infrastructure and amenities at the local levels.

The Master Plans of cities must be revisited to make them aligned with the aspirations of the frameworks for disaster risk reduction, climate change and sustainable development goals.

All new construction must necessarily have to comply with the multi-hazard resistant provisions of the National Building Code through strict enforcement of all safety provisions.

MINISTRY OF HOME AFFAIRS

NOTIFICATION

New Delhi, the 30th July, 2014

G.S.R. 544 (E).— In exercise of the powers, conferred by the sub-section (1) read with clause (a) of sub-section (2) of section 75 of the Disaster Management Act, 2005 (53 of 2005), the Central Government, in partial modification of Disaster Management (Term of Office and Conditions of Service of Members of the National Authority and Payment of Allowances to Members of Advisory Committee) Rules, 2006, the Central Government hereby makes the following rules, namely:

1. **Short title and commencement.**—(1) These rules may be called the National Disaster Management Authority (Term of Office and Conditions of Service of Members of the National Authority and Payment of Allowances to Members of Advisory Committee Amendment) Rules, 2014.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the National Disaster Management Authority (Term of Office and Conditions of Service of Members of the National Authority and Payment of Allowances to Members of Advisory Committee) Rules, 2006, after Rule 5, the following rule shall be inserted, namely:—

“5A. – **Removal.**—If the Central Government deems it expedient so to do, it may remove from office any member of the National Authority, at any time.”

[F. No. 44-23/2014-NDM-II]

G. V. V. SARMA, Jt. Secy.

Note : The principal rules were published in the Gazette of India vide notification number G.S.R. 598(E), dated the 27th September, 2006.

ऐसे यात्रा भर्त्ता, कमरा किराया, दैनिक भर्त्ता और प्रवहन भत्ते का संदाय किया जाएगा जो पूर्व विषय 190 के परिशिष्ट-2 में परामर्शित उच्च शक्ति प्राप्त समिति के सदस्य को अनुद्देश्य है।

[फा. सं. 30/9/2005-एनडीएम. 3(ए)]

नावेन वर्मा, संयुक्त सचिव

NOTIFICATION

New Delhi, the 27th September, 2006

G.S.R. 598(E).—In exercise of the powers conferred by clauses (a) and (d) of Sub-section (2) read with Sub-section (1) of Section 75 of the Disaster Management Act, 2005 (53 of 2005), the Central Government hereby makes the following rules, namely :

1. **Short title and commencement.**—(1) These rules may be called the Disaster Management (Term of Office and Conditions of Service of Members of the National Authority and Payment of Allowances to Members of Advisory Committee) Rules, 2006.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. **Definitions.**—(1) In these rules, unless the context otherwise requires, —

- (a) "Act" means the Disaster Management Act, 2005 (53 of 2005);
- (b) "advisory committee" means the advisory committee constituted by the National Authority under Sub-section (1) of Section 7;
- (c) "member" means a member of the National Authority nominated by the Chairperson of the National Authority under clause (b) of Sub-section (2) of Section 3;
- (d) "section" means a section of the Act;
- (e) "Vice-Chairperson" means the Vice-Chairperson designated by the Chairperson of the National Authority under sub-section (3) of Section 3.

(2) Words and expressions used herein and not defined in these rules but defined in the Act shall have the meanings respectively assigned to them in the Act.

3. **Pay and service conditions.**—(1) A person nominated as a member of the National Authority shall exercise his option to choose either,—

- (a) Pay (less pension in the case of a retired officer), dearness allowance, accommodation, medical facilities, travelling allowance, leave travel concession as admissible to a Secretary to the Government of India and leave as admissible to a Government servant under the Central Civil Services (Leave) Rules, 1972; or
- (b) pay, daily allowance as admissible to a Union Minister of State and pension (without dearness relief in the case of retired officer), accommodation, medical facilities, travelling allowance as admissible to a Union Minister of State in accordance with the provision of the Ministers (Allowances, Medical Treatment and Other Privileges) Rules, 1957, made under the Salaries and Allowances of Ministers Act,

1952 (58 of 1952), and leave as admissible to a temporary Government servant under the Central Civil Services (Leave) Rules, 1972, but without the facility of leave travel concession :

Provided that the option once exercised shall be final.

- (2) A member of the National Authority, who is designated as the Vice-Chairperson of the National Authority under Sub-section (3) of Section 3, shall be entitled to pay and daily allowance, as admissible to a Union Minister, who is a member of the Cabinet, and pension (without dearness relief) and in the case of member who is a retired officer, accommodation, medical facilities and travelling allowance as admissible to a Union Cabinet Minister in accordance with the provisions of the Ministers (Allowances, Medical Treatment and Other Privileges) Rules, 1957, made under the Salaries and Allowances of Ministers Act, 1952 (58 of 1952).

4. **Disqualifications.**—No person shall be a member of the National Authority, who —

- (a) is, or at any time has been, adjudged insolvent; or
- (b) is declared to be of unsound mind by a competent court; or
- (c) becomes incapable of acting as a member; or
- (d) is, or has been convicted of an offence which, in the opinion of the Central Government, involves moral turpitude.
- (e) is, or has been removed or dismissed from the service of the Government or a body corporate owned or controlled by the Government.

5. **Resignation.**—Any member of the National Authority may resign from the office of member of the National Authority by giving a notice in writing under his hand to that effect to the Chairperson of the National Authority and such resignation shall take effect from the date on which such notice is accepted by the Chairperson of the National Authority.

6. **Vacancies.**—Where a vacancy occurs in the office of a member of the National Authority by reason of resignation, disqualification, death or otherwise, the vacancy may be filled by fresh nomination.

7. **Allowances to be paid to a member of the Advisory Committee constituted by the National Authority.**—A member of the Advisory Committee constituted under Sub-section (1) of Section 7 shall be paid such travelling allowances, room rent, daily allowances and conveyance allowance as are admissible to a member of the High Power Committee as specified in Appendix-2 to Supplementary Rule 190.

[F.No.30/9/2005-NDM.III(A)]

NAVEEN VERMA, Jr. Secy.

अधिमूचना

नई दिल्ली, 18 सितम्बर, 2014

सा.का.नि. 669(अ).—केंद्रीय सरकार, आपदा प्रबंधन अधिनियम, 2005 (2005 का 53) की धारा 75 की उप-धारा (2) के खंड (क) के साथ पठित उप-धारा (1) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, आपदा प्रबंधन (राष्ट्रीय प्राधिकरण के सदस्यों की पदावधि और सेवा की शर्तें तथा सलाहकार समिति के सदस्यों की भालों का संदाय) नियम, 2006 का और संशोधन करने के लिए निम्नलिखित नियम बनाती है, अर्थात् :—

1. (1) इन नियमों का मखिल नाम आपदा प्रबंधन (राष्ट्रीय प्राधिकरण के सदस्यों की पदावधि और सेवा की शर्तें तथा सलाहकार समिति के सदस्यों की भालों का संदाय) द्वारा संशोधन नियम, 2014 है।
- (2) ये राजपत्र में प्रकाशन की तारीख से प्रवृत्त होंगे।
2. आपदा प्रबंधन (राष्ट्रीय प्राधिकरण के सदस्यों की पदावधि और सेवा की शर्तें तथा सलाहकार समिति के सदस्यों की भालों का संदाय) नियम, 2006 के नियम 3 के स्थान पर, निम्नलिखित नियम रखा जाएगा, अर्थात् :—

***3. वेतन और सेवा शर्तें—**(1) राष्ट्रीय प्राधिकरण के सदस्य के रूप में नामनिर्दिष्ट कोई व्यक्ति, ऐसे वेतन (सेवा निवृत्त अधिकारी की दशा में वेतन को घटाकर), महंगाई भत्ते, आवास, चिकित्सा सुविधाओं, यात्रा भत्ता, छुट्टी यात्रा रिवाज का हकदार होगा, जो भारत सरकार के सचिव को अनुज्ञेय है और ऐसी छुट्टी का हकदार होगा, जो केंद्रीय सिविल सेवा (छुट्टी) नियम, 1972 के अधीन सरकारी सेवक को अनुज्ञेय है।

(2) राष्ट्रीय प्राधिकरण का कोई सदस्य, जिनके अधिनियम की धारा 3 की उपधारा (3) के अधीन राष्ट्रीय प्राधिकरण के उपाध्यक्ष के रूप में पदाभिहित किया गया है, ऐसे वेतन (सेवा निवृत्त अधिकारी की दशा में वेतन को घटाकर), महंगाई भत्ता, आवास, चिकित्सा सुविधाओं, यात्रा भत्ता, छुट्टी यात्रा रिवाज का हकदार होगा, जो मंत्रिमंडल सचिव को अनुज्ञेय है।*

[सा. सं. 44-23/2014-एन.टी.एम.-II]

जी. बी. बी. शर्मा, संयुक्त सचिव

टिप्पण : मूल नियम भारत के राजपत्र में अधिमूचना संख्यांक सा.का.नि. 598(अ), तारीख 27 सितंबर, 2006 द्वारा प्रकाशित किए गए थे और अधिमूचना संख्यांक सा.का.नि. 544(अ), तारीख 30 जुलाई, 2014 द्वारा परंपादनी संशोधन किया गया।

NOTIFICATION

New Delhi, the 18th September, 2014

G.S.R. 669(E).—In exercise of the powers, conferred by the sub-section (1) read with clause (a) of sub-section (2) of Section 75 of the Disaster Management Act, 2005 (53 of 2005), hereinafter referred as Act, the Central Government hereby makes the following rules, further to amend the Disaster Management (Term of Office and Conditions of Service of Members of the National Authority and Payment of Allowances to Members of Advisory Committee) Rules, 2006, namely:—

1. (1) These rules may be called the Disaster Management (Term of Office and Conditions of Service of Members of the National Authority and Payment of Allowances to Members of Advisory Committee) Second Amendment Rules, 2014.
- (2) They shall come into force on the date of their publication in the Official Gazette.
2. In the Disaster Management (Term of Office and Conditions of Service of Members of the National Authority and Payment of Allowances to Members of Advisory Committee) Rules, 2006, for rule 3, the following rule shall be substituted, namely:—

“3. **Pay and service conditions.**—(1) A person nominated as a member of the National Authority shall be entitled the pay (less pension in the case of a retired officer), dearness allowance, accommodation, medical facilities, travelling allowance, leave travel concession as admissible to a Secretary to the Government of India and leave as admissible to a Government servant under the Central Civil Services (Leave) Rules, 1972.

(2) A member of the National Authority who is designated as the Vice-Chairperson of the National Authority under sub-section (3) of Section 3 of the Act, shall be entitled to pay (less pension in the case of a retired officer), dearness allowance, accommodation, medical facilities, travelling allowance, leave travel concession as admissible to the Cabinet Secretary.”

[F.No. 44-23/2014-NDM-II]

G. V. V. SARMA, Jt. Secy.

Note: The principal rules were published in the Gazette of India vide notification number G.S.R. 598(E), dated the 27th September, 2006 and subsequently amended vide notification number G.S.R. 544(E), dated the 30th July, 2014.

Critical Pedagogy of Disaster Research

Amita Singh*

Abstract

Disasters are not stand alone unforeseen tragedies as mostly perceived through the ages in India. Science which feeds into disaster management is highly advanced and is capable of predicting these incidents to a much greater extent today. The sight of destitute and orphaned human beings going from house to house for shelter, food and clothes after every disaster reflects upon the grievous and injurious episode as a policy failure rather than an 'Act of God.' Consequently, managing disasters transcends a drive for a charitable and altruistic public duty to issues of law and governance. This concern emerged in the Hyogo Declaration which reflects in the Disaster Management Act of 2005 (DMA 2005) and is now a lighthouse to disaster management (DM) through Sendai (2015-2030) commitments of our government. The question here is whether the achievement of Sendai Goals are possible through the administrative and legal framework of disaster management that we currently have. The occurrence of disasters is a serious national emergency in terms of market, monetary and productivity collapse over and above the loss of lives and emotional trauma which it brings. Yet, it is still dispelled, in most cases as an 'Act of God,' an inappropriate technology or comfortably attributed to either administrative oversight or blaming the local community for bad buildings or apathy towards

* Dr. Amita Singh is Professor, Centre for the Study of Law and Governance (CSLG), Chairperson, Special Centre for Disaster Research (Old CRS Building, Damodar Hostel Gate). Member Secretary Institutional Ethics Review Board. Jawaharlal Nehru University, New Delhi-110067. Mobile no.: 09910170904, e-mail: amita@mail.jnu.ac.in

early warning systems (EWS) etc. The present paper attempts to highlight that disasters are a social phenomenon but policy making continues to lean towards 'hazard based' pedagogy resulting into a diversion from its 'Sendai spirit' which may therefore remain unachievable in the coming years as we move towards its deadline in 2030.

Keywords:

Resilience, pedagogy, attribution error, Sendai spirit early warning systems

A Pedagogy for Disaster Research

Even though the ability to question, debate and evaluate is foundational to research in social sciences, its teaching methodologies have neglected the pedagogical tools and culture. Since pedagogies make research arguments and findings better synchronized and understandable, its neglect has scattered and fragmented knowledge on disaster management and reduced it to a hammer and tong discipline. Notwithstanding its own grievous neglect of pedagogical tools, social sciences remained aloof from disaster management¹ to harm research in both the disciplines as well as in advancing the pedagogical culture in research. The worst effect has been its self-imprisonment in a monological or teleological research in which prescriptions of a few hegemonic theoretical perceptions are treated to be final. In contrast, dialogical research is an unending conversation amongst the outsiders (researchers) and the affected (people). This is more a natural feature of disciplines emerging from the grassroots i.e.; anthropology, sociology and law. As Mishler (1986) suggests: 'dialogical research requires hearing participants' stories not as surrogate observations of their lives outside the interview but as acts of engagement with researchers... instigates self-reflections that will lead the respondent not merely to report his or her life but to *change* that life.' In the absence of dialogical research, outside people (researchers) tend to claim information, knowledge and opinions on the lives of others while the affected (people) do not get a role to participate to correct opinions on their lives. Frank (2004) admits that 'Dialogue is life and two is the minimum.'² Due to its tendency of monological research, Natural Sciences kept communities out of their findings. As disaster research returns to social science approaches, the need for

replacing monological with dialogical becomes indispensable and Hyogo Declaration (2005) only accelerated the inevitable and the imminent. This brings to the centre stage a concern for pedagogical principles in disaster research.

Pedagogy is a combination and synchronization of knowledge, cognitive experience and deontological commitments to a problem which provides tools and directions for research. So far, disaster research has largely been a 'hazard based' research due to which a laboratory and sophisticated equipment demarcated its outreach and performance. Consequently, natural occurrences such as the rainfall, earthquakes, hurricanes, landslides, fires and floods occupied a substantial portion of disaster research. Human interaction came towards the end of the tragic episode when people were to be rescued, rehabilitated or collected as corpses. Post-Tsunami, the declaration from Hyogo in 2005 indicated a change as two new jargons entered into disaster research; preparedness and community resilience. This involved 4 Ps of public administration i.e.; Problem identification, Planning, Policy formulation, Project undertaking. Government, governance and law emerged to inundated policies on vulnerable areas in the country. This also opened up a whole new world of anthropology, demography and institutional economics into disaster research. With the key disciplines of social sciences unfolding their porcupine spikes against lax, corrupt and apathetic administrative systems, disasters adopted a new meaning which was more dialogical and ethical due to a design for communities. Not just the local people but local institutions also became active partners in achieving implementation and compliance to laws, ethics and constitutional discipline. This requirement of achieving preparedness and resilience building was comfortable with appropriate indigenous science rather than more science and mega projects.

Contestations in the Understanding of Disasters

The regular cyclic processes of nature become disasters when they kill people. Informed people and prepared communities can escape devastation. Ironically, more than 226 million people are affected by disasters every year. Climate change adding up to the frequency of disasters destroys more than 9-13 per cent of GDP every year and would be the key factor in preventing growth in South Asia³ (The Oxfam Report, 2008). Disasters have also become a major hurdle to poverty reduction programme as an average of 2-6 per cent of GDP of

South Asia is lost to disasters every year. Since 2000, disasters have cost the world over US\$1.4 trillion. Annual losses have risen to over US\$200 billion, with the highest cost in 2005, the year of Hurricane Katrina in the United States. None of the disaster vulnerable country seems to be undertaking preparedness seriously as the proportion of the population living in flood-prone river basins continues to increase by 114 per cent, and on cyclone-exposed coastlines by 192 per cent between 1970 and 2010. Ironically, Kerala despite the devastating experience of Tsunami and other coastal hazards has one of the highest population density growth in its coastal towns, largest defiance of CRZ laws and phenomenal destruction of the protective mangroves. Between 2002 and 2011, more than 1.117 million people perished and a minimum of US\$1,195 billion was recorded in losses. Most of the 3.3 million deaths from disasters in the last 40 years have been in poorer nations. The risk of losing wealth to disasters is outpacing wealth creation these losses are growing faster than GDP per capita. Less than 0.7 per cent of total relief aid goes to disaster risk reduction, which contributes to economic growth by reducing losses and protecting livelihoods. It also affects the use of social safety net programmes and opening new potential for developing social capital and assets. (*Source: UN Factsheet of Rio20+ Agenda of Sustainable Development, 2012*). Despite the increase in disaster related losses and damages (L&D) it has emerged that there is a huge deficit in the knowledge and information on the varieties of vulnerabilities which are inflicted upon human beings. Most efforts being adopted to achieve sustainable development and progress are repeatedly disrupted and thrown back.

Disasters are not 'Acts of God' nor can they be treated merely as man's interference with nature. At the same time they also cannot be attributed to the uncertainties related to climate change alone. The varieties and complexities in the analysis of different kinds of disasters only made research more difficult. Does the fire in Mumbai⁴ public function or that recurring forest fires across the country has anything in common? Such questions bring out many analytical and semantic anomalies to the surface and help sharpen research. In the above example on fire, the emerging reality brings administrative and legal issues to the forefront such as administrative laxity, casualness and dereliction of duty on the part of administration. The fact that nature, which otherwise works upon its own schedule and potency, can very strongly react to its interference by human beings. Science is capable of making many clear predictions as a result of which many lives and substantial

property can be saved. Many disasters are coupled with uncontrollable and unending impacts encountered due to climate change, fragile ecosystems, unprotected human and animal habitats, counterproductive laws, weak administrators, institutional corruption and most of all, a lack of critical thinking in emergency managers.⁵ Much of the development and progress is lost due to preventable disasters in vulnerable areas.

Hyogo and the Three Perplexing Questions in Disaster Research

The Hyogo Framework for Action (HFA, 2005-2015) focuses on 'Building the Resilience of Nations and Communities to Disasters.' As it appears from this thematic title, HFA is a break from the earlier pedagogies of disaster management agreements and policies. It was different as it diluted the precedence being given to compassion, altruism and sermons of morality to policies which deployed rescue and rehabilitation forces to disaster affected areas and instead prioritized the role of local communities in preparedness and preventive measures. HFA highlighted the importance of people's participation in the institutions of all different sectors and actors to reduce disaster losses. This was reflected in what HFA titled as 'community resilience building' thereby suggesting a pro-active role for local communities in reducing loss of lives and social, economic, and environmental assets when hazards strike. A change as challenging as HFA's idea of community resilience building alongside concerns of gender and other vulnerable groups emerged centre stage to DRR. The former state driven, inwardly designed DRR changed to the one embedded in political, social and cultural categories or what one may like to address as 'critical pedagogy.'⁶ It reaffirmed that DRR is not just about knowing but also about changing ourselves and the world we live in. Hyogo changed the whole perception of looking at disasters from the erstwhile 'knowledge banks of science' which treated people as objects to be acted upon during crisis to a relationship which generates compassion, peace, togetherness and sustainability. The 1987 report 'Our Common Future' prepared under the leadership of GroHarlam Brundtland on environment and development finds meaning within the changed pedagogy of HFA. An introduction of 'resilience' in disaster management indicated a need for institutional transformation, a refreshing institutional pedagogy of understanding the factors through which human capabilities return to

normalcy after absorbing the trauma and shocks or surviving through devastating infrastructural, physical and emotional trauma striking them down and pushing them several years behind or even leaving them standing all alone in a rubble of human settlements. The whole new meaning brings the state in a new garb of decentralized constellation of community institutions being coordinated by enlightened and knowledge based professional district level bodies. Knowledge sharing would entail that governance opens up a concern about pre-existing community vulnerabilities such as disability, gender, age and poverty which prevents them from deciphering warnings and even if they did their inability to be rescued the way those who could shout, run and find their way to safety. Many more questions find their way as HFA opens the discourse surrounding disaster management such as; what is institutional preparedness for the trafficking and poaching of young girls, women and children during disasters, who is accountable and how would one undertake regression analysis on identifying the real victims of disaster, the actual offender, cause of impunity of administrators and the dangers of attributional errors of law.

Despite HFA, the scheme and style of governance remains outdated as DMA 2005 remained stand alone law with no toolkit for coordinating performance with other state institutions. Several thousand women and children were trafficked⁷ through June 2013 Uttarakhand disaster alone but policies are still not open to anything beyond property and cash loot which are dealt with under Indian Penal Code (IPC) and Criminal IPC sections. The police forces which are expected to prevent such criminal activities are dismissive and defensive. Many other concerns of women do not get enough space in DRR, such as the one encountered during Manipur earthquake of 2016. A local e-newspaper, *The Third Pole* (Feb. 2016) reports that the famous Womens' Market, the only source of family livelihood, called Ema (Mothers) Market was severely damaged leaving more than 2000 women out of their daily earning to support their families.

Three questions remain perplexing in disaster management initiatives; Are institutions prepared to face disasters? Are administrators moving ahead in the Hyogo spirit of resilience building to achieve four priority areas of the Sendai Declaration? Is India well equipped to achieve the targets enshrined in the Sendai Declaration? Any form of institutional and social reform to address the above three concerns ends up in basic structural-legal changes which in the absence of an

appropriate disaster management framework may merely gurgle out disconnected structures, ill-coordinated administrative initiatives and a fragmented 'compendium' of laws which may neither influence the preparedness action or increase the threshold of community resilience.

The Pedagogical Change in Disaster Research

The pedagogical tools in disaster research have undergone tremendous change in the last twenty years. This has not been acknowledged as it should have been. This section of the paper would try to capture the direction of change gradually affecting and influencing human experience which in turn impacts upon or attempts to harness and change available structures and processes of disaster management.

All throughout the past history of disasters, a fear bitten society looked at natural calamities and accidents as unforeseen cosmic tragedies beyond the control of human beings. The fear of gargantuan episode devastating human life and habitats had been so unsettling and disrupting that cause could be none other than God. Some questioned on why God would be provoked to act in the manner of mean people playing with vengeance? Many religious leaders have attributed disasters such as Hurricane Katrina⁸, Haiti earthquake⁹ and the Tsunami¹⁰ to many varied issues which according to them were God's judgement to the sins being committed by humanity for transgressing divine laws governing human beings. In ancient Hindu philosophy, the concept of *Prarabdha Karma* or the *karma*¹¹ which human beings face in this life due to a destiny which cannot be controlled. Thus, natural calamities and accidents should be accepted because human beings are merely subdued sections of a Cosmic Great Plan.¹²

On a larger canvas of the coming of the era of positivism with an advancement of scientific education and new technology systems, a new faith in the scientifically verifiable situations emerged. It restored logical proof to an incident by rejecting metaphysics, theism and moral considerations which were used to create escapes from state accountability. Some writings have greatly influenced the growth of the social sciences perspectives of disaster research. The three sociologists Max Weber, Durkheim and Karl Marx have shown the way to sociological platforms to analyse systems which affect society. Weber was not a pure empiricist like Durkheim and emphasized social action through interpretative methods. Therefore, Weber attached importance

to cultural issues which were embedded into religion and the Calvinist tradition. His *The Protestant Ethic*¹³ argues that the basic tenets of Protestantism inspired capitalism. He however laid the foundation of legal positivism by promoting the rational-legal authority and rejecting the charismatic authority systems. The analytical jurisprudence of legal positivism developed by Jeremy Bentham and John Austin made a significant appearance in H.L.A. Hart (1958) whereby distinction was made between morality and law and laws to non-cognitivism. Therefore, laws became nothing but the command of human beings. The tool of legal positivism as applied to disaster management highlights the sheer impunity of state in ignoring acts which it should have done to prevent devastation, loss of life and property. While an advancement of human skills alongside an enhanced self-consciousness in relation to life forms, constitutional remedies and state responsibility, the new disaster research pedagogy reached a deeper level of development which was inclusive, holistic besides being sustainable. The HFA in its *Priority Action 3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels* and *Priority Action 5: Strengthen disaster preparedness for effective response at all levels*.

The conclusion of HFA in 2015 and the adoption of Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030 has created a new pedagogical regime of transdisciplinarity. It has prescribed major roles to administrators and scientific institutions in building community resilience. The four priority areas bring together scientific institutions, law & governance, economists, bankers and government administrative services in achieving the goals of community resilience and preparedness.

Sendai and Progress Towards Transdisciplinary Research

Disaster research is one of the most contemporary and extremely demanding policy problem which invokes transdisciplinarity in its most unrelenting format. Transdisciplinarity draws out of the contemporary relevance of various disciplines to unite knowledge for resolving a problem. Russell (2008) writing at the beginning of the academic movement for transdisciplinarity across the world suggested that, “Transdisciplinarity..... as a practice.....transgresses and transcends disciplinary boundaries, ... and seems to have the most potential to respond to new demands and imperatives. This include problem

focus (research originates from and is contextualized in ‘real-world’ problems), evolving methodology (the research involves iterative, reflective processes that are responsive to the particular questions, settings, and research groupings) and collaboration (including collaboration between transdisciplinary researchers, disciplinary researchers and external actors with interests in the research).”¹⁴ All the three suggested dimensions given by Russell pose a serious challenge to disaster research. Sendai has attempted to sketch a preliminary outline to be filled by national governments like nursery children filling colours inside an outline of a sketch.

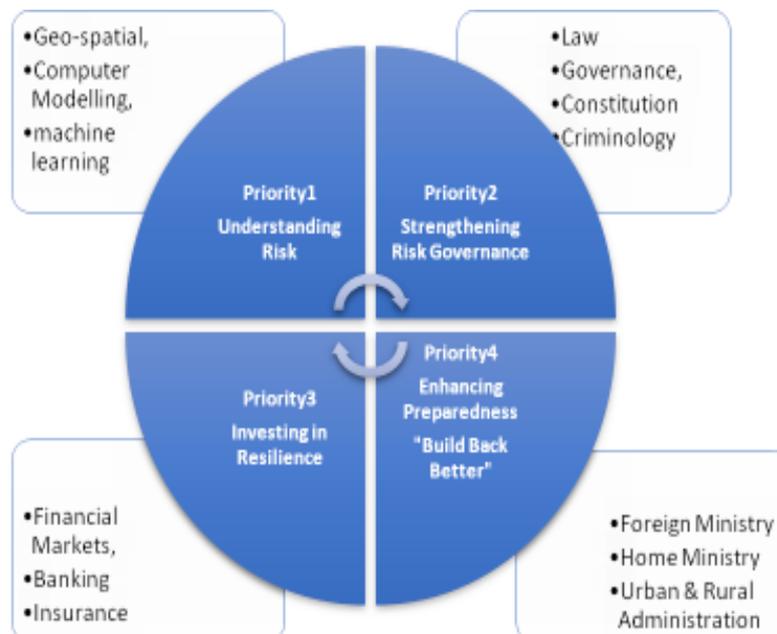
Notwithstanding the challenge, a framework of transdisciplinarity acquired a structure in SFDRR and the pre-existing policy of leaving governments to sketch their own drawings for achieving resilience building through their disaster management structures finally acquires a direction. Much was required to be done at Sendai but considering the investment challenges that each national government would encounter, Sendai became the best approximation to a reasonable disaster management framework for the signatory states. A few facts which justify the variations which DRR was expected to resolve on their own and due to which the DRR gets diluted are given below:

- a) By the very nature of activities which come under disaster management, it cannot be the responsibility of a single department.
- b) It also does not give time for most departments to coordinate a plan of action as the disaster strikes. The plan has to be pre-meditated but disasters may disrupt a stratified pre-meditated plan and every department should have a contingency plan for those moments and situations.
- c) Most other departments which are expected to work alongside the disaster management department are rarely interested in delaying their own priority requirements for DRR. The disaster management departments are like any other department and cannot impinge upon the plans prepared by other departments.
- d) Most local administrative structures work in different linguistic, cultural and political environment and sometimes they work against central commands even at the cost of the safety and protection needs of local people.
- e) The DMA 2005 does not resonate with work and task segregation within the three constitutional layers of

government. There is a lot of fragmentation of piecemeal policies to suit a particular administrative need.

- f) The implementation of DRR is leadership dependent since the task is too scattered, variables are extensive, identification and time lines to performance involve some historically very different departments i.e.; panchayats and the remote sensing department. Every Chief Minister should be a willing, incorruptible, duty bound and performance oriented leader to DRR.

Fig: Sendai Framework: A Framework for Transdisciplinarity



Summing up

A pedagogical directions to disaster research liberates it from a stratified framework of 'hazard based' focus of natural sciences. Hyogo and Sendai frames have catalysed this internal democratization of the

discipline towards community participation, legal frameworks of governance and institutional accountability. Universities and colleges across the country should reap this prodigious opportunity to explore many new directions in social sciences research in collaboration with natural sciences and the information and communication technology (ICT) research.

Currently, disaster research is impressively perching over social sciences as the pedagogical tools required in both are manifestly dialogical rather than monological. The changing requirements with the HFA 2005 and Sendai since 2015 demands enormous interaction with people in vulnerable zones to bring preparedness and community resilience against disasters. A thrust for a culture of pedagogical explorations may combine knowledge from many disciplines even though these aims may not be achievable in any near future, a gradual positioning would still influence policies. The relationship with social sciences on one hand and natural sciences on the other may also not be very comfortable as the management of transdisciplinarity is a tough challenge at a time when transdisciplinarity itself is under researched. In this situation, a critical pedagogy helps to understand where the new jargons in policy are coming from and how the state, society and the law may become accountable for their actions in disaster management.

A framework of accountability becomes relevant to critical pedagogy where state impunity may harm implementation and suffer from attributional errors in identifying the cause of disasters (God or Man? communities or government?). One may not be in a position to confirm whether a pedagogical understanding of disasters can bring stronger and timely action to prevent or dilute disasters but the fact that a direction sans pedagogy may not suggest compliance to achieve the goals of Sendai by 2030. It is this area of disaster management which need a more holistic and inclusive attention from social sciences to build a nation-wide movement of a disaster-free nation.

References

Action Aid International (2013) “*Women and Children at risk of human trafficking warns action Aid.*” 5th July., available at <http://www.actionaid.org/news/women-and-children-risk-human-trafficking-north-india-warns-actionaid>.

- Bray, Ian, Kenny, Sean., Chughtai, Shaheen., (2008) *Rethinking Disasters, Why death and destruction is not nature's fault but human failures*, Oxford: Oxfam International.
- Dowling, Tim (October 30, 2012). "Superstorm Sandy and many more disasters that have been blamed on the gay community." *The Guardian*. London.
- Draus, P. (2004). *Consumed in the city: Observing tuberculosis at century's end*. Philadelphia: Temple University Press.
- Frank, Arthur. W., (2005) What Is Dialogical Research, and Why Should We Do It? *Qualitative Health Research*, Vol. 15 No. 7, September 2005 964-974, DOI: 10.1177/1049732305279078, Sage Publication, Available from: https://www.researchgate.net/publication/7667742_What_Is_Dialogical_Research_and_Why_Should_We_Do_It? [accessed Jul 27 2018].
- Gilgoff, Dan (2011) at CNN.com available at <http://religion.blogs.cnn.com/2011/03/16/6-other-calamities-blamed-on-divine-retribution/>
- Hudson, John., (2010) *Pat Robertson Blames Natural Disaster Victims* in *The Atlantic*, Jan.14. USA. at: <https://www.theatlantic.com/technology/archive/2010/01/pat-robertson-blames-natural-disaster-victims/341489/>
- Lewthwaite, Sarah and Nind, Melanie (2016) Teaching research methods in the social sciences: expert perspectives on pedagogy and practice. *British Journal of Educational Studies*, 64 (4), 413-430. (doi:10.1080/00071005.2016.1197882).
http://eprints.ncrm.ac.uk/3795/1/Lewthwaite%20%26%20Nind_Teaching%20research%20methods_BJES_eprints.pdf
- 'Make in India' , (2016) *Times of India* Feb.14, p.1,
http://timesofindia.indiatimes.com/articleshow/50985658.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst,
 accessed 28th July,2018
- Matthew L. Collins, Stacy L. Peerbolte., (2006) Public Administration Emergency Management Pedagogy: Cultivating the Habit of Critical Thinking, *JPAE 18(2)*, 315–326 *Journal of Public Affairs Education*
- Russell, A. Wendy, Wickson, Fern, Carew, Anna L., Transdisciplinarity: Context, contradictions and capacity, *Science Direct Futures 40* (2008) 460-472, Elsevier, Stable URL: <http://www.sciencedirect.com/science/article/pii/S0016328707001541>
- Sharma, Seema., (2014) *Women trafficking a rising concern in state*, *Times of India*, 2nd August., available at <https://timesofindia.indiatimes.com/city/dehradun/Women-trafficking-a-rising-concern-in-state/articleshow/39493450.cms>

- Singh, Amita. (2016) 'Disaster Law and Community Resilience', Delhi Law Review, Delhi: Delhi University Law Centre.
- Sutton, Komilla., (1999) *Essentials of Vedic Astrology*, UK: Wessex Astrologer Ltd.
- Weber, Max., (2002) *The Protestant ethic and the "Spirit" of capitalism and other writings*, (trans. Peter Baehr & Gordon C. Wells) New York: Penguin.

Notes

- ¹ See Lewthwaite and Nind (2016) Teaching research methods in the social sciences: expert perspectives on pedagogy and practice.
- ² Draus (2004) clarifies this dialogical methodology as, 'Narrative is a mode of conveying sociological information which allows the sick, poor, and the otherwise excluded to determine at least some of the terms by which they will be known. This is in direct contrast to the usual modes of bio-medicine and positivist sociology, which routinely place individuals — or their words — within categories or typologies, as though an entire complex and contradictory existence would thus be collapsed into a ready receptacle. (pp. 8-9).
- ³ Bray et al. (2008) Rethinking Disasters, Why death and destruction is not nature's fault but human failures.
- ⁴ Fire breaks out during cultural programme at 'Make in India', (2016) Times of India Feb.14, Pg.1, http://timesofindia.indiatimes.com/articleshow/50985658.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst, accessed 28th July,2018
- ⁵ For greater clarity on the framework of emergency management pedagogy see Collins & Peerbolte., (2006) Public Administration Emergency Management Pedagogy: Cultivating the Habit of Critical Thinking,
- ⁶ See Amita Singh , '*Disaster Law and Community Resilience*', 2016.
- ⁷ Action Aid International 5th July 2013, "Women and Children at risk of human trafficking warns action Aid." Seema Sharma, Times of India, Women trafficking a rising concern in state 2nd August 2014. "Preeti Jain, coordinator of Ashram Trust, said: "With the anti-human trafficking cell (AHTC) becoming active in the state, the regular police has begun tracking such cases with help from the revenue police. Until June this year, 88 such cases have been reported from across the state. It was 138 last year....." Surender Bhandari, coordinator of NGO Janank Smiti said that 27 vulnerable, poor girls were sold off from Vikasnagar in the name of marriage last year.it was found that 60 girls from nearby villages were sold in just one year. Seventeen girls of Okhal Kanda Block in Naintal district who had married two years ago were never seen again.

Geeta Gairola, project director of Mahila Smakhya Organization, said: “Our teams have raided these agents from Uttarkashi, Chamoli and other hill districts many times. But they escaped under the pretext of fake marriage.”

- ^{8.} Hurricane Katrina was attributed to sexual immorality, homosexuality and abortion law of the state by Rabbis of Jewish Israel Torah traditions Judaica. Dowling, Tim (October 30, 2012).
- ^{9.} Pat Robertson, the religious leader and founder of the Christian Broadcasting Network, co-hosts “The 700 Club” daily television broadcasts, claims that the 2009 Haiti earthquake was caused due to the Haitians ‘pact to the devil’ to get freedom from the French. He has claimed that most natural disasters were divine judgment from God. Hudson, 2010.
- ^{10.} Dan Gilgoff, CNN.com Religion Editor, mentions that the governor of Tokyo apologized for attributing the earthquake and tsunami that killed thousands of Japanese were divine retribution for national egoism.
- ^{11.} In Hinduism and Buddhism a cumulative aggregation of one’s action in relation to others (human, non-human animals and plants) carried through various stages of transmigration of soul from one bodily form to another. This is described in the holy Hindu scripture Bhagavad Gita (2.22) as just as one gives up an old shirt to put on a new one, the soul gives up an old body to acquire a new kind of body (vasâmsijirnâniyathâvihâya).
- ^{12.} For ‘Prarabdha’ or ‘destiny’ defined in Hindu literature see Sutton 1999.
- ^{13.} Weber 2002 on The Protestant ethic and the “Spirit” of capitalism.
- ^{14.} Russell, and Wickson, et al; on Transdisciplinarity: Context, Contradictions and Capacity..

Disaster Risk Governance and MODDI Effect

Prof. Santosh Kumar*

For thousand of years in the past as mentioned by Yuval Noah Harari in his book Homo Deus-A Brief History of Tomorrow, three problems preoccupied the people of twentieth –century China, India and Egypt. Famine, plague and war were always on the top of the list. Generations after generations human have prayed to every god, angel and saint and have invented countless tools, institutions and social systems-but they continued to die in their millions from starvation, epidemics and violence. Many thinkers during that time concluded that famine plague and war must be the part of God’s cosmic plan. But humanity wakes up. In last few decades we have managed to rein in famine, plague and war. Although these problems have not been completely solved but they have been transformed from incomprehensible and uncontrollable forces of nature into manageable challenges. We now know quite well what needs to be done in order to prevent famine, plague and war-and we usually succeed in doing it. “We need to recognize the challenges and confront them. Sitting idle and expecting god, saint or any invisible hand would come for our rescue is insane.

Nearly eight to ten states of India are now inundated with flood water. More than 800 people have been killed so far (preventable deaths) and millions have got affected- thousands have become homeless and are taking refuge either in relief camps or somehow managed to migrate to cities considering as safer areas to survive. Kerala is facing unprecedented floods (nearly 300 deaths so far) in this century. Floods

* Prof. Santosh Kumar, Ph.D Professor, Policy Planning & Community Issues National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India.

are the recurrent phenomenon for many of the states in India. Some states (Rajasthan, Gujarat, Maharashtra, Madhya Pradesh) are getting surprises with the new phenomenon of floods. Frequently affected states are considered to be better prepared ones than those which do get surprises as these states are not identified as flood prone ones. Disaster is a mixture of astonishment and surprises. If we go purely by the definition given in the dictionary- the two words keep influencing each other i.e. astonishment and surprises which makes disaster events uncertain. The case of astonishment where we do not expect to happen at all – Latur earthquake, Japan earthquake leading to Tsunami, Flooding and nuclear emergency which astonished every one. On the other hand, surprise where the element of risk is known but we are not sure about its timing when it is going to happen? Say we know the Himalaya is prone to earthquake – zone V but we are not sure about when? This is the case of surprise. These two situations pose many challenges. But where it is known that during the monsoon season flood would come and people and properties might get affected. Despite this information, if deaths are happening, people are getting badly affected, properties get destroyed then it is a concern. Why it is happening? Why preventable deaths could not be prevented? Why we always get over powered by known natural activities? We need strategy, commitment and perseverance for confronting these situations as we could do in the past for famine, plague and war.

Two disasters, 1999 Orissa Super Cyclone and Kuchh earthquake 2001, have changed the disaster discourse in India which later was substantiated by Tsunami 2004, Uri Earthquake 2005 and Mumbai floods 2005. Professionals, administrators, academia, civil societies and faith based organizations have been responding to the disasters situations in the past but it never became as turning points for ex-ante disaster risk reduction. The combination of disasters which occurred in quick successions created pressure on the governance. The Push factor worked well. And, subsequently, the proactive governance the pull factors together changed the entire discourse.

People/Professionals who are working in the sector might be having different views on the on preventing the preventable impact and also the narration of push factor. But in my opinion, Gujarat earthquake of 2001 may be considered as watershed event for paradigm shift in disaster management governance in India. I do not hesitate calling it as “MODDI EFFECT” (Magnificent, Obtainable, Diligent, Demonstrative,

Innovative). My argument is based on my personal encounters/experiences in three disaster recovery programmes which went on parallel in which I was associated with very closely. Prior to the Gujarat earthquake recovery programme, Latur (Maharashtra) was considered as a successful story of long-term recovery and reconstruction which was undertaken in 1993 with the support of World Bank, ADB and DFID. Latur recovery was first of its kind. Larger reallocation of the affected people and also new actions for disaster management got initiated such as preparation of disaster management plans, setting up of control rooms, disaster management capacity building and training etc. Latur was known for its housing reconstruction with earthquake resilient technology. In 2001 Gujarat was struck by a severe earthquake. This created colossal damage to property and large number of human casualties. Challenges before the government of Gujarat and the people were the same as of Maharashtra for rebuilding Gujarat. If we just quote for understanding the impact of earthquake “Ashok Lahiri’s, planning commission member data, – nearly **19,000** people died during the Gujarat earthquake. Kutch alone reported more than **17,000** deaths. **1.66** lakh people were injured. Most were handicapped for the rest of their lives. The dead included **7,065** children (0-14 years) and **9,110** women. There were **348** orphans and **826** widows. As per ADB and World Bank’s **Gujarat Earthquake Joint Assessment Mission**, the disaster loss was estimated at Rs **99 billion**. Reconstruction costs were estimated at Rs **106 billion**. The annual loss of state domestic product was estimated at around Rs 20 billion (assuming an ICOR of 4) for the first 12 months.” Rebuilding was a huge challenge before the government.

After eight years of Maharashtra, two other long-term recovery programmes were undertaken. One was of Orissa Super Cyclone of 1999 and the other one was Andhra Cyclone, 1997. All the four recovery programmes were having two things in common. One that all were undertaken with the assistance of the World Bank and secondly, building resilience. Hence I would, while respecting all the good works/work done by other State governments, like to highlight a few points of the Gujarat recovery as long-term effects. Government of Gujarat under the leadership of Shri Narendra Modi, the then Chief Minister of Gujarat, who could bring some phenomenal initiatives which turned around the entire disaster management discourse in the country. The work of long-term recovery and rehabilitation in the aftermath of the earthquake

of Gujarat may be considered as full of innovations which were later recommended for the global learning process as best practices for post disaster long-term recovery.

The government, after realizing the colossal damage of property and loss of lives, became very particular **to not to rebuild disaster risk again**. They committed themselves to confront the challenges they had before them for building a resilient Gujarat. Their well planned efforts for resilient rebuilding could lead to transformation.

Magnificent, as moving out from ex-post relief centric to ex-ante disaster risk reduction, Setting up of the institutional system for undertaking risk reduction – GSDMA, Gujarat Institute of Disaster Management, Seismological Research Institute, bringing disaster management curriculum for school education and earthquake engineering in technical engineering Institutions. Bringing new legislation for disaster risk governance, State policy on disaster management, various structural and non-structural projects and programmes for risk reduction, introducing risk insurance in housing sector, making it inclusive recovery by giving women as joint owners of the house leading to women empowerment process, risk reduction features for housing and infrastructure recovery. The four affected urban towns – Bhuj, Bachau, Anjar and Kuchhagot underwent a sea change by bringing land use planning, earthquake resilient housing etc. provided many new dimensions in disaster risk reduction. MODDI effect led to the creation of resilient Gujarat. International media was also looking at Gujarat very critically. Professionals working in the area were also very anxious about the whole new experiment. The World Bank, Asian Development Bank, UN organizations were very skeptical. The people of Gujarat were very nervous too. But after the completion of the task, the third party monitoring and Benefit Monitoring of the investment made for recovery the MODDI effect turned out to be a global example as best practices. UN SASAKAWA Award was conferred upon the Government of Gujarat.

So magnificent initiative became **Obtainable**. All planned activities got translated on the ground with quantifiable targets. Careful planning, setting of Institutions for its execution, constant monitoring, developing new capacities became the integral part of the entire process. The **diligent** drive with **demonstrative** character with highest political commitment could bring the change. The entire process of new paradigm got replicated both at the national and international action and dialogue.

Disaster affected countries adopted the process for their recovery programmes especially community driven housing reconstruction. **Demonstrative** capacity of the project led the process of new learning in disaster recovery. Here lies the **innovation**. Many things, which were tried out and completed in time, were not known or popular in the literature of disaster management. So MODDI effect as the new abbreviation could be used in the learning process of innovative governance. Building financial resilience lead to the implementation of housing insurance as one of the risk transfer mechanism. Most of the houses got reconstructed were duly insured of earthquake risks and resilient too.

At the federal level, rule of business for disaster management has also undergone change. The subject of disaster management, which was earlier with the Ministry of Agriculture, got shifted to the Ministry of Home Affairs in 2002. Soon after that, in the year 2003, Ministry of Home Affairs initiated the process of drafting new legislation on disaster management. National legislation which adopted many things from the Gujarat State Disaster Management Act was introduced in the Parliament in 2005. Parliament passed the Bill and the birth of a new legislation took place in the form of National Disaster Management Act 2005. The main thread of the Act is a paradigm shift in disaster management from post-disaster centric (relief and response) to the pre-disaster risk reduction (prevention, mitigation and preparedness). The new era (ex-ante risk reduction) of disaster management began in the country.

At the international level too, the discourse was changing. The world also moved from response and recovery to risk reduction. In South Asia, Asia, Africa, Latin America and Europe there was a shift from INDNDR decade of Yokhama strategy, Hygo framework of Action and now Sendai framework of DRR 2015. India is committed for undertaking the agenda priorities of Sendai framework (i) reducing the number of death occurring due to disaster (ii) reducing the number of affected people (iii) reducing the loss of property and (iv) building disaster response system and build back better. Now there are many changes are taking place in many states of the country for the implementation of Sendai framework. Bihar is the first state which could draft the multi sectoral disaster risk reduction action plan in consonance of the Sendai framework.

UNISDR also declared India as Asian Champion for disaster risk management in the year 2015. Being the Asian champion for disaster management took several responsibilities for propagating the subject of ex-ante risk reduction. India, organized its first Asian Ministerial Conference in 2016 after the Sendai Declaration in 2015 on disaster risk reduction where the Asian road map for disaster risk reduction was drafted, named as Delhi Declaration and adopted by all the Asian nations. Hon'ble Prime Minister of India Mr. Narendra Modi had inaugurated the conference and he gave ten agenda points as a road map to all the Asian nations to follow for making people of Asia disaster resilient.

In India, State governments are now preparing for disaster risk management in a more professional and organized manner. Constitution of State Disaster Management Authorities/District Disaster Management authorities, adoption of legislation for disaster management, strengthening State disaster response capacity by building State Disaster Management response force, building capacity of Panchayat and local bodies, review of development projects and programmes as disaster risk. Auditing is gradually picking up momentum but it is yet to be institutionalized and strengthened. Although, the speed is not at the expected level, nevertheless the glimpse of MODDI effect could be seen. Most of the States are now trying to work in the same way and bring effective disaster risk governance for making their efforts visible in building resilient development. Asian nations along with India are committed to undertake the ten point agenda for disaster risk reduction framework 2030 along with the Sendai Framework for Disaster Risk Reduction. Continuity of action for disaster risk reduction is the key for sustainable development, otherwise I would just be creating an island of success stories. MODDI principle could be a good planning example for confronting the challenges of disasters and to emulate in the disaster risk governance for achieving sustainable development goals and building resilience.

NDRF: Saviour in Disasters

K.M. Singh*

It is indeed very heartening to note that National Disaster Response Force (NDRF), which is the youngest Central Police organisation in the country, has in a short span of 13 years, acquired a niche for itself for its professionalism in handling disaster situations. It is a multi-disciplinary, multi-skill, high tech specialist force, capable of handling all natural disasters and Chemical, Biological, Radiological and Nuclear (CBRN) emergencies. It has also acquired the unique distinction of being the single largest dedicated disaster response force in the world.

The NDRF journey, since its inception to its present shape, has been a steep uphill task with innumerable impediments and overcoming the same has been a daunting experience. But first a few words about its inception. As the DG CISF, I had the privilege of being a Member of the Steering Committee headed by the then Union Home Secretary in 2003, constituted to decide the format of disaster response mechanism in the country. Full credit for the grandiose vision of having 8 Bns of NDRF drawn from four CPOs goes to Shri R.K. Singh, the then Joint Secretary, Disaster Management and the Secretary of CBRN the Steering Committee. He not only conceived the concept of NDRF, but got the Cabinet approval for Rs. 290 crores for 310 equipments for each of the proposed 8 Bns of NDRF. He was also responsible for drafting the Disaster Management Act 2005, which enjoined upon the National Disaster Management Authority (NDMA) the responsibility of superintendence, direction and control of the NDRF.

Shortly after constitution of the NDMA, a meeting with the four DGs (BSF, CRPF, CISF and ITBP) was convened under the

* K.M.Singh is currently Vice President of PPF and Founder Member, National Disaster Management Authority (NDMA).

chairmanship of the Vice Chairman in Oct, 2005 to seek their support to set up the force (NDRF) by providing the personnel sanctioned for each of the 8 Bns. The lukewarm response of the DGs to extend the desired support made us to realise that establishing this force would be a difficult task. While the efforts to get the support of the DGs were on, a missive from the Army Hqr came as yet another blow. It was a very cogently drafted proposal from Army Hqr, received in the NDMA through MOD & MHA, staking claim for all the 8 NDRF Bns being given to Army. The argument was that since Army has vast experience of handling disasters, it would be able to provide experienced personnel from all disciplines to establish the NDRF and make all the 8 Bns fully functional within six months. Notwithstanding the merit in the proposal of Army Hqr vis-a-vis the impediments and limitations to set up this force with personnel from CPOs, NDMA argued the case vehemently in support of CPOs. After protracted correspondence for months, this issue was finally clinched in favour of CPOs with the argument that NDRF is a statutory force under Sec 44 & 45 of the DM Act and if NDRF is given to Army, it will be the first instance of Army being given a statutory role in matters relating to internal security. It was further contended that even after constitution of NDRF, Army will still be requisitioned in any major disaster as aid to civil authorities.

The next hurdle was various problems relating to procurement of 310 equipments for which there was neither any QR and nor wherewithal for procurement. Since most of the 310 equipments were new items for which no QR was available with any organisation, NDMA engaged the services of Maj Gen (Retd.) Mukherjee (former ADG, Weapons & Equipment, Army Hqr) and constituted a committee under him which produced a voluminous document with detailed QRs of all the 310 equipments after a painstaking effort of six months. Next problem came up with the Procurement Division of MHA declining to accept the huge responsibility of procurement of the 310 equipments for each of the 8 NDRF Bns. DG NDRF was handicapped in undertaking this responsibility, as he had no sanctioned staff for NDRF Hqr. The four CPO Chiefs also declined to take up this responsibility. After exhausting all options, NDMA engaged the services of Ms. Somi Tandon, who had retired as Secretary/FA in MOD and had vast experience in the field of procurement. The committee set up under Ms. Somi Tandon, after detailed deliberations, distributed the 310 items under two categories of low value and high value. It recommended that the low value items may be procured by the Commandants of respective Bns under their

delegated powers. The remaining high value items were distributed under four different heads with the responsibility of procurement under each of the four heads assigned to the four CPOs. The four DGs were persuaded to accept this responsibility which they accepted grudgingly. Realising that procurement of all the equipments was critical towards effective operationalisation of the NDRF, NDMA monitored this process very closely and ensured that most of the procurement was completed by around 2008.

Equally important factor towards effective operationalisation of NDRF as a professional force was availability of manpower and their proper training. As per the Cabinet approval each NDRF Bn was authorised 1145 personnel, but since the CPOs had their own priorities and constraints of manpower, availability of manpower in each of the NDRF Bns remained abysmal. The problem was worse compounded because skeleton manpower available in each of the NDRF Bns was being diverted regularly for routine law & order and IS duties directly by the MHA, sometimes even withdrawing the personnel midway from various Disaster Response trainings. In a series of meetings in the MHA, even with the Hon'ble HM, NDMA impressed on the importance of training of NDRF personnel and their ready availability for response during any disaster. However, MHA would invariably scuttle it with the contention of shortage of manpower for IS duties, maintaining that the NDRF personnel withdrawn for law & order duties would be made available as and when there is any disaster. Finally, in one of the meetings in early 2007, Hon'ble HM agreed that NDRF would be a dedicated force for disaster response only and directed the NDMA to send a proposal accordingly to frame the Rules for NDRF. Draft for NDRF Rules was accordingly sent to MHA by NDMA around mid 2007, but thereafter there was no feedback from MHA on the fate of this draft. Follow up inquiry on this issue by the NDMA brought out that MHA had sent it to the Ministry of Law for Hindi translation and Gazette notification. Informal enquiry from the Ministry of Law brought out that MHA had changed the draft rule mentioning that "at any point of time 50 per cent of NDRF personnel may be deployed by the MHA for law & order duties." This change, if incorporated in the NDRF rules, would have been a catastrophe for this force as in the normal course, 15 to 20 per cent posts in the forces remain vacant and 25 to 30 per cent are on leave or training. If MHA was authorised to divert 50 per cent of the sanctioned posts, the actual availability of manpower in respective NDRF Bns would have been reduced to 5 to 10 per cent

only and this force would have been no better than Civil Defence or Home Guards. It was a very disturbing situation with the fate of this force in total jeopardy.

In this situation of helplessness, there was no option left but to approach the then NSA Shri M.K. Narayanan to intervene in the interest of destiny of this force. Luckily, around the same time Hon'ble PM had convened a meeting of NDMA on October 25, 2007 in which besides NDMA Vice Chairman and Members, Home Minister, Finance Minister, Pr Secretary to PM, Home Secretary etc. were the invitees. Although NSA was not an invitee to the meeting, it was after tremendous persuasion that he agreed to participate in the same. In this meeting with Hon'ble PM, issues relating to NDRF were not discussed, as it was not in the agenda. However, since the NSA was fully briefed on this issue, towards the end of the meeting, he made a very strong case for NDRF, suggesting that it should be 'a stand-alone' force for disaster response only on the lines of NSG. He further mentioned that the NDRF 'personnel should be on deputation to NDMA and would not form part of the MHA's general reserve as additional force for law and order situations' Hon'ble PM approved NSA's suggestion. We felt that the issue was clinched, but this happiness was short-lived, in the sense that NSA's suggestion was dropped from the minutes of the meeting at the behest of MHA, on the ground that NSA was not an invitee to this meeting. I once again approached the NSA with this draft minutes of the meeting. A look at this minutes convinced the NSA of magnitude of problems NDMA was faced with in setting up this force. He immediately issued a letter dated 14th November, 2007 quoting his suggestions, already approved by Hon'ble PM in the meeting and adding that the minutes should be redrafted accordingly. Ultimately, it was this letter of the NSA that clinched the issue finally leading to Gazette notification of NDRF rules as a dedicated force on deputation to NDMA on 14th February 2008. Needless to mention that, but for pro-active initiative of the NDMA and support of the NSA at crucial junctures in framing the NDRF rules, this force would not have been what it is today.

In terms of teething troubles in effective operationalisation of NDRF at the ground level in the initial years, a major problem was to carry conviction with the State governments to use this unknown force during floods and other disasters. The States were used to requisitioning the services of Army during any disaster as they had confidence in their capability to handle the same. Therefore, they continued with the practice

of requisitioning Army, paying no heed to NDRF despite its teams being deployed at disaster sites. Another significant development was that in order to preempt NDRF's deployment, the local units of Army started rushing their columns to the disaster sites, even without being requisitioned by the local authorities. To overcome this problem of mindset of the state authorities, NDMA came up with two concepts related to deployment of NDRF. Firstly, 'pre-positioning' NDRF teams in sufficient numbers at likely disasters sites based on IMD weather forecast. Secondly, in case of disasters with no advance warning, 'pro-active' deployment of NDRF teams at disaster sites with utmost promptitude without awaiting approval for deployment from NDMA/NDRF Hqr. A few other initiatives taken by the NDMA to acquaint the State and district authorities about the capabilities of NDRF, included organising exhibitions and demonstrations by NDRF of its capabilities and resources mainly at State capitals and conducting community capacity building and awareness generation programmes relating to different disasters at district and block levels in States.

While multi-pronged initiatives were on to ensure acceptability of NDRF by the States, a major breakthrough came in terms of breach of the Kosi embankment near Indo-Nepal border and resultant massive flood in Bihar in August 2008. This massive flood could have led to huge devastation as there was no unit of NDRF in Bihar. However, as soon as the news of breach in Kosi barrage came to notice on 19th August 2008, NDMA directed two nearby Bns to despatch 13 motorised boats with 130 personnel which reached the affected site with utmost promptitude on 20th August. Thereafter, for the next one week the skeleton team of officers in the NDMA remained in round-the-clock contact with the Bihar government mobilising motorised boats from the factory in Noida and personnel from different Bns and airlifting the same directly to Purnea. Notwithstanding limited resources of NDRF in this initial phase, as many as 175 motorised boats and around 1700 personnel were deployed evacuating 1,05,000 affected people. But for very prompt and professional response from NDRF, thousands of lives would have been lost in this devastating flood. Impressed by the professionalism of NDRF, Bihar CM Shri Nitish Kumar wrote a complimentary letter to Hon'ble PM on 27th August 2008 requesting for sanction of a NDRF Bn for Bihar and offering land free of cost to NDRF at prime location near Patna. Taking cue from this, the Andhra Pradesh CM Shri Rajsekhar Reddy also wrote a letter with similar request to Hon'ble PM. Complimentary letters to Hon'ble PM from

CMs of two important states brought the NDRF to limelight for its professionalism and it has never looked back since then. The proposals from the two CMs were examined by PMO and MHA in consultation with NDMA and in 2009 it was decided to sanction two NDRF Bns in Bihar and Andhra Pradesh immediately in phase I and two more Bns in Uttarakhand and North East later in phase II. These Bns are located at Guwahati, Kolkata, Mundali (Odisha), Guntur (Andhra Pardeshi), Aarakonam (Tamilnadu), Pune, Vadodara, Bhatinda, Ghaziabad, Varanasi, Patna and Itanagar.

While most of the major teething problems of NDRF in its formative stages, as mentioned above, were sorted out in the first 3-4 years, certain equally important issues crucial to the force like land and infrastructure for each of the Bns, training in handling different types of disasters including CBRN emergencies, a state of the art training institute in disaster response and staff for the NDRF Hqr etc. have all been handled with reasonable degree of satisfaction. A significant impediment in planned growth of the force was postings of DGs with short tenures: as many as 13 DGs between 2006 to 2013. However, this issue was sorted out with posting of Shri O.P. Singh with a tenure of nearly two years, who was succeeded by Shri Pachnanda and then came the present DG Shri Sanjay Kumar. This has not only brought stability with long-term vision to the force, but has also changed the profile of NDRF significantly.

The mandate of the NDRF, as per the Act, is to provide specialist response to any disaster or threatening disaster situation. In discharge of this role the NDRF has so far responded to around 1,800 disaster situations evacuating around 6,00,000 people. Significantly, NDRF has taken on itself many additional roles going beyond its mandate. Most important among these is capacity building and awareness generation programmes for community. NDRF has so far conducted over 6,000 community capacity building programmes with nearly 60,00,000 people being its beneficiaries. It has also conducted around 1,500 Mock Exercises of various disasters in association with NDMA. Another important role that NDRF has taken on itself is the responsibility of training State Disaster Response Forces (SDRF) in different States. On yet another front, 246 personnel of NDRF have been trained in management of animals in disasters. These trained personnel have done commendable work in rescuing large number of animals stranded in serious flood situations in Bihar, U.P. and Kerala in the last couple of years.

As the founder Member of NDMA entrusted with responsibility of raising this force from scratch, it gives me immense satisfaction to see that this force has earned a name for itself for its professionalism in handling disasters not only within the country, but also abroad. Commendable work done by the NDRF in the triple-disaster at Fukushima (Japan) in March 2011 and in the Nepal earthquake in April 2015 will remain the high watermark of professionalism of this force. NDRF's exemplary dedication and compassion was widely appreciated by the Japanese Government, people, media and most importantly the Prime Ministers of both the countries. Following extract of the speech of the then Hon'ble Prime Minister of Japan at a meeting of the Indian Council of World Affairs in Delhi on 28th December, 2011 is an ample testimony of the high degree of professionalism and commitment of the personnel of NDRF:

“On March 11, an earthquake of unprecedented scale struck Japan's Tohoku region. Nations around the world, including India offered warm support for Japan. On behalf of the Japanese people, I would once again like to express my sincere gratitude for the assistance we received from Indian people in all walks of life, including heroic efforts of the National Disaster Response Force of the Government of India.”

Another milestone development in history of this force has been a recent Cabinet decision (August 9, 2018) raising the strength of NDRF from 12 Bns to 16 Bns. One could never imagine that this force would double its strength from 8 to 12 Bns in a short span of 13 years. The meteoric rise of this youngest central police organisation is an ample testimony of the fact that the NDRF conceived as 'specialist force' in the DM Act, has not only lived up to the expectations of the framers of the Act, but has excelled itself in its professionalism, commitment and dedication. This rapid stride of NDRF has primarily been due to the fact that it has endeared itself among the people in areas vulnerable to disasters and project itself with the image of 'Saviour in Disasters'.

The NDRF will remain beholden to Gen. (Retd.) N.C. Vij, Vice Chairman, NDMA and Shri P.K. Mishra, first Secretary of NDMA for their whole hearted support in its formative stages and also to NSA Shri M.K. Narayan for providing much needed support at the highest level at crucial stages. The painstaking efforts of Shivaji Singh, Dr. Kumar Raka, Vijay Lomish and other members of NDMA and NDRF Hqr has contributed immensely in making this force what it is today. NDRF is now poised for high trajectory growth and we wish best of luck to this force in its future endeavours.

Challenges of Disaster Management Act 2005 with Special References of Flood Control—Need for an Alternative Disaster Management Policy

Pankaj Kumar Jha*

Abstract

In India, the problem of flood is seen as one of the biggest challenges to achieve the goal of the way of governance. In Bihar, in flood related matter, the Patna Flood Conference (1937), the first National Flood Policy (1954), Kosi Treaty 1954, National Flood Commission 1980, National Water Policy 2002, etc. all describe the problem of flood by highlighting embankments and high dams as its solution. Important fact is that in this direction, Disaster Management Act 2005 and many other acts show the commitments to mitigation, preparedness, response and recovery in the flood management. In this regard, the paper is divided into four sections. First section, in the context of provisions related to flood in Bihar highlights the 2005 Disaster Management Act. Second section highlights discourse related to the debate of the flood as disaster vs flood as natural phenomenon. Third section presents a critical evaluation of the Disaster Management Act and the fourth section explores the possibilities of the alternative flood management policy.

Key Words: Flood Control, Flood Management, Embankment, Disaster Management.

* Pankaj Kumar Jha Ph.d teaches political science in the Motilal Nehru College, University of Delhi. Email: pankaj.j.du@gmail.com

National Disaster¹ Management Act, 2005² (DM Act 2005)

DM Act, 2005 was introduced in India in order to prevent disasters (e.g. flood, famine and earthquake) at the national level. It was an Act meant to provide for the effective management of disasters and for matters connected therewith or accidental thereto. The Act comprises a total 11 chapters. In the Disaster Management Act, 2005, the word '*disaster*' has been defined as 'a catastrophe, mishap, calamity or grave occurrence in any areas, arising from natural or man-made causes, or by accident or negligence which result in substantial loss of life, of human suffering or damage to and destruction of property or damage to, or degradation of environment, and is of such nature of magnitude as to be beyond the coping capacity of the community of affected areas.'

The objectives which have been clearly mentioned in Section 2 (e) of the DM Act, 2005 are:

- Prevention of danger or threat of any danger. Mitigation or reduction of risk of any disaster or its severity or consequences.
- Capacity building.
- Preparedness to deal with any disaster.
- Prompt responses to any threatening disaster situation or disaster.
- Assessing the severity or magnitude of effects of any disaster.
- Evacuation, rescue and relief.
- Rehabilitation and reconstruction.

The DM Act provides for a detailed action plan right from the Central Government to the district and local levels to design, implement and execute a disaster management plan (Sarkar and Sarma 2006). The Act provides for a three tier mechanism for disaster management that includes the National Disaster Management Authority,³ State Disaster Management Authority and District Management Authority (Mondal 2015; Jha 2015). According to the Act, a National Disaster Management Authority will function under the chairmanship of the Prime Minister. Similarly, the State Disaster Management Authority will be under the Chief Ministers and the District Management Authority under the District Magistrate. There will be a paradigm shift from the erstwhile relief-centric response to a proactive prevention, mitigation and preparedness-driven approach for conserving developmental gains and to minimize loss of life, livelihood and property (NPDM, 2009).

The DM Act, 2005 provides for the constitution of a National Disaster Response Force (NDRF) for the purpose of specialist response

to an impending disaster or in the aftermath of a disaster. A very interesting point in the Act is the role of the local authorities, both rural local self-governing institutions (Panchayati Raj institutions) and local bodies (municipalities, contonment boards and town planning authorities). These bodies will ensure capacity building of their officers and employees for managing disasters; carry out relief, rehabilitation and reconstruction activities in the affected areas; and will prepare DM plans in consonance with guidelines of the National Disaster Management Authority (NDMA), State Disaster Management Authorities (SDMAs) and District Disaster Management Authorities (DDMAs) [Sec 41 (a)].

This paper focuses on one specific disaster, i.e. 'Flood,' out of the disasters mentioned in the provisions of the DM Act and also tries to understand in detail, the participation and the presence of locals in the State sponsored policies and programmes.

Flood – Disaster vs Natural Consequences

Flood related perspective has been divided into established academic and in the world of activism. First perspective maintains that flood is a natural disaster and favours the State-led measures like high dam, sluise dam, embankments etc. to tackle the problem of flood. This perspective is also known as State sponsored hydrological perspective. The post colonial State maintains the modernization and developmental schemes as the very important part. (Guha 1988; Baviskar 1995) and on this basis only science has been favoured as a reason of State. (Nandy 1988: 1) As per this epistemology, the post colonial State has acknowledge the Bhakra Nangal project as the temple of modern India. (Singh 1997) At present, State has considered flood as disaster and through Disaster Management Act 2005 and through many other disaster acts State is trying to tackle and manage the problem of flood.

In opposition to that, there is a different perspective which maintains that flood is not a disaster, rather a natural phenomenon. Scholars like Dr. Dinesh Mishra, Anupam Mishr, Imtiyaz Alam favour this perspective. They maintain that disaster is something which comes without any prior notice, with no time and no date. In other words, which comes unnoticed and create destruction. In this way Tsunami, earth quake come under the category of disaster but not flood. And even if flood comes and creates destruction that destruction is not due to flood but due to the policies of State in creating in every possible place dams and embankments on the river and increasing the possibility of flood. Mishra

who doesn't maintain that all the forms of flood are disaster said that whole Bihar, including Mithila, have witnessed many forms of river flood. River water used to come till the farms and its stay is called flood. For agriculture, this is necessary. When, this water used to reach the residential areas, then it is called as *boh*. In 20-30 years, one time it may happen that water will reach the windows of the house and cattle get drowned then its called as *humma*. When people were not able to do anything and leave the cattle then it is called *saah*. Such situations when got more disastrous then called disaster. The local society had adapted itself to all these forms of floods. Till the time flood is not taking the most violent and disastrous form, they try to live with it. (Mishra 2010; Jha 2014).

Important matter is that if we add up these two epistemologies then we can clearly see that in the present time the destruction caused by the flood as disaster. Definitely, the local people maintain that the romanticism of the State for dams and embankments had transformed the flood as disaster.

Critical Observation

The following points highlight the critical evaluation of the DM Act and other policies.

The DM Act, 2005 in its chapter 2 had maintained that the meeting of National Disaster Management Authority will be scheduled when Prime Minister feels that meeting is required. Here, it should be noted that number of meetings required should be mentioned, but no such mention is there. (Ray 2005 : 487)

This provision has talked about many support agencies like National Disaster Management Authority, State Disaster Management Authority, Advisory Committees, Executive Committees, Legislative Committees, and sub-committees. However, despite the provision for their establishments, no special categorization of the works and functions which has to be taken by the specific committees is mentioned causing confusion and overlap in their authority and responsibilities.

This provision remained silent on the issue of women, tribes and other backward communities of the societies. The pregnant women and these groups need special and immediate attention. No special mention has been given.

Under this provision, the role and presence of non-governmental organization (NGOs) has been neglected. Here it is important that

within the Act, the role of the NGOs should have been highlighted and encouraged their participation at the local level.

Ineffective Disaster Management Policy⁴

What is available in the name of government intervention in floods, is the Disaster Management Act, 2005 of the Central government and the Bihar Disaster Management Act 2007. I believe that two aspects of the perspective of disaster management being used for floods need to be critically looked at—one in terms of policy of preparedness for floods and another for managing the situation afterwards. It should be noted that both the Central and the State governments declared flood a disaster and emphasized the formation of Central, State and District based authorities to oversee the issues. But both Acts have overlooked some significant aspects which include the clear definition and streamlining of the responsibilities and involvement of the local communities. The results were evident in what I observed during extensive fieldwork. I saw that very impressive designs were being made by the Central and State governments in the name of disaster management. Yet on the ground, the local people knew very little about these plans. I argued that until such time as the whole flood affected population is not involved in the system of disaster management, no special benefits will accrue to them. This shows up in the inherent flaw of the so-called disaster management agency that comes into action only after the floods come and cause devastation. Floods have a clear calendar and come gradually, yet no special attention is given to preparedness and planning prior to them. This aspect of disaster management needs to be radically changed.

The other serious flaw shows up in the management of the aftermath, after the rescue operations, by the National Disaster Response Force. Not only are local people not encouraged to participate, but also the officials involved with the management of the rescue and rehabilitation work in aftermath of the flood, have little sympathy towards the flood victims. People have little knowledge about the allegations in relief work of caste factors, local powerful networks, nepotism in distribution of the relief goods and services. Discrepancy and corruption are in evidence in the distribution of the polythene sheets, chuda, sattu, gur (jaggery) etc. sent by the State government in the name of disaster relief.

Need for an Alternative Flood Management Policy

In the formulation of the ideas of governance in Bihar, there is an urgent need to introduce and involve an alternative flood management policy. In this, four significant points are: First, the State government still talks about the 'flood control' to tackle the issues of flood, whereas the flood control does not fully articulate the problem. Rather than, 'flood management' should be the call and emphasis should be on 'how to manage i.e. flood management' instead of flood control. Under this, the transportation system, the school system and the communication system should be developed fully.

Secondly, in alternative flood management policy, with the perspective on scientific-hydrological techniques which includes high dam, embankments, ring dam, detention basin, catchment areas safety provisions like development and watershed etc., the local knowledge and understanding to be given equal importance. As per the local knowledge, efforts have been made to revive the ponds like conventional sources. But more such efforts are required. Ponds are called the kidneys of the land in flood affected areas. It should be kept in mind that the statist, dam-based ideology which has led in the attraction of the big-high dams are not highlighting the importance of ponds whereas the reality is in flood affected areas, these ponds work as check dams.

Thirdly, both the governments at the Central and State levels, should review their own flood related management policies and the special provisions. Under this, on one side, the warning/alert system prior to flood, flood forecasting techniques, floodplain zoning should be strengthened. On the other hand, in this whole process, the participation of local people must be ensured. This is extremely significant for any flood management framework.

Fourthly, the Bihar government need to give priority to serious issues like floods in its development-governance policy. And for that, the government should rectify its seven-point agenda and flood management should be included in the agenda-list. And, with this, along with the civil engineering, hydrological techniques, and other related scientific knowledge, in the flood affected areas, the knowledge of the local people who live, adjust and draw a balance between river and flood, that 'poor man's wisdom' should be given special and significant priority. In a real sense then, an alternative flood management will be designed and executed efficiently.

Conclusion

In totality we can say that Disaster Management Act, 2005 definitely is a serious and systematic legal way to set up a strong flood management regime in the direction of flood management. But under the microscopic analysis, it can be seen that till now it has failed to establish a strong perspective of people's participation in the discourse of flood management. This is the reason that still the absence and neglect of the women, tribes, dalit and other marginalized sections of the society, civil society and NGOs is very evident. This is the reason that there is a need to explore an alternative flood management policy, where in place of flood control flood management will be given prominence, and special focus will be to keep alive the traditional sources of meeting flood etc.

References

- Ahmed, Imtiaz (1999), 'Governance and Floods', *Seminar*478, pp. 34-41.
- Buchanan, Francis (1928), *An Account of the District of Purnia, 1809-10*, Superintendent's Report, Bihar and Orissa: Government Printing Press.
- Baviskar Amrita (1995), *In the Belly of the River*, New Delhi: Oxford University Press.
- Dhawan, B. D. (1989), 'Major and Minor Irrigation Works: Cost Aspects of the Controversy', *Economic and Political Weekly*, 30 Sept, pp. A-117-A-121.
- Government of India (1980), *Rashtriya Barh Ayog Report*, Department of Irrigation, New Delhi.
- Government of Bihar (2009), *Standard Operating Procedure for Flood Disaster Management*', Department of Disaster Management, Patna.
- Government of India (2005), *Disaster Management Act, 2005 National Disaster Management Authority*, Ministry of Home Affairs, New Delhi.
- Government of India (2013), *A Review of the Disaster Management Act, 2005, Report of The Task Force*, Ministry of Home Affairs, Delhi.
- Hardin, G. (1968), 'The Tragedy of The Commons', *Science*, 162:1243-8.
- Heller, P. (2000), 'Degree of Democracy: Some Comparative Lessons from India', *World Politics*, 52(04):484-519.
-(2001), 'Moving the State: The Politics of Democratic Decentralization in Kerala, South Africa and Porto Alegre', *Politics and Society*, 29(1):131-63.
- (2009), 'Democratic Deepening in India and South Africa', *Journal of Asian and African Studies*, 44(1):123-49.
- Jha, Pankaj Kumar (2014), 'Janer Kei Geet', (Hindi), *Jansatta*, 7 October.
-(2015), 'State and Politics of Flood Control, Case Study of

- Katihar District of Bihar', unpublished Ph.D thesis, Department of Political Science, University of Delhi, Delhi.
-(2015), 'Bihar Assembly Polls 2015: Seemanchal's Biggest Issue is Nowhere its Focus', *India TodayBlog*, Retrieved 20 April, 2018 from <http://indiatoday.intoday.in/story/bihar-assembly-polls-2015-seemanchals-biggest-issue-is-nowhere-its-focus/1/514>
-(2017), 'Barh se Jiyab, Bandh se Marab: Barh Niyantran ki Rajneeti' (Hindi), *Parthiman Journal*, The Center for the Study of Developing Society (CSDS), Delhi.
-(2018), The 'Local' in Bihar Flood Management—Policy and Politics (unpublished Paper), in Satyjit Singh & Ajit Menon (eds.), Volume on Local, Routledge University Press.
- Mishra, Anupam (1995), *Aaj Bhi Khade Hain Talaab* (Hindi), New Delhi: Gandhi Peace Foundation (GPF).
-(2008), *Tairne Wala Samaj Doob Raha Hai* (Hindi), New Delhi: Gandhi Peace Foundation (GPF).
- Mishra, Dinesh Kumar (1994), *Bandini Mahananda*, (Hindi), Patna: Samta Prakshan.
-(1997), 'The Bihar Flood Story', *Economic and Political Weekly*, August 30. Vol. 32, No. 35, pp. 2206-2217.
-(1999), 'Flood Protection That Never Was – Case of Mahananda Basin of North Bihar', *Economic and Political Weekly*, July, 17-23, Vol.34, No.29, pp. 2013-2018
-(1999), 'The Embankment Trap', *Seminar 478*, June. pp. 46-51
-(2000), *Boya Per Babool Ka –Barh Niyantran Ka Rahasya*, (Hindi), New Delhi: Prithavi Prakshan.
-(2001), 'Living with Floods', *Economic and Political Weekly*, July, 21-27, Vol. 36, No 29, pp. 2756-2761.
-(2002), 'Living with the Politics of Floods', Dehradun: People's Science Institute.
-(2005), *The Kamla – People and River on a Collision Course*, Barh Mukti Abhiyan.
-(2008), *Trapped Between the Devil and the Deep Sea – Story of the Kosi River*, People's Science Institute, SANDRAP.
-(2009), 'The Inevitable Has Happened', *Economic and Political Weekly*, September, 6-12, Vol.43, No.36, pp. 8-12.
- Nandy, Ashis (2003), *The Romance of the State and the Fate of Dissent in the Tropics*, New Delhi: Oxford Publication.
- Ostrom, Elinor (1990), *Governing the Commons: The Evolution of Institutions for Collective Actions*, Cambridge: Cambridge University Press.
- Perry, Ronald W. (2007), 'What is a Disaster?' In *Handbook of Disaster Research*, Havidan Rodriguez, Enrico L. Quarantelli, and Russell R. Dynes, eds. New York: Springer.

- Quarantelli, Enrico L. (Henry) (2005), 'A Social Science Research Agenda for Disasters of the 21st Century: Theoretical, Methodological and Empirical Issues and their Professional Implementation', in *What is a Disaster? New Answers to Old Questions*, Ronald W. Perry and Enrico L. Quarantelli, eds. New York: Springer.
- Ray, C. N. (2005), 'A Note on the Disaster Management Bill', *Economic and Political Weekly*, 40(47), 19 November.
- Renu, Phanishwar Nath (1977), *Rinjal-Dhanjal*, (Hindi) Delhi: Rajkamal Publication.
- Sarkar, Subhradipta and Sharma, Archana (2006), 'Disaster Management Act, 2005? A Disaster is Waiting'? *Economic and Political Weekly*, 41(35), 2 September.
- Scott, James C. (1998), *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*, New Haven and London: Yale University Press.
- Singh, Satyajit (2016), *The Local in Governance – Politics, Decentralization, and Environment*, New Delhi: Oxford University Press.
- Williams, Philip B. (1999), 'Flood Control vs Flood Management', *Seminar* 478, pp. 18-22.
- World Bank (1992), *Governance and Development*, The World Bank, Washington, DC.

Notes

- ¹. In the social sciences, systematic studies of disaster began shortly after the Second World War (Quarantelli 2005). There are mainly three approaches to defining disaster (Perry 2007; Perry and Quarantelli 2005). First, disaster can be viewed as being created by hazardous fleeting events (e.g. tornado, earthquake) that disrupt routines (Davies 2002). Second, geographers and geophysical scientists tend to define disasters as equivalent to natural hazards (e.g., Tsunamis). Third, disaster can be defined as a social phenomenon, such that disaster is socially constructed and rooted in the social structure of the community affected by a natural hazard (Quarantelli 2005).
- ². This section (Disaster Management Act 2005) of this paper is from the book titled Politics of local by Satyajit Singh and Ajit Menon (Under Publication).
- ³. This is very important that recently, National Disaster Management Authority (NDMA) has prepared a comprehensive plan named the National Disaster Management Plan, 2016, integrating prevention, mitigation, preparedness and response. The aim of the Plan is to make India resilient. The Plan significantly took into account the global trends in disaster

management and incorporated the approach enunciated in the Sendai framework for Disaster Risk Reduction, 2015-2030. In the Plan, stress has been given to bring a balance and coordination of participation between the Centre and State governments along with civil society, community based organizations and society. For details see (NDMP, 2016).

4. During my extensive Ph.D field work, I saw that be the Central and State government in the name of disaster management, too much colourful designs are sketching. But in reality, in ground the locals know very less about all this plans. Till the time, when the whole flood affected population is not getting attached to this system, no special benefits will generate. Second thing, only after the flood came and devastated everything, then only the so-called disaster management agency comes into action. No special attention has been given to preparedness and planning prior to floods, whereas the floods have a scheduled possible time and it comes gradually, not all of a sudden generally. In such cases, the government's flood management schemes seem to be ineffective.

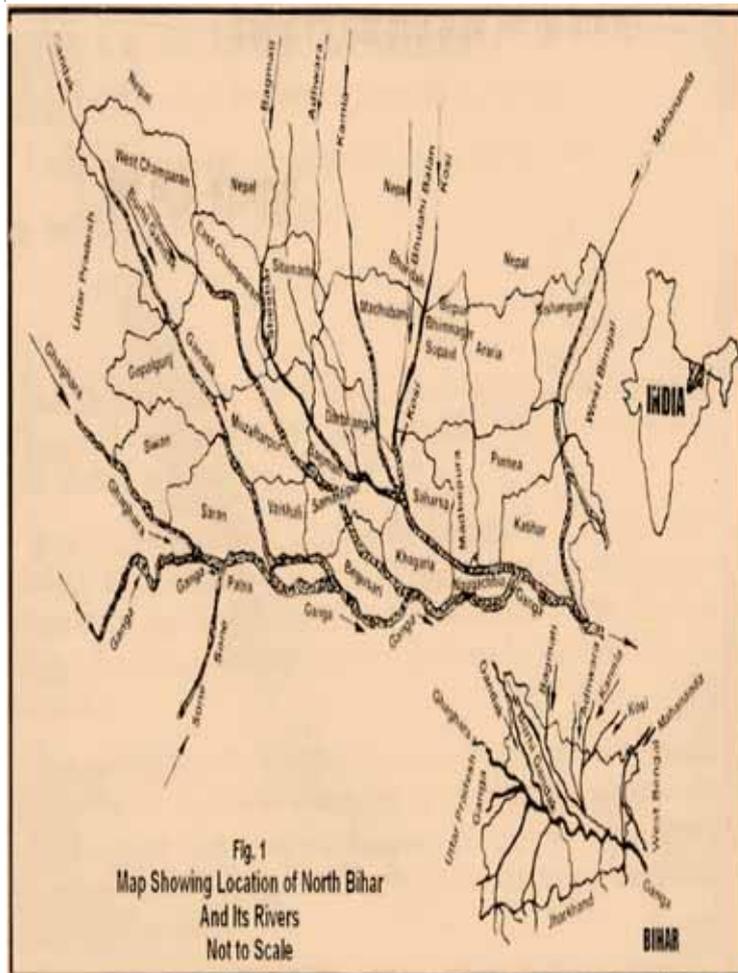
Revisiting Burhi Gandak Breach at Begampur in Samastipur District of Bihar-1986

Dinesh Kumar Mishra*

The Burhi Gandak

Burhi Gandak is one of the important tributaries of the Ganga in Bihar. It originates from Bagaha-1 block of West Champaran district from a village named Padarkhap, close to Chautarawa Chaur. The catchment area of this river spreads from Someshwar Range in lower Himalayas in the north, the Gandak (Narayani) in the west, the Bagmati in the east and the Ganga in the south. The river passes through the districts of East Champaran, Muzaffarpur, Samastipur and Khagaria where it joins the Ganga. The crow fly distance between Chautarawa Chaur and its confluence with the Ganga is in about 400 km, but because of the circuitous route of the river, the Burhi Gandak covers a distance of about 580 km. No other river of North Bihar has as many bends as the Burhi Gandak. The river has a total catchment area of 12,021 sq. km. of which 2,130 sq. km. is located in the hills. The river has 20 per cent of its catchment areas in Nepal and the remaining 80 per cent in India. Average rainfall in the basin of the river is 1283 mm but it ranges from 1041 mm to 1569 mm at different locations in the basin. The bedslope of the river between Bishambharpur to Chanpatia is about 4.72 metres per km but it suddenly changes to 17 centimetres between Chanpatia to Motihari. Beyond Chanpatia the bedslope gets further flattened to only 6cm per km.

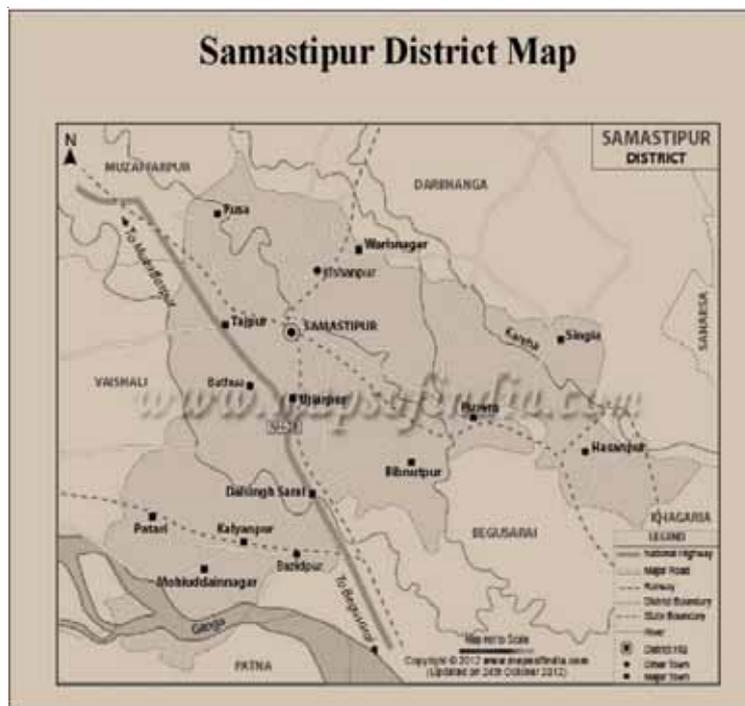
* Prof. Dinesh Kumar Mishra, Duplex-29, Vasundhara Estate, NH-33, P.O.: Pardih, Jamshepur-831020 (Jharkhand), Mobile: 09431303360.E-mail: dkmishra108@gmail.com



Water can only crawl at such a mild slope and it cannot flow. Thus, when flow increases in the river during monsoon season, the river inundates vast areas. When the river breaches its embankments the situation of the adjoining flood plain becomes precarious. This unstable river used to flood the plains that it passed through and it was

embanked in its entire length starting 1956 till late 1970s. Embanking of the river resulted in distortion of river behaviour and subsequently breaching of embankments almost immediately thereafter.

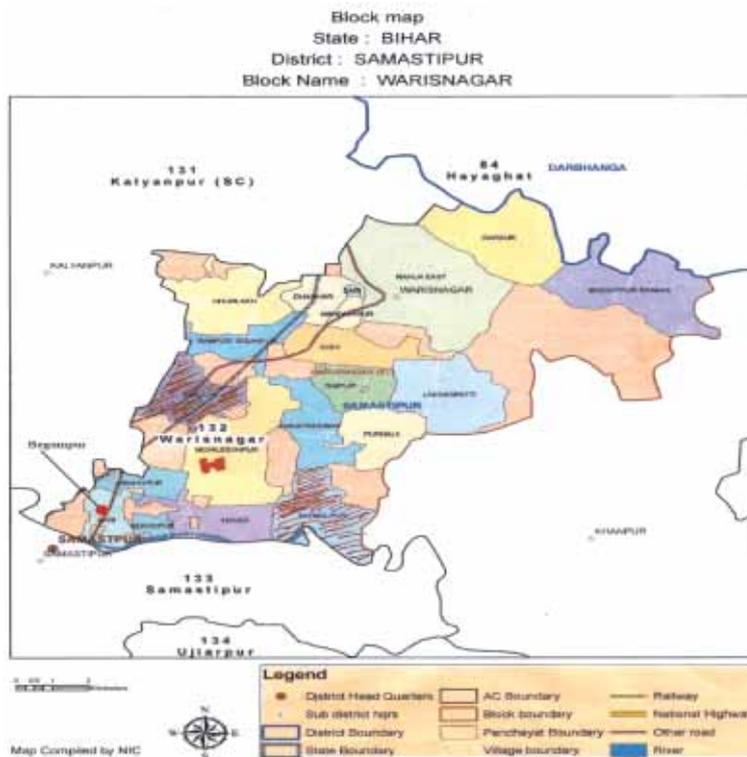
One such breach took place in the village Begampur in Samastipur district of Bihar, just opposite Magardahi Ghat, a busy market in Samastipur town, on the 2nd September, 1986 and the author was lucky to have visited the site on the place two days later on the 4th September. He visited the place once again on the 5th April, 2018, almost 32 years after the incidence. Here is the detail of the breach and the statements of some people who had suffered the disaster.



Prelude to Disaster, 1986

The river had crossed its highest flood level (HFL) recorded in 1984 and it was trying to overtop the embankments built on its either side, all along its length in Samastipur district. The situation was getting

worse since the last week of August and the District Magistrate (DM) issued warning to the people living on either side of the river to move to safety on the 2nd September. The river was threatening the embankment at many places close to the city of Samastipur and panic gripped the area following DM's announcement.



Despite all the administrative preparedness and efforts put in by the engineers of the Irrigation Department (ID) and warnings to face any eventuality, the left embankment of the river breached on the night between 2nd and 3rd September, 1986. River water emanating from the 250 feet long breach of the embankment engulfed the villages of Ramnagar, Begampur, Nagarbasti, Hansa, Kusaya, Bhole Jairam,

Noorganj, Ekdara, Daudpur, Daulatpur, Shekhopur, Mohaddipur, Satamalpur, Shiropatti and Saari by the morning of the 3rd September and slowly it spread over 50 villages in 25 Panchayats of Warisnagar and 10 Panchayats of Kalyanpur block and the entire area appeared like an ocean. There used to be a sluice gate in the left embankment of the Burhi Gandak near Begampur and the river water had started oozing out of the sluice on the 2nd September and this was an indication of an impending disaster that sent shock waves among the people nearby. The river was in spate for the past five days.

Subsequent to the Breach

After the breach, many families around the sluice ran for shelter with their children, cattle and whatever stuff they could lay their hands on, to the nearby railway stations at Muktapur and Kishanpur. Some families found shelter in high school of these villages. Those who could not move in time to safety, they risked their lives reaching the crest of the remaining portion of the embankment – totally helpless and on the mercy of rains under the open sky. Slowly, their number increased to about 1.5 lakhs. Army personnel were pressed into service on the 4th September to take care of the rescue and relief operations and it was in the afternoon of that day that dropping of food was started with the help of helicopters. This also led one to believe that the government was there and it cared for the people. However, it took about 40 hours after the breach that the presence of the government was felt and army boats were deployed for rescue operations. In this interim period, people had to fend for themselves without any external support.

Saving Samastipur Town was the Top Priority

Breaching of the Burhi Gandak embankment occurs with an alarming regularity at some point or the other but Magardahi Ghat is located within Samastipur in a very busy market area in Samastipur city. Should a breach take place here, the most crowded market place along with all the godowns will get submerged. Obviously, the district administration and the ID take no chances with the safety of the embankment here. In this years' flood seepage had set in Magardahi Ghat, Bishanpur and Begampur and the embankments were vulnerable at all these three points. Entire district administration and technicians of the ID were camping at Magardahi Ghat to ensure safety of the right embankment of the river and the 500 feet long weak stretch of the embankment was

protected with the help of earth and sand bags with round the clock vigil of the structure.

Rural Areas can be Flooded to Save the Town

Prior to Begampur incident, this embankment had breached at Shobhan Basant in 1974 and at Bichhulia in 1984. Whenever a breach takes place in the left embankment of the Burhi Gandak opposite Samastipur town, people living in that area nurse a feeling that the breach was caused by the establishment to protect the town. Such rumors were floating in the air and the flood hit people were raising questions that why all the labour deployed at the Begampur sluice was withdrawn from the site at 10 p.m. on the night of 2nd September, while they were working to protect the embankment at the sluice gate site? People were not informed till then that the embankment is likely to breach and the people should move to safer places. A deafening sound was heard from the sluice gate location around 0.30 hrs on the 3rd September following which the sluice gate was washed away and about 100 feet wide gap was created in the embankment and the entire area got submerged.

Whether the embankment at Begampur breached on its own or was it breached under some conspiracy to save the Samastipur town was not resolved. People maintain that the DM, Mr. A.K. Chugh, was a very sincere and upright person and never compromised on the quality of work. Some engineers and officers of the district administration may have had some grudge against him and planted such stories to defame him. The DM later brushed aside such allegations asking those who believed such rumors: 'what could you have done had you been in my place?' The flood victims maintained that the DM was keeping a close watch on the situation near Magardahi Ghat while the SDO was active on the left side of the embankment. Despite their hilarious efforts the embankment near Begampur village got breached and this became its first target and the people had to flee for safety in the dead of night with water chasing them from all directions.

Correspondences without Action

The embankment and 52 sluices on the embankment were in bad shape of maintenance and needed immediate repairs. This action might have put some people to inconvenience but the catastrophe of such a dimension following the breach in the embankment could have been averted. Such advices were never heeded to.

Flood victims of Begampur tragedy were no less critical of the inaction of the Chief Engineer based at Samastipur looking after flood control. The sluice gate that was swept away this year was in bad shape since 1980 and the concerned Executive Engineer, following the pressure from the public, had written to higher authorities two years ago for the repair of the sluice gate but his request was ignored. Newly posted Executive Engineer (1986) too had proposed the repair of the sluice (1986) as early as possible but no interest was shown by higher authorities and no funds were allotted for the upkeep of the sluice nor were any repairs undertaken. Some of them living on the countryside of the embankment were confident in asserting that the embankment has to breach at some point or the other every year resulting huge loss of life and property. They were convinced that the alarming regularity with which the embankments breach every year is not an accident but it happens by design.¹

Politicians Step in

Nearly two dozen members of the Bihar Vidhan Sabha including former chief minister Karpoori Thakur, Satya Narayan Dudani, Raghunath Jha, Umadhar Prasad Singh and Vijay Kumar Choudhary wrote letters to the Chief Minister and the Prime Minister demanding CBI enquiry into the entire episode, saying that gross irregularities and corruption was involved in protecting the embankments and maintenance of the sluice gates.²

Patliputra Times, published from Patna, in its editorial titled, *Bandh Tootane ka Antheen Silsila* (Endless incidence of breaches in Embankments) dated 5th September, 1986 writes: 'We all know that rivers start swelling with the onset of monsoon in the State followed by the news of suspected breaches in the embankments. Then only building materials like boulders, sand bags, rods etc. are transported to the vulnerable site on the embankments to strengthen them. The result is that the job is never completed in time and the floods appear. Everything then is consumed by the river. This happens because it takes lot of time to allocate funds necessary for carrying out the repairs. The delay is also caused to ensure that the engineers and contractors get time to deliver the bribe package at right courts. Then the embankment breaches and the engineers and contractors stand to get additional benefit because everything is booked as swept away due to the breach and they get the full payment reimbursed to them as per rules. Everyone – from small and big contractors, engineers and even up to ministers are involved in

this game. If so, then why breaching of an embankment should not be treated as a productive enterprise?’

Second Wave of Floods

In the meanwhile, heavy showers poured in East and West Champaran on the 14th September, 1986 and that led to another round of floods all along the Burhi Gandak River, whose flood level started rising, that included Samastipur also. By 20th September, 1986, floods were repeated in about 190 villages in Warisnagar and Kalyanpur blocks of Samastipur. The Burhi Gandak was flowing 187 cms above the red mark in Samastipur and 207 cms at Rosera. After the first round of the floods, the train services that were suspended between Darbhanga and Samastipur and resumed with great difficulty was suspended once again on the 19th September. Flood water was flowing over the road near Muktapur and the traffic on Samastipur-Darbhanga road had to be suspended. The road between Samastipur and Ilmasnagar was inoperative still after the breach. Army had to be called in once again on the 21st September, 1986. A contingent of 55 military engineers and supporting staff was deployed at Begampur for about a fortnight. The army men stayed till the water level within the embankments went down to manageable limits.

The Second Bihar Irrigation Commission Report (1994)³ writes that the Burhi Gandak had remained above the danger mark for 21 days in Sikandarpur (Muzaffarpur), 31 days in Samastipur, 41 days in Rosera (Samastipur) and 22 days in Khagaria. Depths of flow of flood water was above two metres in Samastipur and Rosera. Chief Minister Bindeshwari Dubey had to take another round of aerial survey and he had to issue orders for taking up massive relief and rescue operations in the affected area on war footing.

Technical Committee Appointed to Ascertain Role of Engineers

The State Government appointed a high level committee of engineers to look into the causes of the breach at Begampur subsequently. Flood victims, however, did not take very kindly to this step of the government and why a team of engineers alone should enquire into their own failures, they were asking. Such an enquiry will only be an eye wash and a tool to absolve the erring engineers of their faults. Even if the responsibility is fixed, it is unlikely that any action will be taken against those guilty

of misconduct. Should any action be taken against any engineer, their association will come forward to protect him and the Government will have to retreat and the whole process of enquiry will become a farce. Even if some action is taken and pursued to its logical end, it was not going to help the breach victims, who have lost all their worldly possessions during floods.

This had precedence in recent years. There was a breach in the eastern embankment of the Kosi at Navhatta in Saharsa district of Bihar. Flood victims refused to take the Government relief and demanded compensation of the losses that they incurred due to negligence of the Water Resources Department. They went up to the Supreme Court and got a ruling that they should be paid the compensation as desired within five months of issuance of the order. That was the end of the entire episode. The victims of this breach on the Kosi did not get anything other than flattened rice, jaggery, polythene sheets and some token grant for building their huts despite filing a contempt petition in the Hon. Supreme Court.

Neither Relief nor Plugging of the Breach-March, 1987

It is customary of relief politics that involves blaming someone or some institution of the debacle, demand relief, charge those involved in relief distribution of favouritism, corruption in distribution, indifference of the Government to the problems faced by the people, shedding crocodile tears by politicians in power, giving assurances without ever meaning it and so on. The situation that the breach victims of Begampur silently faced during rains and the winter season can only be imagined. In normal course, water starts receding towards the end of the month of October and by the end of March the land gets dried. The DM of Samastipur on the 25th January, 1987 wherein he said that: 'A retired line, estimated to cost Rs. 53 lakhs will be constructed at Begampur where the Burhi Gandak had breached its embankment last year. Some 12-13 houses and a mosque will be affected due to this construction and all efforts will be made to protect them and compensation will be paid to the families located within the main embankment and the retired line and they will be suitably relocated outside.'⁴

The statement of the DM suggests that no rehabilitation of the worst-hit flood victims was done till January 1987. Also, the establishment had not done anything for the benefit of the flood victims who were located outside the proposed ring bundh. It had also not done anything for the

benefit of those whose land was sand-cast following the breach. It is likely that those close to local politicians might have been benefited some way or the other and managed some grants but it is certain that no construction work had started till 18th March, 1987 as the entire matter of rehabilitation was stuck between the correspondence of the officials of the administration and the ID. The DM had sent a wireless message to the Irrigation Commissioner, Engineer-in-Chief of ID and the Principal Secretary of the Chief Minister on the 15th March, 1986 that funds should be sanctioned and made available for the construction of the retired line and repair of the sluice gate at Begampur on the Pusa-Bachhuali embankment in Warisnagar block of Samastipur district within a week. He also cautioned the Government that if the construction does not start immediately, there is a possibility of law and order situation to deteriorate and also that Warisnagar and Kalyanpur block may face problems of inundation similar to one faced last year.⁵

Aryawarta-Patna writes in its editorial titled *Idle Irrigation Department* in its 20th March, 1986 issue, 'the message of the DM clearly indicates that he had to intervene because the efforts of the concerned officials of the Irrigation Department have failed. Based on the experiences of the past years, it is not difficult to conclude that the Irrigation Department delays the process of sanctioning of funds needed for flood protection works almost every year. The result is that despite spending so much money of the government not only the expected benefits are not achieved; the chances of spending money on all right and wrong works by the department also increase. Because of the inefficiency of the Irrigation Department, the opportunities of corruption increase automatically...It is also amazing that the decision is kept in abeyance in the name of receiving the recommendations of the High Level Technical Experts Committee, while the department itself does not care about these recommendations. The committee had recommended a sum of Rs. 25 crores for the Kosi in 1987 for strengthening the embankments but the Irrigation Department has cut the budget by ten crores. In that case what is the need for the recommendations of the High Level Experts Committee? Why should there be delays in initiating the works in the name of the committee? The Irrigation Department is thoroughly conversant with the problems of annual floods in North Bihar then what is the reason for its indifference, laziness and inactivity? Should it not be concluded that the entire planning of delaying the process is done willfully keeping one's share in the booty.'⁶

As anticipated, the work was not started in the month of March, 1986.

Begampur Revisited after 32 years–April, 2018

The author visited this location in 2018 once again after a lapse of about 32 years and met some people there. My first encounter was with one **Akhtar Ali** of Begampur who is in his late sixties and is a retired train driver. This is what he told me.

“This is an incidence of 2nd September, 1986 when the embankment breached in the midnight. There used to be a sluice gate here close to our village. The level of the river was flushing with the top of the sluice and seepage started near the bottom of the sluice. I had gone to Narkatiaganj in West Champaran with a train. Flood was there also. There was no mobile in those days but I could manage contacting my home on a landline and learnt that something was wrong here and my mother asked me to return immediately. We had a very good harvest of 84 mounds of paddy that year and in my absence my mother had opened the bags and kept all the stock in a *kothis*. On my return on the 2nd September, 1986 the first thing I saw were the empty paddy bags and asked my mother where the paddy was? She told me that it was in *Kothis*. I scolded her that river is here on our head and what it will do the next moment nobody knows. I was angry and went on to the roof and slept there. In the midnight someone woke me up saying that water is oozing out of the sluice and situation is too bad. I woke up my servant and told him to untie the buffalos and the bullocks and take them on to the embankment. My father was old and I sent him too on the embankment. My tyre cart was also here and that too was moved to the embankment. I was last to go to the embankment and might have gone for a distance of 200 metres only when I heard voices, ‘Run away, run...the embankment has breached.’ By the time I could come back home, the boundary wall of my house had collapsed and water had started entering the house and it took no time to come up to the sill level of the windows. There was an electric pole in front of my house and I got it disconnected to avoid current.

I rushed with my wife and daughter to the roof. Thereafter it was total chaos. My elder brother had gone for his work. His supervisor came to know about the situation here and he told my brother that village is getting submerged and you are working here. Go back immediately to your home. As he arrived here, there was swift water between him and our home here. I told him to go back to some safe place which he did.

There was a bridge here nearby on the road but the department had packed it with sand bags so that water does not spread over a large area. It collapsed the next day under the pressure of water. The level had risen but it remained near our window. When the water level came down, I went to a grocer nearby and asked him for some biscuits and he responded

by saying that he did not have any. With great persuasion and even threatening he gave me a canister of biscuits. That was a great help to us.

Next day, a retired train driver friend of mine, Ali Ahmad Saheb who had his relatives in our village sent two small boats to us. I kept one and the other went to his relatives. This improved our mobility. I went to the embankment to see our children and sent my elder son to market with the boat to get essential stuff like tea, sugar, etc. needed for fooding. We all came back to our home with the help of boats and camped on the roof. Cooking was done there. The boat was tied to a tree here and it was also used for defecation. We were lucky to have a flat roof where we could spend our time also but those who had huts and if it was not swept away, they were in real trouble and were at the mercy of 'Allah'. If there was a Chowki in the house, one could save his life sitting over it but if it was outside the house then what route will it take during flood is again decided by 'Allah'. There was a mosque in our neighbouring village that was swept away. It is now located within the ring bundh. The locals built it again by collecting contributions from the community. A girl in our village thought when the water was rising following the breach that she will go to the field and pluck some maize from there. She went to the field but never returned from there. She was swept away in gushing water. We went looking for her in our boat only to find her dead body. We brought her body but the grave yard was under water. We arranged for her coffin somehow. Namaaz for her last rites was performed and she had to be buried under water by tying her body with a heavy stone."

Mirza Afazal Beg, Village Begampur, Block Warisnagar

Our house was located very close to the embankment but on the riverside. This embankment was built in 1956-57. Our house was a mud house which meant that river never came closer to us in the past. The sluice gate that you are talking about had thoroughly dilapidated and it was in bad shape. Aravind Chug, a thorough gentleman, was the DM and he used to camp in our village to supervise the construction. The day the embankment breached, we were on the embankment. SDO came to us in his official jeep and asked us to move away from the place. A man from his jeep came out and went towards the sluice and came back. After sometimes there was a deafening sound and the sluice gate blew off. The top slab of the sluice fell here where you are sitting now. We had some more years to live otherwise we had been dead that night. It is reported that the SDO under whose instructions the sluice gate was blasted became mad later.

Mahendra Mahato, Begampur, Block Warisnagar.

The first house that the Burhi Gandak had hit and demolished was mine. We were sleeping when my daughter shouted that the embankment has breached. Run away... There was a panic. I picked up my children, untied bullocks and ran for safety to the embankment. Ours was a settlement of about 200 families. Our village and houses – all were ruined. One son and one daughter of mine were lost in the melee as we were running towards the embankment. Both of them had taken the road and went towards Samastipur. I had to worry about myself and my missing children. It was not known whether they were surviving or had died. After about three days I was told that two children have been spotted in Mathurapur. We went there and found them there. Nobody in the family had taken any food during those three days worrying about the children.

Vijay Kishore Singh, Village Sari, Block Warisnagar

There was a big noise around 11 pm on the night of 2nd September that the embankment has breached. I came out from the house to see in which direction the water was flowing and found that the water was just crossing the road. Those days the level of the road was almost one and half feet lower than what it is today. I returned to my home. In the morning when I returned to the crossing, I found the current was too swift and it was not possible to walk on the road. Water was flowing through the school down there. Whatever came in its way after the breach was simply swept away. Fortunately, my house was spared and that gave shelter to many who had been uprooted from their homes. There was no movement for about a week and it resumed only when the government boats arrived. Relief came one week after the arrival of boats. We were virtually confined to our houses and did not know about the plight of others. No trace of the houses and crops was found where the embankment had breached.

We had not heard any sound when the embankment breached but a vehicle of the department did pass through this place announcing that the embankment has breached and everybody must move to some safe place. Blasting sound may be a rumor but the administration was fully aware that the embankment was weak and could give way any moment. Had it not breached here then its next destination was only on the other side of the river in Samastipur town. The gate of the sluice and rest of the steel frame of the sluice gate is not yet traced. The sediment that accompanied

the flood water covered the Shekhopur village fully. Later, if anybody needed sand, all that he had to do is to go to Shekhopur and collect it free of cost. This sand came very handy in filling all the ditches around. Lot of construction work followed this breach and sand for that construction was availed only from Shekhopur. There was no agriculture in Shekhopur for three years after the breach at Begampur because sand in the field would not permit farming.

Conclusion

It was a welcome sign that the people remembered the incidence after 32 years of its occurrence. Most of them have their own houses now, the roads have improved and access to amenities has increased. Much difference has been noticed after the adoption of the National Disaster Management Policy in 2005. On the flip side, population has increased and so has unemployment. Migration to greener pastures is rampant and for prolonged duration. Breaching of embankments is less common but this is not because the ID, that is renamed as Water Resources Department, has improved its working. It is because the rains have been hit adversely in the State and one rarely gets floods as it used to be before 2007. Climate change must be the reason behind this. Kusaha breach of the eastern afflux bundh of the Kosi in Nepal in 2008 is an aberration as that was caused due to negligence and not due to excess rainfall or excess water in the Kosi. One can only hope that things improve in future.

References:

1. Singh, S.N; Samastipur Tragedy-Facts and Fiction, The Indian Nation Patna Edition, September 10, 1986, p1 and 6.
2. Pataliputra Times-Patna, समस्तीपुर तटबंध टूटने की सी.बी.आई. से जांच कराने की मांग, 11th September, 1986.
3. Report of the Second Bihar Irrigation Commission, Vol. V, Part-1, Appendix-3/70, 1994. P-338.
4. Aryawarta-Patna, Monthly Press Conference of the DM of Samastipur; 25th January, 1987.
5. Aryawarta-Patna, Monthly Press Conference of the DM of Samastipur; 3rd February, 1987.
6. आर्यवर्त-पटना, 'निष्ठी सिंचाई विभाग', सम्पादकीय, 20 मार्च, 1987.

Odisha has Successfully Reduced Heatwave Deaths, but the Challenge is Far from Over

Ranjan K. Panda*

Heatwave incidences and impacts are increasing around the globe. In India, heatwave has been a major concern for more than two decades now. If we go by latest studies, climate change is all set to increase the spread the heatwave related devastations further. A recent study by Prof. Elfatih Eltahir of MIT and others, found out that heatwave could impact the exposure of 70 per cent of Indian people to extremes of 32 degree wet-bulb temperatures by 2100. That's a 3500 per cent increase. Further, the study says that 2 per cent of Indians will sometimes be exposed to the survivability limit of 35 degrees. This will have multiple impacts, going beyond only the people who are directly be affected. As Prof. Elfatih puts it: "With the disruption to the agricultural production, it doesn't need to be the heatwave itself that kills people. Production will go down, so potentially everyone will suffer."

Another study, conducted by Vimal Mishra and others at the Indian Institute of Technology (IIT) Gandhinagar, published in December 2017, says that the frequency of severe heatwaves in India will increase 30-fold by 2100 under a 2 degree C warming scenario and almost 75-fold under a business-as-usual scenario. According to Vimal, heatwaves like 1998 are projected to occur every year in the late 21st century under a business-as-usual scenario.

Odisha has been praised globally for its various disaster coping actions including that of reducing deaths due to heatwave. From more

* Ranjan K. Panda is Convenor, Water Initiatives Odisha and Convenor, Combat Climate Change Network, India. Email: ranjanpanda@gmail.com

than 2000 deaths in 1998 due to heatwaves, the state has been successfully able to reduce this to two digit figures, though not to zero yet. We, as part of our “Beat the Heat” campaign revisited the heatwave related disasters the state faced in the year 2015 in which extreme heatwave conditions prevailed in the state.

The Year in Focus

2015 was one of the hottest years in recorded history and it saw lot of deaths and devastations from across the globe. India’s Union Ministry for Science & Technology and Ministry of Earth Sciences, informed the Parliament on 5th of August that year that almost 2037 people had died due to heat wave in the summer. In fact, studies by National Oceanic and Atmospheric Administration (NOAA) found out that this year’s May was the hottest and the combined average temperature over global land and ocean surfaces for May 2015 was the highest in a 136-year period.

The devastating effects were largely attributed to El Niño. NOAA had said that El Niño is driven by warm surface water in the eastern Pacific Ocean. Such a weather pattern is known for causing extreme droughts, storms and floods could become one of the strongest ever. That year’s El Niño was the biggest in over 15 years. The Secretary General of World Meteorological Organization (WMO) had then said: “Because of climate change, heatwaves may be hotter and more frequent than usual, and more places may be at risk of flooding.”

The Intergovernmental Panel on Climate Change (IPCC) report of 2014 highlights that mean surface temperature of the globe has risen by 0.850 ± 0.180 C. All India mean temperature has risen nearly around 0.60 C over the last 110 years. Using daily maximum temperature data of 103 stations uniformly distributed over the country for the period 1961-2010 from Indian main land during the hot weather season (March to July), it was observed that many areas of the country (north, northwest, central and northeast peninsula) have experienced more than eight (8) heatwave days on an average per season. The recent decade 2001-2010 happens to be the warmest decade for the country as well as for the globe.

That year (2015), while disclosing the heatwave death figures, India’s Union Minister informed that upon prediction of the heatwave conditions by the ESSO-IMD, various State Governments have a

system of giving wide publicity of Dos and Don'ts through advertisements in print and audio-visual media and opening up of drinking water camps at identified places in rural and urban areas to mitigate the impact of heatwaves. The schedule of National Rural Employment Guarantee Scheme (NREGS) workers is adjusted to avoid exposure to extreme hot weather duration periods.

Odisha's Experience

In the year 1998, when 2042 people died of heatwave in the state, the entire nation was shocked. For the first time, people from the coastal areas died of sun stroke. The government of Odisha took it seriously and stepped up its adaptation efforts to prepare the state against heatwaves. The heatwave conditions in the state have increased over the last two decades, partly because of the global warming and partly because of local development that have been happening at the cost of the greens, but the government has successfully reduced deaths caused by heatwave conditions. The following table puts that in figures.

Heatwave deaths reduced	
Year	Number of Deaths
1998	2042
1999	91
2000	29
2001	25
2002	41
2003	67
2004	43
2005	237
2006	21
2007	48
2008	71
2009	93
2010	109
2011	23
2012	97
2013	08
2014	32
2015	67

Less Deaths but Increased Impacts

As the above table confirms, deaths due to heatwave has decreased but has not reached zero yet. Then, death figures are not the only indicators to look at the increasing impacts of the heatwave that is being further exacerbated by climate change. There is yet no data available to understand the exact number of people and animals who are suffering from heatwave and related woes. As part of our study we collected case studies of heatwave victims and tried to understand the effectiveness of government initiatives.

The state undertakes a number of preparedness/preventive activities for management of the heatwave situation like IEC activities through mass media for general awareness of the public, mitigating water scarcity problems, special arrangement of treatment of heatstroke patients in government hospitals at different levels, rescheduling of working hours for labourers, provision of drinking water at work sites, restriction on plying of buses during peak hours, re-scheduling of timetable of the school, closure of schools in advance for summer vacation, etc. The Odisha government's heatwave preparedness efforts centre on the objective of 'no human casualty.' The government starts its preparedness efforts at the end of February and beginning of March each year. Schools, colleges and government offices are asked to open only in the morning hours. Instructions are given for shunning public transport during peak heat hours of the day, between 12 noon and 3.30 pm. Construction and other workers and colleges shift to early morning sessions. They open at 6.30 am and end by 12 noon.

Construction works that involve working out during the day time are also restricted. Under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGS) the working hours for wage labourers are shut from 11.30 am to 3.30 pm. Many private organisations also follow the morning office hours. Construction works do shift to evening and night shifts. Special instructions are given to public health facilities for treatment of heatwave patients with priority. Hospitals and dispensaries keep ice slabs ready to treat stroke patients. Panchayats across the state open water booths. Water booths are also opened at several places in cities, on highways and many places. Several charitable organisations, youth clubs, private organisations and others also open water booths.

Odisha has earned praises and appreciation from across the nation and globe for its successful awareness programmes as well as preparedness efforts to prevent heatwave deaths. However, the state still does not have a mechanism to assess the impacts of heatwaves on other species.

During our study, we met family members of several heatwave victims, civil society organisations working with people, officials in charge implementing government schemes and others concerned. It was found out that the existing schemes only compensate victims for death and there is no way the heat stress victims and their related income loss and health loss costs are compensated.

As such also assessment of heatwave related deaths is a cumbersome and confusing exercise and that means the poor and marginalised, who are often the victims of heatwave deaths, have to face lot of hardship to get the benefits. Then the compensation amount is not sufficient.

Even the government officials who are in charge of assessing the death and providing the compensation themselves find it difficult sometimes to be able to provide the support despite having the intentions to do so. In many cases, people's own social taboos and belief systems prove hurdle in the process of filing compensations. There are many societies/communities who still don't want their deceased family members to go for post-mortem which is essential to avail the heatwave related compensation.

Due to the complicated process or due to any other reason, when officials find that they are unable to provide benefits to heatwave victims under the linked scheme, they try to support the family members from other schemes. On humanitarian grounds that looks good, but that does not address the issues and challenges faced by the heatwave compensation scheme.

Despite government claims, many health centres and other facilities in rural areas are found lacking in necessary facilities and supplies to treat heatwave victims. That is same with peri-urban locations as well. While there is a general agreement among many people in urban areas about the effectiveness and outreach of awareness on heatwave preparedness, in many rural pockets the general public are not aware of the same. The aged, daily wage labourers and people from poor communities suffer most deaths due to heatwave.

Suggested Actions

Time the government recognised heatwave as a larger menace and did not limit the major action only to compensate sunstroke deaths. The government has certainly made some tremendous efforts in reducing heatwave deaths, however the debate over heatwave cannot just be limited to preparatory efforts. Coping mechanisms should be linked to larger climate change mitigation efforts.

The government needs to initiate effective monitoring of heatwave conditions and deaths of the animals, both near human habitations and inside the forested areas. Industrialization, mining and urbanization process in the state must consider integrating green policies and practices. Forestry, including urban forestry, needs to be promoted and strengthened. Desertification and land degradation process needs to be arrested with strategic and strong interventions. The state climate change action plan needs to be further strengthened, monitored and evaluated on a regular basis.

Response for Chemical Industrial Disasters

Dr. Muzaffar Ahmad*

The chemical industry is one of the oldest industries in India. It not only plays a crucial role in meeting the daily needs of common man, but also contributes significantly towards the industrial and economic growth of the nation. The Indian chemical industries comprise small, medium and large scale units. The chemical industry which includes basic chemicals and their intermediates, petrochemicals, fertilizers, paints, pesticides, drug & pharmaceuticals and hydrocarbon substances is one of the most diversified industrial sectors covering more than 70,000 commercial products, relating to organized as well as unorganized sector in the country.

It is a known fact that in India, the increasing use of hazardous substances by industrial units with inadequate safety infrastructure has raised serious concern over industrial plants, safety of workers in factory premises and home workers operating from small establishments, HAZCHEM vehicles, residents of nearby settlements, adjacent buildings, occupants and the surrounding environment (including livestock, flora and fauna). There are numerous cases of release of the hazardous substances into water or in the air, may travel long distances and contaminate water supply, air, soil, crops and livestock, making the affected area uninhabitable for humans and livestock. Therefore, extreme care is warranted in handling of chemicals at all stages of manufacture, processing, package, storage, transportation, sale, use and disposal.

India, a growing economy and world's largest democracy, has population exceeding 1.21 billion. Out of this huge number, 63.6 per cent (*Ref. OSH in India: Now and Future, by Shyam Pingle, Industrial*

* Dr. Muzaffar Ahmad, Senior Lecturer, Public Health Foundation of India and former Member, National Disaster Management Authority of India.

Health Country Report 2012) form working age group, which comes out to 769 million workers. The work force involved in the chemical and allied sector is quite complex in the current scenario. Of the total employed population in the country, about 17 per cent (*Ref, OSH Working Group Report for 12th Plan 2012-17*) represents the organized sector, mainly from manufacturing industry including chemicals, mining, IT, services and docks and the remaining 83 per cent represents the unorganized sector, primarily covering beedi and cigar, shops and establishments (including chemicals), agriculture and construction sector. So the work force covered in chemical domain (which is at risk) involves organized and the unorganized sectors both.

And in terms of the number of formal units, it is estimated that there are currently over 1864 Major MAH (*Ref – MOEFCC Report, 2015, GoI*) units, spread across 26 States and 3 UTs, covering 47 per cent Districts of India (302 out of 640). These units are handling a large number of chemicals as raw materials, in processes, products and wastes, with flammable, explosive, corrosive and toxic properties. Apart from it, the other small and medium sized industries and new industries are also establishing at a rapid rate. The chemical (Industrial) accidents can occur any time due to lack of safety measures, technical faults, the nature induced effects or due to human error. These disasters are low in frequency but are very significant in terms of loss of lives, injuries, environmental impact and property damage. The implementation and adoption of appropriate methods for handling the hazardous chemicals and hazardous wastes is mandated.

India has witnessed the world's worst chemical (industrial) disaster "Bhopal Gas Tragedy" in the year 1984. The Bhopal Gas Tragedy was the most devastating chemical accident in history, where over 2500 people died due to the accidental release of the toxic gas Methyl Iso Cyanate (MIC), is still fresh in our memories. The Bhopal disaster is also known as the "*Hiroshima of Chemical Industry*". Such accidents are significant in terms of injuries, pain, suffering, loss of lives, damage to property and environment. India continued to witness a series of chemical accidents after Bhopal had demonstrated the vulnerability of the country.

Apart from it, our country has faced five major chemical accidents, that took place during the last 30 years include an explosion in IPCL Gas Cracker Complex at Nagothane in Maharashtra (1990); vapour cloud explosion at HPCL refinery at Vishakhapatnam (1997); fire in an oil well in Andhra Pradesh (2003), IOCL Fire Tragedy of Jaipur (October

2009) and GAIL NG pipeline leak in East Godavari (2014). Only in the last decade, 130 significant chemical accidents were reported in India, which resulted into 259 deaths and 563 major injuries.

Safety Provisions to Address Chemical Risk

India is amongst very few countries of the world, which have enshrined the right to live in a clean and wholesome environment as a fundamental right. The Factories Act was enacted in 1948, for ensuring safety, health and welfare at the workplace. Recognizing the need to mainstream environmental and chemical (industrial) concerns in all developmental activities, a separate ministry—the MoEF (Ministry of Environment & Forests) was created in 1980, and was declared as a nodal ministry for management of chemical (industrial) disasters. Chemical Industrial Disaster Management (CIDM) received greater emphasis the world over only after the Bhopal disaster in 1984.

The regulatory framework on chemical safety in India, can be traced to the Factories Act, 1948 and chemical class-specific regulations like the Explosives Act, 1884; the Insecticide Act, 1968; and The Petroleum Act, 1934. Later, an umbrella Act, the Environment (Protection) Act, 1986, (EP Act) was enacted, which also deals with chemical management and safety. Under this EP Act, two rules have been notified for ensuring the chemical safety namely, (a) Manufacture, Storage & Import of Hazardous Chemicals Rules 1989 (MSIHC), amended in 1994 & 2000 (b) Chemical Accidents (Emergency, Planning, Preparedness and Response) Rules, 1996 (EPPR Rules). In 2005, the Disaster Management Act came into existence, which literally helped in paradigm shift, by changing the approach of stakeholders from post to pre-disaster mode. And after the prolonged deliberations, DGFASLI (Technical arm of Ministry of Labour & Employment, (Government of India) came out with National Policy on Safety, Health and Environment at Workplace in Feb 2009, which is also considered to be a major milestone for the organized sector.

A number of regulations covering the hazardous substances handling, transportation, liability, insurance and compensations were enacted in parallel, including Static & Mobile Pressure Vessels Rules 1981, Explosives Rules 1983, Gas Cylinder Rules 2004, Motor Vehicles Act 1988 and Central Motor Vehicles Rules 1989, Hazardous Wastes Rules 1989. The Public Liability Insurance Act came into existence in 1991, which was later amended in 1992. For unorganized sector, the Shops and Establishments Act enacted by various State governments in

1948. Further Beedi and Cigar Workers Act also came into light in 1966. For chemical safety at Ports, Indian Ports Act came into light in 1908, which is further supported by the Dock Workers Act 1986 and Dock Workers Rules 1990. Government of India has further reinforced the legal framework on chemical safety and management of chemical accidents by enacting new rules and by way of amendments to the Ministry of Environment & Forests (Nodal Ministry for Chemical Disasters), has framed National Action Plan (NAP) for Chemical Disaster Management. NAP has addressed the issues of disaster prevention, response, capacity building and inventorization of chemicals in identical manner and paves the way for industrially safe nation.

87 Table top and Mock exercises (including onsite & offsite) on chemical industrial disaster management in and around the MAH Units, to check preparedness of industries & districts and the capacity building of all stakeholders.

Ministry of Environment and Forests has already issued a National Action Plan on chemical safety, which was formulated by a group of experts under the aegis of Institute of Chemical Disaster Management Bhopal CIDM forum of FICCI over the last more than five years has provided a platform for capacity building on various important topics on chemical industrial disaster management at various places where emphasis is given to safety of chemicals at industries and also during transportation and management of hazardous waste.

In the current scenario, there is a need to focus on the dedicated prevention planning and its institutionalization, to address all pertinent issues related to prevention of chemical accidents, including legislation, safe designing, planning & assessment, monitoring and control. This is definitely possible with active participation and support from all the concerned stakeholders. Therefore, by developing multi stakeholder partnership amongst all partners, through platforms such as FICCI, District level and Local level Crisis Groups (DCGs, LCGs), the sustainability of chemical disaster management can last long, successfully and effectively.

Treating Animals as Living Entities

K. M. Singh*

The verdict of Uttarakhand High Court on 4th July 2018 in a petition filed for protection and welfare of animals is a landmark judgement. It mentions that all animals, including avian and acuatics have a right to life, honour and dignity and should be treated as 'legal entities having a distinct persona with corresponding rights, duties and liabilities of a living person.' The High Court verdict added that for this judgement they had relied on the Supreme Court verdict in Animal Welfare Board vs A Nagaraja & others.

In this context one is reminded of the unprecedented devastation in the Uttarakhand disaster in 2013 which is still alive in memory. This disaster caused huge loss of human lives and animal wealth. At that time the authorities geared up all possible resources for evacuation, rescue and relief of human beings. However, no significant initiative was taken for rescue and relief of animals as the concerned departments in the state were neither equipped nor prepared for the same.

This historic judgement should be an eye opener to the concerned government agencies, both at national and state levels for introspection regarding their level of preparedness to deal with management of animals in all the three phases of disasters. The administration should see the spirit behind this court order and plan a holistic approach towards safety and protection of animals. According to a report of the National Disaster Management Authority (NDMA), on an average 94,830 animals perish in floods alone every year in our country. This does not take into account loss of animal lives in other disasters which by and large remain unreported.

* K. M. Singh is currently Vice President of PPF and Founder Member, National Disaster Management Authority (NDMA).

The situation relating to rescue and relief of animals in any disaster is in a state of neglect, primarily because this subject has not been integrated in the overall disaster management framework in the country. This explains the lack of requisite preparedness including effective response mechanism for rescue and relief of animals in disasters as was seen in the Uttarakhand floods in 2013. Significantly, the Disaster Management Act 2005, which aims at holistic approach to disaster management is focussed primarily on safety and security of human beings and property, without any reference to safety and security of animals. As a result, Animal Husbandry Departments at the centre and state levels are not involved in any structured manner in the overall disaster management framework in the country, except in case of drought. However, certain initiatives have been taken where a few states have responded positively.

It would be relevant to mention here that in a primarily agrarian society like India around 70 per cent of rural population depend directly or indirectly on animal wealth for their livelihood. As such, this issue deserves priority attention at appropriate levels. A study by the World Animal Protection (WAP) in 2012 identified three key existing gaps for management of animals. These were inadequate training facilities and infrastructure, inadequate trained human resource and non-availability of any preparedness plan for management of animals in disasters.

This issue assumes greater significance in the wake of emphasis given on Livelihood Protection in the 'Sendai Framework of Disaster Risk Reduction (2015-30).' Section 30 (p) of the Sendai Framework focuses on 'strengthening the protection of livelihood and productive assets including livestock and working animals.'

Against this backdrop, the Policy Perspectives Foundation (PPF, a Delhi based civil society organisation) and World Animal Protection (WAP) took a number of initiatives in collaboration with the Animal Husbandry Department of the Government of India. These include organizing a 'National Workshop on Management of Animals in Emergencies' (March 2016) in Delhi in which 'National Disaster Management Plan for Management of Animals in Emergencies' was released. In a side event during the World Conference on Disaster Risk Reduction in Mexico in 2017, it was acknowledged that India was the first country to have prepared a national plan on this subject. This National Workshop in Delhi made a number of recommendations relating to strengthening the legal and institutional framework for protecting animals from disasters and management of animals needs during all three stages of disasters.

To address the issue of non-availability of trained human resources, PPF and WAP collaborated with National Disaster Response Force (NDRF) and Bihar State Disaster Management Authority (BSDMA) to train their responders in a structured manner. These programmes were aimed at developing capacity of personnel in efficiently rescuing animals during disasters, providing first aid to animals and also conducting community awareness generation programmes for cattle owners in vulnerable areas. Under this initiative, 246 personnel from all the 12 Bns of NDRF and 30 personnel from State Disaster Response Force (SDRF), Bihar have been trained so far.

Among the states, Bihar State Disaster Management Authority (BSDMA) has taken pioneering initiatives in this field in terms of incorporating an exclusive chapter on 'Resilient Villages' with Livestock and Livelihood being key issues in the Bihar State Disaster Risk Reduction (2015-30) Plan drafted on the lines of Sendai Framework. To achieve this objective, Bihar has launched a comprehensive plan for training all its veterinarians (approx 1,000) in 30 batches of 35 participants each. Further, Haryana Institute of Public Administration (HIPA) has also conducted a 4-days' training of district level veterinarians in May 2018. It is necessary that other states also emulate such initiatives.

Significantly, the NDRF is taking forward this initiative of capacity building of responders in a structured manner. The trainers, who had undergone Training of Trainers (ToT) courses in management of animals in disasters are running similar training programmes in their respective Bns. Also, a 3-day curriculum on this subject has been included in the Basic Training Programme of the NDRF for the new inductees to this force. Since the ToT programme is only for subordinate officers and personnel, a sensitisation programme on this subject for the officers of the NDRF Bns is being planned in December 2018.

The trained personnel of NDRF and SDRF did commendable work in rescuing stranded animals in floods in Bihar in 2017. In the floods in a '*diara*' (sandy riverine tracks) of Balia district (UP), last year over 1,200 animals were stranded. NDRF personnel showing a commendable professional zeal amidst serious flood situation rescued around 900 of these animals in a single day disregarding their own physical exhaustion. Similarly, at Bharatpuzha in Kerala, a team of NDRF workers was deployed exclusively for rescue of nearly 100 buffalos stranded on the island amidst serious flood situation. A related problem in such rescue operations is that in the absence of designated relief shelters for animals, the rescued animals roam around damaging crops leading to complaint from the local people.

Most of the above mentioned initiatives of capacity building at the national level have so far been primarily at the behest of non-governmental agencies. The Uttarakhand judgement addresses the problem in the right spirit. It is important that the governments at national and state levels now loose no time to appreciate the spirit behind this judgement and take pro-active steps to integrate this subject in the overall disaster management framework.

To achieve this, the first step required is to amend the Disaster Management Act 2005 to include 'animals' at Section 2 (d) in definition; include Secretary Animal Husbandry in Section 8 (b) in the National Executive Committee; include Secretary Animal Husbandry in Section 20(b) in the State Executive Committee and include District Veterinary Officer in Section 25 (2) in the District Disaster Management Authority. The next step should be to focus on capacity building at all levels of veterinarians, para-vets etc. These should go along in a mission mode programme to generate awareness for cattle owners in vulnerable locations.

While the suggestions mentioned above are the basic requirements, a holistic approach to deal with this problem at the grass roots level would have a huge canvas covering institutional framework, policies and guidelines, human resources, infrastructure, financial resources, capacity building and information and knowledge management etc. To achieve this, a coordinated approach involving the Union government, State Governments, academic institutions, Panchayati Raj Institutions, private sector, NGOs, civil society organisations and all other stakeholders would be called for. It is a tall order which will take a long time, but a beginning needs to be made with small steps in the light of the Uttarakhand High Court verdict. Some of the initiatives that need to be taken in this holistic approach are :

Organisational and Institutional Framework

Veterinary institutions in the country, particularly in the regions with high vulnerability from flood and cyclone should strive to establish Veterinary Emergency Response Units (VERU) equipped with resources and trained staff to train veterinary students and personnel of Animals Husbandry Department, NDRF, SDRF etc.; on management of animal in disasters. Provisions should be made to establish Veterinary Emergency Response Centre (VERC) with required resources and equipments at district levels at the vulnerable locations to protect animals in disasters.

Steps should be taken for integration of the subject of management of animals in disasters in the disaster management framework at the national and state levels aimed at benefiting and helping both people and animals.

Policies and Guidelines

All the State Disaster Management Authorities (SDMAs) should prepare State Disaster Management Plan for Management of Animals in Disasters in line with the National Plan. This should be developed to address all issues related to the welfare of animals in disasters.

All the National Disaster Management Guidelines should integrate measures for addressing the needs of animals in addition to the needs of people.

Animal welfare needs should be integrated into the existing and new disaster management programmes/plans at all the administrative levels (National, State, District, Block, Gram Panchayat, Village, Urban Local Bodies, etc.) of the government.

The National Livestock Policy and National Policy on Disaster Management should clearly specify the scope for effectively addressing the needs of animals in disasters.

Statewise operational guidelines should be developed by the respective state governments in line with the national policies and guidelines to protect the animals in disasters.

Human Resources

Measures should be initiated to encourage volunteers by recognising their contribution (appreciation certificates by Government) for protecting and managing animals in disasters.

One trained veterinary doctor or para-vet with necessary basic veterinary supplies should be appointed in the Gram Panchayats/Wards with high vulnerability from flood and cyclone to provide veterinary service. Veterinary doctors should be appointed on the basis of 1 veterinary doctor for every 5000 livestock, which is in line with the National Agricultural Commission's recommendations.

Material Resources

Standardized list of emergency veterinary medicines and equipment (speciewise and region specific) should be maintained at the units of

Animal Husbandry Department and Animal Husbandry Offices as also at Veterinary Emergency Response Centre (VERC) at the vulnerable locations for evacuating, handling, rescuing, treating animals etc.

The NDRF and SDRF Bns should also maintain basic emergency medicines and equipment for treating and rescuing animals.

Latest technology such as GIS, Remote sensing, Unmanned Aerial Vehicle (UAV) and high powerboats especially made of pontoon should be made available by the veterinary response teams at the vulnerable locations for rescue of large number of animals during disasters.

Mobile Veterinary Emergency Ambulance, Boats and Transport Vehicles should be provided to all the Veterinary Emergency Response Centres/Veterinary Hospitals at the vulnerable locations in the country for safe evacuation of animals during emergencies.

Training and Capacity Building

Trainings related to management of animals during disasters should be integrated in the training calendars of National Institute of Disaster Management (NIDM), National Institute of Animal Welfare (NIAW), Indian Council of Agricultural Research (ICAR), Administrative Training Institutes (ATI), and other government or affiliated training centre of the country.

In the summer/winter school courses offered by the Indian Council of Agricultural Research (ICAR), this subject of management of animals during disasters should be included.

Specialized trainings on Management of Animals in Emergencies (MAE); Livestock Emergency Guidelines and Standards (LEGS); Veterinary Emergency Response Unit (VERU); Community Based Animal Disaster Management (CBADM); Management of Wild Animals in Disasters; Management of Companion Animals in Disasters; etc. should be periodically imparted to all relevant stakeholders, particularly at the vulnerable locations.

All the vets and para-vets should undergo training on specialized techniques of animal handling (domestic and wild), such as spotting and identification, capture, safety of the animals in all procedures, after capture morphometry, radio collaring, micro chipping, identification marks, loading in sledge, sledging, loading in crate, transportation, restraining, release and post-release management to animal handlers.

Training on structural mitigation measures for engineers, masons, construction firms, relevant stakeholders for designing equipment and constructing structure (speciewise) such as cyclone/flood shelters, high

grounds or platforms for animal evacuation or storage of feed and fodder, boats, etc. at the locations with high vulnerability from floods and cyclones.

Training on various psycho-social aspects focused on the animal owners is an important component in Indian scenario.

Table Top Exercises and Simulation Exercises/Mock Drills on management of animals in disasters to all the relevant stakeholders should be periodically organized and updated in the disaster management plans, particularly at the locations with high vulnerability from cyclone or flood.

Education and Academic Curricula

Messages on management of animals in disasters should be included in-disaster risk reduction public awareness campaigns/activities at all levels (National, State, District etc.)

The Veterinary Council of India (VCI) should ensure that the education syllabus and materials for all courses comprehensively include the subjects on management of animals in disasters.

The authorities concerned should consider inclusion of management of animals in disasters into the activities of National Cadet Corps (NCC), National Service Scheme (NSS), Scouts and Guides, etc. of the educational institutions, especially in veterinary and agriculture institutions.

Information and Knowledge Management

The latest technology should be used for mapping of animals (specie-wise) and their resources (type of feed, water, grazing area, forest etc.) and vulnerability to help in effective planning and designing interventions for animals in disasters in the areas prone to flood and cyclone.

Integration of topics and information related to animals in disasters in the knowledge platforms such as India Disaster Resource Network (DRN) and Indian Disaster Knowledge Network (DKN).

Documentation of region specific indigenous coping strategies adopted by communities and best practices implemented by organisations in managing their animals during disasters.

Audio visual materials and resources on various measures to manage animals in disasters focusing on different target stakeholders in the areas with high vulnerability from flood or cyclone.

Pro-active role of communication mediums such as social media, mobiles, internet, television, radio, newspapers etc. for disseminating early warning and quick tips for managing animals in disasters in areas with high vulnerability.

Conclusion

Animals occupy a special social and cultural position in India and there is a real connection between people and animals in our country, where nearly 70 per cent of our people depend directly or indirectly on animals for their livelihood. Therefore, the above recommendations would help us to act in a comprehensive manner to address the needs of animals in disasters. By acting on above recommendations, India would raise the standards of animal protection globally and set a role model for other countries to replicate.

Unprepared for Flood Disasters

Himanshu Upadhyaya*

Due to repeated failures in governance and management, floods have turned out to be disastrous in India. As per estimates made in 1980, if India's total geographical area of 329 million hectares, about 45.64 million hectares are flood-prone. The Working Group for the Flood Management Programme for the XI Five Year Plan (December 2006) estimates that, on an average, 7.55 million hectares get affected, 1560 lives are lost and damages worth Rs 1805 crore is caused due to disastrous floods every year in India.

This article presents an account of how has the Central government and State governments performed on the front of flood forecasting, flood management and disaster preparedness. While, the subject 'flood control' doesn't find a mention in any of the three legislative lists under the Constitution of India, 'Drainage and Embankments' are mentioned under the State list. Given such a nature of legislative priority, schemes on flood control and flood management are planned, investigated and executed by State governments with their own resources. The Union Government renders assistance to States, which is technical, advisory, catalytic and promotional in nature. The Ministry of Water Resources, River Development and Ganga Rejuvenation provides technical guidance, conducts scrutiny, clearance and monitoring of the irrigation, flood control and multi-purpose projects. The Union Ministry is also responsible for operation of the central network for flood forecasting and issuing warnings on inter-state rivers.

Due to unprecedented floods of 2004 in Assam, Bihar and West Bengal that resulted in heavy loss of life and property, a Task Force on

* Himanshu Upadhyaya is Assistant Professor, Azim Premji University, Pixel B, PES Institute of Technology Campus, Hosur Road (Besides NICE Road), Electronics City, Bangalore-560 100. Mobile: 09972717925.

Flood Management was constituted by the Union Ministry of Water Resources.

Many decades before this, in 1976, the Central government had constituted Rashtriya Barh Aayog (National Flood Commission). Rashtriya Barh Aayog (RBA henceforth) was tasked with identifying flood prone areas and recommend the steps to reduce annual damage occurring due to floods. RBA submitted its report in March 1980. The recommendations of RBA were forwarded (in September 1981) to all States/UTs/Ministries. State governments and UTs were asked to verify the estimates of area liable to floods and furnish the data along with connected maps to Central Water Commission (CWC) and Ganga Flood Control Commission (GFCC) before March 1982.

In November 2007, the Central government introduced a scheme named Flood Management Programme, with allocation of Rs 8000 crore in XI Five Year Plan and Rs 10000 crore in XII Five Year Plan. Under this programme, central assistance was available to States for undertaking works related to (i) river management, (ii) flood control (iii) anti-erosion and (iv) drainage development etc.

As indicated in the Report of Working Group on Flood Management for XIth Plan (October 2011), State governments and UTs were yet to take up scientific assessment of flood prone areas detailing at micro level and giving comprehensive details on frequency of flooding, duration and depth of inundation. As per a performance audit of schemes for flood control and flood management by CAG of India (Report No 10 of 2017), out of the selected 17 States/UTs, only Assam and Uttar Pradesh had verified the flood prone area figures that were identified more than three decades back in RBA report. Underlining the gross neglect of the first recommendation of RBA report, performance audit pointed out that only Assam and Uttar Pradesh had furnished data along with connected maps to CWC/GFCC.

Elaborating on its recommendation on scientific assessment of flood prone areas, RBA had tasked CWC and GFCC with the following activities:

Flooded area at any time during the period for which records have been maintained should be transferred by the authorities in States/UTs on a detailed map of the river basin to CWC/ GFCC.

CWC/GFCC should (on receipt of such detailed river basin maps) carry out test checks in the field and update the river basin maps every five years.

CWC should undertake a comprehensive study and lay down criteria for defining 'flooded area.'

CAG auditors approached CWC for the records pertaining to these activities, but realized that "CWC did not have any information" on these activities.¹ Replying to this audit observation, the Ministry stated in its reply dated August 2016 that "an expert committee for the scientific assessment of flood prone area in India had been constituted in CWC in July 2012 and three meetings (in August 2012, June 2013 and September 2013) have been held so far." The performance audit also tells us that "in its second meeting, the expert committee recommended that Regional Committees be constituted for each State/UTs." Such regional committees were envisaged to identify, demarcate and classify the Flood Prone Areas based on the prescribed methodology, classification and criteria. The performance audit also underlines the fact that in its third meeting, the expert committee laid out ten activities to be undertaken by regional committees with timeline. As per this timeline, regional committees were supposed to submit preliminary report on flood prone areas by 28th February 2016. It was envisaged that the national level expert committee was to give its feedback and submit preliminary report by 31st March 2016. Following this, regional committees were tasked with submitting the final report by 31st May 2016 and the national level expert committee was supposed to submit its final report by 31st July 2016.

During its performance audit, CAG auditors found that while "regional committees for all 36 States/UTs had been constituted," "till July 2016, out of the selected 17 States/UTs, scientific assessment of Flood Prone Areas by the regional committees was taken up only in Bihar, Haryana, Kerala, Odisha, Punjab and West Bengal."

Voicing severe indictment of States/UTs, CAG auditors point out that "in the remaining 12 States/UTs, the scientific assessment of FPA was yet to be started." What is even more revealing is the fact that got unearthed during audit scrutiny of records in Arunachal Pradesh, Madhya Pradesh and Uttar Pradesh where regional committees continued to exist only on papers and no activities worth the name could be shown since "no meetings of the regional committee were held as of February 2016."²

Would the CWC and Ministry make public the minutes of three meeting held so far and would it toll flood affected people what progress has been made by this expert committee on the scientific assessment of flood prone areas?

Another recommendation of RBA tasked State governments/UTs with carrying out surveys and indicate the area that can be extended

protection against flood damage. RBA also desired that such an assessment of areas that can be extended protection against flood damage every five years. Acting on this recommendation, CWC requested States/UTs in September 1981 to initiate the surveys.

However, during the performance audit, it was found that out of 17 States/UTs, only five States (Bihar, Himachal Pradesh, Odisha, Tamil Nadu and Uttar Pradesh) had furnished details of the area which was provided with reasonable protection. The remaining States/UTs did not carry out the field surveys and failed to indicate the extent of area that could be extended protection.

In a shocking observation, CAG auditors also tells us that “None of the selected 17 States/UTs had carried out periodical reviews of assessment of protectable areas every five years!”

Frequency Based Flood Inundation Maps and Digital Elevation Models for Flood Affected Areas

Clause 10.6 of the National Water Policy (2012) stipulates preparation of Frequency Based Inundation Maps. Similarly, recommendation 28 of the 21st Parliamentary Standing Committee on Water Resources for 2013-14, stipulates preparation of Digital Elevation Models (DEMs) to demarcate flood affected areas that were facing perennial flood ravages, especially in the Ganga basin States.

CAG auditors point out shameful neglect on this aspect as well stating: “From the 17 States/UTs covered in audit, we found that only Bihar and Odisha prepared Frequency Based Inundation Maps.”³ Similarly, a complete inaction was observed on the front of preparation of DEMs and it was found out during audit scrutiny that despite the allocation of Rs 400 crores for preparation of DEMs covering 2.5 lakh square metres area in the Ganga basin, none of the sampled States sampled in the audit had prepared DEMs and Union Ministry couldn’t furnish the latest position in this regard. Out of the sampled States, West Bengal authorities stated that “preparation of DEMs for Flood Prone Areas was costly and time consuming” in the reply dated August 2016.

Replying to audit observation regarding DEMs, the Union Ministry stated during the exit meeting (December 2016) that the exorbitant costs charged by the National Remote Sensing Centre for high resolution DEMs is acting as deterrent in preparation of the detailed digital maps.

Morphological Studies

Paragraph 10.3 of the National Water Policy (2012) and recommendation of 21st Parliamentary Standing Committee on Water Resources for 2013-14 envisaged preparation of detailed morphological studies of all the 301 rivers in 11 Ganga basin States. During performance audit, it was revealed that “CWC awarded work relating to morphological studies of only 15 rivers during 2015-16,” with a two year timeline for completion. CAG audit scrutiny also revealed that “out of these 15 rivers, morphological studies of only eight rivers (three per cent of total rivers in Ganga basin) were taken up.”⁴

Comprehensive Master Plans and Formation of Implementation Committees

Performance audit also observed that comprehensive master plans (CMPs) were prepared by GFCC for all the 23 main tributaries of the Ganga. State governments in Ganga basin were to carry out Action Plans for implementation of recommendations contained in CMPs. However, CAG auditors observed that these details were not forthcoming from State governments. CAG auditors pointed out five main observations regarding preparation of CMP as follows:⁵

Out of 17 sampled States/UTs, 10 States (Bihar, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Manipur, Odisha, Punjab, Tamil Nadu and Uttarakhand) did not prepare CMP for flood management. Instead, these States prepared flood management projects on selective basis.

In Uttar Pradesh, CMP was prepared by the GFCC, however its recommendations were not implemented despite being one of the severely flood-affected States.

While formulating the Flood Management Programme schemes in West Bengal, major recommendations of GFCC were either not incorporated in the Detailed Project Report or were not implemented. Seven Flood Management Programme schemes falling in the Ganga basin revealed that important recommendations such as creation of natural detention basins, partial diversion of the flood water to the spill channels, watershed management, morphological studies etc. were not taken up.

In Arunachal Pradesh, though Brahmaputra Board had prepared the basinwise CMP, no action plan on the basis on the CMP was prepared by the State (as on June 2016).

Assam implemented only short-term schemes recommended in the CMP, but did not implement the long-term measures recommended in the Master Plan.

CAG auditors also noticed that while the Union Ministry requested (in February 2014) six severely flood-affected Ganga basin States (Bihar, Himachal Pradesh, Jharkhand, Uttarakhand, Uttar Pradesh and West Bengal) to constitute Implementation Committee to ensure time-bound implementation of the recommendations of the CMPs, only Uttar Pradesh had formed such a committee. However, the most shocking audit observation was that “no records relating to its meetings and progress achieved towards implementation of comprehensive plans were made available to audit.”

Similarly, CAG auditors also pointed out that large-scale flood disaster that Chennai had to witness during the South-West monsoon of 2015 was thanks to non-preparation of CMP for Chennai and its suburbs with reference to three rivers (as on August 2016). CAG of India carried out a comprehensive performance review of flood in Chennai and suburbs and this report was ready to enter the public domain in 2017. However, the Tamil Nadu government, for the reasons best known to them, delayed laying it in the assembly for more than a year. This comprehensive performance audit report has not got tabled and it remains to be seen if the Public Accounts Committee will take up the report for discussion without any further delay.

Flood Plan Zoning

CWC had circulated a Model Bill on Flood Plain Zoning to all the States in 1975 for guidance of State governments for enactment of legislation that aimed to provide clauses about proposed flood zoning authorities, surveys and delineation of flood prone area, notification of limits of flood plains, prohibition or restriction of the use of flood plains, compensation and power to remove encroachments on the flood plains. Further the 21st Parliamentary Standing Committee on Water Resources recommended in 2013-14 that Union Ministry shall take vigorous steps for persuading the States to enact the necessary legislation on Flood Plan Zoning without delay.

However, during the performance audit in 2016, CAG auditors “observed that only three States (Manipur, Rajasthan and Uttarakhand) had enacted Flood Plain Zoning Acts.”

Audit also observed that “in Uttarakhand, Disaster Mitigation & Management Centre in 2012 had emphasized the need for banning

construction, especially in proximity of rivers and streams in lines with the provisions of the Uttarakhand Flood Plain Zoning Act, 2012.” The fact that this recommendation was not taken up in earnest became obvious since, “the Geological Investigation Report (2014) of DMMC, Uttarakhand and study report of Wadia Institute of Himalayan Geology (2014) attributed that most of the damages during the floods of June 2013 were due to construction and encroachments along the riverbeds and flood plain areas.”

Glacial Lake Outburst Floods and Landslide Dam Break Floods Studies

Clause 10.7 of National Water Policy 2012 envisages that in order to increase preparedness for sudden and unexpected flood related disasters in hilly reaches, glacial lake outburst floods (GLOF) and landslide dam break floods studies with periodic monitoring.

Audit scrutiny revealed that the work of monitoring Glacial Lakes and Waterbodies in the Himalayan region was taken up by CWC in 2009. The inventory of Glacial Lakes and Waterbodies was prepared in 2011 based on satellite imageries taken in 2009. However, what is more shocking is that as against 2027 Glacial Lakes and Waterbodies with more than 10 hectares of water spread areas, CWC was monitoring only 477 Glacial Lakes and Waterbodies, having water spread area of more than 50 hectares during the monsoon season (June to October).

Flood Forecasting

Performance audit revealed that “CWC has not established any Flood Forecasting Stations in 15 States/UTs, namely Andaman and Nicobar, Chandigarh, Daman and Diu, Goa, Himachal Pradesh, Kerala, Lakshadweep, Manipur, Meghalaya, Mizoram, Nagaland, Puducherry, Punjab, Rajasthan and Sikkim.”

Similarly, audit scrutiny revealed that “against a target for the XIIth Plan for installation of 219 telemetry stations, 310 base stations and 100 flood forecasting stations; only 56 telemetry stations had been installed as of August 2016.” Not only had CWC missed to achieve the target regarding flood forecasting stations, but CAG auditors also highlighted that “out of 375 telemetry stations, 222 numbers of telemetry stations were non-functional after installation and thus real time data was not available for the corresponding periods.”

Execution of Flood Management Programme

CAG auditors also pointed out that “in eight out of 17 States/UTs, the flood management works were not taken up in an integrated manner covering the entire river/tributary or a major segment of rivers/tributaries.” Audit also pointed out huge delays in completion of Flood Management Programme works which ranged from 10 months to 13 years.

Absence of Emergency Action Plans (EAPs)/Disaster Management Plans (DMPs) for Large Dams

CAG auditors raised an alarm over the likely impact of a dam burst with respect to large dams in India. The performance audit observed that “out of 4862 large dams, EAPs/DMPs of only 349 large dams had been prepared as on March 2016.” Further, the auditors found out that “only 231 large dams evolved operating manuals/ procedures.” A detailed scrutiny of records pertaining to management of large dams revealed that “out of 17 States/ UTs, only two States had fully carried out pre and post-monsoon inspection of the dams, three States had carried out such inspections partially and remaining 12 States had not carried out such inspections.”

It has been more than a year since this performance audit report entered public domain. The monsoon of 2018 has already shown us devastating impacts of floods in different parts of the country. What we urgently require is a white paper from Public Accounts Committee on whether any lessons has been learnt from the severe indictment of the execution of Flood Management Programme and how have relevant agencies addressed the shortcomings and deficiencies pointed out by CAG auditors.

Notes

- ¹. See, page 73 of the Performance Audit on Schemes for Flood Control and Flood Forecasting, (Report No 10 of 2017), CAG of India, New Delhi.
- ². See, page 75 and 76 of the Performance Audit on Schemes for Flood Control and Flood Forecasting, (Report No 10 of 2017), CAG of India, New Delhi.
- ³. See, page 76 of the Performance Audit on Schemes for Flood Control and Flood Forecasting, (Report No 10 of 2017), CAG of India, New Delhi.
- ⁴. See, page 77 of the Performance Audit on Schemes for Flood Control and Flood Forecasting, (Report No 10 of 2017), CAG of India, New Delhi.
- ⁵. See, page 78 of the Performance Audit on Schemes for Flood Control and Flood Forecasting, (Report No 10 of 2017), CAG of India, New Delhi.

Medical Preparedness for Emergencies and Disasters in India

Dr. Muzaffar Ahmad*

Healthcare facilities and their staff, play a key role in emergency preparedness and response efforts for all types of events, including natural or man-made disasters, pandemic outbreaks, or terrorist attacks. Because the availability of healthcare is essential to accommodate the surge in demand for providing care related to a public health emergency. With growing awareness of the significance of healthcare facilities in response to emergencies, many are reassessing and upgrading their existing emergency preparedness plans. General elements of emergency management for healthcare facilities include mitigation, preparedness, response, and recovery.

Although hospitals are supposed to have emergency management plans in place, such planning better prepares staff to manage emergencies especially during disasters, hazardous materials situations, such as industrial accidents – in which both staff and facility may be contaminated, unless such incidents are anticipated beforehand. Planning should address the concerns of caregivers and the potential for distribution of a contaminant throughout the emergency department or even the hospital.

India has witnessed various disasters which have questioned the availability of Emergency Medical Care. In India, number of deaths occurred as a result of Disaster by one way or the other and the number of casualty was much high that caused the government to think over it for the optional remedies. DISASTER MANAGEMENT ACT, 2005 the VISION behind the enactment is “to build A SAFE AND DISASTER RESILIENT INDIA” by developing a holistic, proactive, multi-disaster

* Dr. Muzaffar Ahmad, former Member, National Disaster Management Authority of India.

and technology-driven strategy through a culture of prevention and mitigation. A multi-dimensional strategy including preparedness and efficient response is the key requirement to be adopted. The strategy to fight against the disasters is in pre-disaster Phase: 1. Prevention. 2. Mitigation. 3. Preparedness focusing on the Capacity Building. The Act itself provides the importance of Medical Services in time of disaster.

ROLE OF CENTRAL MINISTRIES

For biological disasters—Ministry of Health; for Chemical Disaster – Ministry of Environment; for Nuclear Accidents & Leakages – Department of Atomic Energy, Railway Accidents – Ministry of Railways; for Air Accidents – Ministry of Civil Aviation and (vii) for Natural Disasters & Civil Strife – Ministry of Home Affairs are responsible. NDMA initiated the first step towards the official and landmark achievement by laying down the policy and guidelines for the Disaster Management through inclusive, participatory and consultative process with representatives from the Ministries/Departments of Government of India and other stakeholders.

Search & Rescue and First Aid along with the Transfer/Evacuation to Medical institutions for treatment is essential to save lives during disasters besides Restoration of Essential services e.g. Medical services, Water, Electricity, Communication networks, etc. Provision of minimum standards of relief camps e.g. food, drinking water, shelter, sanitation, medical cover disposal of dead bodies, prevention and control of outbreaks of Epidemics. Is key responsibility of health and medical department of States along with other stakeholders.

The focus on pre-hospital care which had not received due attention in the past is an important factor not only in disasters but even in day-to-day situation. Lack of skills in CPR and Basic Life Support (BLS) is required to be taken up in a big way not only for college and university students but also at community level, so that even bystanders know how to save life by providing CPR (Cardio Pulmonary Resuscitation). JPN Apex Trauma Center AIIMS has played a crucial role in imparting training on trauma life support for both basic as well as advanced trauma life support. National guidelines on medical preparedness for mass casualty management should emphasise the need for developing cadre of first medical responders, ambulatory services, improvement in blood transfusion services, improving biosafety levels

of laboratories, networking of hospitals and need for hospital disaster management plans. There is also need to main stream skill and competence based training in the education curricula of various professional courses. Development of disaster resilient communication network with care providers, provisions of single national toll free number for ambulance services and mobile tele-health facilities provide special care to the vulnerable groups during disasters.

The psychosocial support also is an essential component which is to be planned for health workers. Minimal Initial Service Package (MISP) for reproductive and vulnerable groups during disasters is required to be taken by all states under the existing programmes of health mission, besides focus is required to be given for capacity development for intersectoral coordination for public health in emergencies, the WASH (Water and Sanitation Hygiene) and nutrition in emergencies. What is required is to train community, resident welfare associations, for first aid, so that they take care of especially vulnerable groups.

Health care institutions during disasters have been victims either due to internal or external factors. Hospitals collapsed during Iran earthquake, Gujrat earthquake, Kashmir and Chennai floods, not only structurally but even functionally. National guideline on hospital safety issued in 2016 comprises the need for making hospitals safe especially in vulnerable areas of country. There is also need to have backup mobile hospitals with diagnostic and operative facilities with at least 100 beds, so that these hospitals take care of mass casualty management during disasters.

The facility risk assessment should be a multidisciplinary process, with representatives from all services involved in an emergency situation. This includes infectious disease, infection control and safety staff to assist in differentiating biological from chemical agent exposures and in follow-up management. In USA, The Joint Commission has, since 2001, mandated member hospitals to complete an annual hazard vulnerability analysis (HVA), which is expected to provide a foundation for emergency planning efforts.

Facilities should conduct or review existing HVAs. The process includes assessing the probability of each type of event, the risk it would pose, and the organization's current level of preparedness. This HVA should also take into account nearby community resources likely to be affected or called upon for assistance – including schools, public transportation, news media, telephone and communication systems.

Confusion and chaos are commonly experienced by the hospitals at the onset of a disaster. However, these negative effects can be minimized if management responds quickly with structure and a focused direction of activities. In addition, emergency plans need to be coordinated at the local community level based on the individual needs of the community.

The Hospital Emergency Incident Command System (HEICS) is an emergency management system which employs a logical management structure, defined responsibilities, clear reporting channels, and a common nomenclature to help unify hospitals with other emergency responders. There are clear advantages to all hospitals using this particular emergency management system, which is fast becoming the standard for healthcare disaster response.

HEICS provides guidance for hospital/healthcare settings to improve their emergency planning and response capabilities.

When the situation escalates to a level that endangers the health and/or safety of the facilities patients, staff, and visitors' evacuation of the endangered areas is necessary. Safety and continuity of care among evacuees during a disaster depend on planning, preparedness, and mitigation activities performed before the event occurs.

Communication between news media and hospital media relations can support the healthcare organization by conveying important and realistic information to the public.

With the lessons learnt from Bhopal gas tragedy, there is need for extensive training and capacity development of various stake holders for the effective medical response for chemical industrial disasters for which adequate personnel protection equipment and stock piling of antidotes requires to be ensured not only in major accident hazard prone units but also in the hospitals which are in the vicinity of hazardous industrial units. With the growing incidents of terrorist attacks in many countries the emphasis for medical preparedness for CBRN (Chemical Biological Radiological and Nuclear emergencies) is need of the hour, for which capacity development along with infrastructure and other logistics support is required.

India's Great Secular Confusion**

Michel Danino*

The long dispute between claimants to the site of Ram Janmabhumi and the erstwhile Babri Masjid in Ayodhya seems to be inching towards a conclusion in India's Supreme Court. How far the litigants will be satisfied by a final judgment on the ownership of the crucial plot of land remains unclear, however. Meantime, did the Chief Justice of India on February 8 miss a golden opportunity to resolve the conflict innovatively, when he refused to hear a petition filed on behalf of the NGO "Citizens of Peace and Justice" by thirty-two "public spirited citizens" such as Teesta Setalvad, Shyam Benegal, Medha Patkar, Aruna Roy and John Dayal?

What was the gist of the petition? Actually an old argument: the Ayodhya developments have posed such "a serious threat to the secular fabric of the country" that the dispute cannot be regarded as an ordinary land issue. To save the country from a communal conflagration, the Supreme Court is asked to "direct that the disputed site be used for a non-religious public use." However, while brushing the petition aside for the moment, the Chief Justice said he wanted the dispute to be treated "as a land issue," hinting that it would be solely decided on the merits of the title to the disputed plot.

But what if the petition were to be taken seriously? Let us consider the implications.

There is enormous historical evidence—from Islamic chronicles, inscriptions and archaeological remains—that thousands of Hindu, Jain and Buddhist temples were destroyed by Islamic invaders from the 11th

* Michel Danino is an author, a scholar of ancient India, a member of the Indian Council of Historical Research, and a visiting professor at IIT Gandhinagar. Email: micheldanino@gmail.com.

** This essay is a revised version of a series of articles published in The New Indian Express from March to May 2018.

century onward. Delhi's Qutub complex, for instance, was built by Qutb-ud-din Aibak out of the remains of 27 destroyed Hindu and Jain temples. Varanasi's Gyanvapi mosque erected by Aurangzeb sits on the erstwhile Kashi Vishvanath temple, remains of which are still visible (the 19th century Orientalist James Prinsep left a fine lithograph of them). Aurangzeb also had Mathura's Krishna Janmabhumi complex destroyed, with the Shahi-Eid Gah mosque built over parts of its remains. And so on. Let us assume that in the name of secular wisdom, Ayodhya's disputed site is indeed turned into a public space. Very likely, Hindutva organizations would go back to their list of potential hotspots (starting with Varanasi and Mathura) and launch fresh agitations. All would depend on whether those were sufficiently sustained and intense. If they pass the test, Ayodhya's "secular solution" would serve as a very useful precedent: should not the newly disputed mosques be converted to hospitals, schools or such like? One after another, thousands of mosques across India could thus experience the delights of secularization. Hindutva organizations would not recover the underlying temples, but the public would considerably benefit in terms of public health and education, a prospect every progressive Muslim should rejoice in.

But why stop at mosques? Ananda Ranga Pillai in his *Diary* recorded the destruction in 1748 of Pondicherry's large Vedapuriswar temple; at Goa, the historian A.K. Priolkar listed the destruction of 34 temples, some later overbuilt with churches; there have been persistent arguments that Chennai's Santhome cathedral stands over Mylapore's original Kapaliswar temple. Should some of the churches become candidates to secularization too?

And why stop at India? Christendom is replete with churches built over destroyed Pagan sites. In the late first millennium, Muslims conquering Spain, erected mosques over churches; Christians promptly reconverted them after their reconquest. (Although Spanish Muslims have asked the Roman Catholic Church to let them pray at Córdoba's Cathedral of Our Lady of the Assumption, earlier known as the Great Mosque of Córdoba, the Vatican seems in no mood to grant their request!) And what if orthodox Jews started agitating for the removal or reconversion of Jerusalem's Dome of the Rock mosque? Its location was that of the Jewish Second Temple, which the Romans destroyed to erect a temple of their own; later, one or several churches were built over it, before Islam swept by. Perhaps orthodox Jews should demand

thorough excavations, and, were their claim to be established, could ask the building to be put to some “secular” use.

The potential unleashed by our thirty-two self-appointed guardians of secularism appears limitless. Should we rejoice at this formula? And if not, why reserve it for Ayodhya? All the above examples—not even the tip of a global iceberg—are inherent to the history of aggressive, conquering religions. Unsurprisingly, that history has more often than not been sanitized or swept under the carpet—a mistake in my view, as we stand to benefit hugely from an honest look at the unvarnished past and its darker chapters.

Strangely, the petition in the Supreme Court, which clumsily tries to dispute the massive archaeological, epigraphic and literary evidence supporting the existence of a large Hindu temple beneath the Babri Masjid, makes no mention of repeated pleas by smaller Muslim groups to hand over the site to Hindus, since it has no particular religious value for Islam. Or of last November’s proposal by Uttar Pradesh’s Shia Central Waqf Board Chairman Waseem Rizvi to let a “grand Ram temple” be built at the disputed site, in exchange for a mosque at Lucknow. Such formulas, coupled with a goodwill agreement that there would be no future claims to other sites, would be a far more promising road to a final solution for this centuries-old conflict and to true reconciliation.

Since, meanwhile, the petition is loud on India’s “secular and tolerant ethos,” which it sees under threat from Hindu activism (and no other), we need to cast a critical look at the concept and practice of secularism in India, both in the polity and in education.

*

India seemingly has armies of self-appointed guardians of secularism, such as the above. But secularism in India is as enigmatic an animal as the proverbial elephant variously described by blind men: it has been all things to all people.

Indeed, although it frequently figured in the debates of the Constituent Assembly, the word “secularism” did not appear in the 1950 Constitution of India; Nehru was initially cold to it: “Another word is thrown up a good deal, this secular state business. May I beg with all humility those gentlemen who use this word often, to consult some dictionary before they use it? It is brought in at every conceivable step and at every conceivable stage. I just do not understand it.” His

influential Minister for Agriculture, P.S. Deshmukh, is on record for questioning “the specious, oft-repeated and nauseating principle of secularity of the State. I think that we are going too far in this business of secularity.” Nauseating or not, the principle was parachuted into the Constitution by the 42nd Amendment of 1976 (promulgated during the Emergency), which turned India from a “sovereign democratic republic” to a “sovereign, socialist secular democratic republic.” There was a catch, however: the word “secularism” was left undefined, which is uncharacteristic of Constitutional amendments.

If so, we should expect it to have the conventional meaning. Let us, therefore, heed Nehru’s advice and turn to our dictionaries: “The principle of separation of the state from religious institutions,” says the Oxford dictionary; “indifference to or rejection or exclusion of religion and religious considerations,” adds the Webster. The former definition reflects the expulsion of Christianity from State matters which European nations opted for (to varying degrees) from the eighteenth century onward; also of Islam by Turkey in 1923. Was such a concept ever relevant to the Indian context, where compulsion in matters of religion and belief is repulsive to the ethos of the land? No Jain, Buddhist or Hindu king or emperor, to my knowledge, ever imposed a “state religion”; nor was India the scene of “religious wars,” whatever doctrinal frictions there may have been. Even those Islamic rulers who did declare their intention to draw India into *dar al-islam* failed in the end.

Besides, the same Constitution which declares all Indians equal, irrespective of their religion, caste or gender, proceeds, in Articles 28 and 29, to give religious and linguistic minorities the right to manage their places of worship and educational institutions. The Civil Code, too, is religion-specific as regards marriage, divorce, inheritance, etc. This is anti-secular on the face of it. How do we get out of this embarrassing situation? By what I call a “sleight of word”—by declaring that “secularism” actually means something else: among other things, equidistance from, or neutrality towards, all religions (which is not the case), tolerance (why not use this word, then?), or perhaps some combination of atheism, rationalism and agnosticism (why not those words?).

Strictly speaking, then, India’s brand of secularism denies equal rights to a perceived “majority.” It has no roots in the history of the land: the word “secularism” does not exist in any Indian language (except for recent coinages); more importantly, “India has all along

been trying experiments in evolving a social unity within which all the different peoples could be held together, while fully enjoying the freedom of maintaining their own differences. ... This has produced something like a United States of a social federation, whose common name is Hinduism,” wrote the impeccably secular Rabindranath Tagore in his 1917 essays on *Nationalism*. Already expressed in Ashoka’s Edicts and many classical texts, this mix of integration, mutual respect and “full freedom” could, or perhaps should, have produced an Indian alternative to the European concept by building on the land’s long experiments in religious coexistence.

Instead, secularism has been a source of endless controversy and bitter feelings. As Taslima Nasreen once declared : “Most secular people are pro-Muslims and anti-Hindu. They protest against the acts of Hindu fundamentalists and defend the heinous acts of Muslim fundamentalists.” Or to quote the respected advocate, statesman, educationist and litterateur K.M. Munshi: “The word ‘secularism’ in India has no bearing on the attitude and conduct of individuals nor of religious groups. However, it has been used as a slogan of varying significance. In its name, anti-religious forces, sponsored by secular humanism or Communism, condemn religious piety, particularly in the majority community. In its name, minorities are immune from such attention and have succeeded in getting their demands, however unreasonable, accepted. In its name, again, politicians in power adopt a strange attitude which, while it condones the susceptibilities, religious and social, of the minority communities, is too ready to brand similar susceptibilities in the majority community as communalistic and reactionary. How secularism sometimes become allergic to Hinduism will be apparent from certain episodes relating to the reconstruction of Somanath temple. These unfortunate postures have been creating a sense of frustration in the majority community.”

By another sleight of word, such a statement would be viewed as “communal” today. But whether this “majority” really exists or is a construct deserves our attention.

*

Being a rational person, I certainly challenge the secular definition of the Indian nation: there is, in fact, no such definition, nor are the nation’s institutions and Constitution genuinely secular, since they discriminate among the followers of different religions.

At the core of the issue lies a binary that has been accepted as a political axiom, though occasionally challenged as we will see: that of majority vs. minority, inherited from the colonial era and enshrined in Articles 28 and 29 of our Constitution. On the face of it, minorities appear to be identifiable enough: no one doubts the existence of a Parsi or a Jewish minority. Christians claim to be a minority, too—but are they? Numerically, no doubt, but should that be the sole criterion? When I lived in the Nilgiris of Tamil Nadu in the 1980s and 1990s, the largest and most beautiful estates and bungalows belonged to Christian individuals or institutions; so did most of the hospitals and schools; my own town had over 40 churches, against three or four Hindu temples; foreign-funded Bible “colleges” kept mushrooming. Whether such an economically and culturally dominant group qualifies as a ‘minority’, with the attached tag of vulnerability, is problematic (and proselytizing Christian groups are known to play the vulnerability card to the full among their well-wishers abroad: no other fund raising is required). Equally ambiguous is the concept of a Muslim ‘minority’ of about 195 millions (extrapolating from the 2011 Census), nearly three times the population of U.K.

But the concept of majority is even more problematic, as the word suggests a monolithic Hindu population, primarily identifying itself as Hindu. This is contrary to India’s ground situation, where an assumed Hinduness is just one strand of a complex identity, others strands being community, language and region; for some Hindus, caste matters more than religion; for others, it is their region; for yet others, language. Their identity is but the ever-changing interplay of those four strands. That explains why Hindus have never reacted *en bloc* to any issue; even the Ayodhya Movement, which possibly saw the largest Hindu mobilization in recent times, involved only a small fraction of Hindu Indians. There is, in reality, no Hindu majority; it is a construct of the colonial powers, who never missed a chance to pit Hindus against Muslims. It is true, as Swami Vivekananda, Sri Aurobindo, Tagore and even Nehru pointed out (apart from most Western Indologists) that Indic schools of thought and belief gave Indian civilization a unique cultural stamp, but those never translated into political power centres. It is also true that the religious strand comes to the fore at critical junctures, especially at times of inter-religious conflicts, but this does not mean that “majorityism” rules India, as is often glibly and irresponsibly asserted. If it did, why should groups claiming to defend

Hindu causes, such as the RSS, continue to voice the same demands decade after decade, with no sign of their ever being granted?

Intriguingly, some of those demands have been impeccably secular in their spirit: abrogation of special Constitutional rights to minorities, of Article 370, implementation (as suggested by the Supreme Court on several occasions) of a common Civil Code. One may add, if we are serious about building a truly secular nation, that there should be no room for a National Commission for Minorities or a Ministry of Minority Affairs with its special “schemes for welfare of minorities.”

The RSS is not isolated in making such demands. In his presidential address to the 53rd session of the Indian National Congress at Ramgarh in 1940, Abul Kalam Azad asked: “Can anyone who has any conception of the actual working of a democratic constitution, allow himself to be led astray by this false issue of majority and minority?” Eight years later, the Constituent Assembly initiated a long and vigorous debate on special rights for minorities. Tajamul Hussain, a Muslim member from Bihar, felt compelled to intervene: “I want to tell the House, Sir, that there is no minority in this country. I do not consider myself a minority. In a secular State, there is no such thing as minority. I have got the same rights, status and obligations as anybody else. I wish those who consider themselves as the majority community would forget that there is any minority today in this country.” Damodar Swarup Seth, a member from United Province, concurred: “I feel, Sir, that in a secular state minorities based on religion or community should not be recognised. If they are given recognition then I submit that we cannot claim that ours is a secular state. Recognition of minorities based on religion or community is the very negation of secularism.” H.C. Mookherjee, a member from West Bengal, asked: “Are we really honest when we say that we are seeking to establish a secular state? ... If your idea is to have a secular state, it follows inevitably that we cannot afford to recognise minorities based upon religion.” Finally, on 25 May 1949, Sardar Vallabhbhai Patel, to the applause of the Assembly, concluded: “In the long run, it would be in the interest of all to forget that there is anything like majority or minority in this country and [to accept] that in India there is only one community.”

Perhaps the tragedy of post-Independence India is that such sane voices—both Muslim and Hindu—were ignored, although they spoke

for true secularism, and have since been sidelined by our self-styled “secular,” “liberal” statesmen and intellectuals.

*

In a recent keynote address to a history conference held by the Indian Council of Historical Research, Dr. R. Nagaswamy affirmed, “Secularism in India means anti-Hinduism.” Is such a statement, coming from an acclaimed archaeologist, epigraphist and art historian, justified?

As I argued earlier, the Indian Constitution and the State are unsecular, despite their claims to the contrary, as they neither enshrine nor practise equal rights and, instead, deprive a perceived but largely constructed “majority” of privileges accorded to minorities. This, of course, has led to charges that India’s brand of secularism rests on minority appeasement. Although I hesitate to use terms with such a historical baggage, “appeasement” is justified when one recalls a “secular” Rajiv Gandhi’s 1986 overturning of the Supreme Court’s judgement in the Shah Bano case, his ban two years later on *Satanic Verses* (which neither he nor his complainants had read), or the ban by seven Indian States on the film *The Da Vinci Code*, even as the Supreme Court rejected petitions to have its screening stopped.

Should these examples sound a little old, let us turn to Taslima Nasreen. The Bangladeshi writer was debarred in 2012 from the 36th Kolkata International Book Fair “following protests from fundamentalists.” Her crime? Highlighting atrocities against Hindus in Bangladesh. Last year, invited to the Jaipur Literature Festival, she called for the “urgent” implementation of a common civil code in India: “Why are Islamic fundamentalists against a uniform civil law? Is not having a uniform civil law democratic?” she asked. “What do you mean by secularism, does it require you to encourage Muslim fundamentalists?” The Rajasthan Muslim Forum promptly protested that Nasreen had “too much freedom” and declared they had secured an assurance from the Fair’s organizers that she would not be invited to the event again—which the organizers abjectly confirmed. When, six months later, Taslima Nasreen landed at Aurangabad on a visit to Ajanta and Ellora, crowds awaited her at the airport: a leader of the All India Majlis-e-Ittehadul Muslimeen declared, “We will not allow her to step on the soil of our city.” The police had to send her back.

The recent case of the young Kerala actress Priya Prakash Varrier, of winking fame, appears tame in comparison, yet is symptomatic

enough: Muslim groups from Hyderabad filed police complaints against her and the film makers, objecting to a supposedly blasphemous (but actually Muslim) song that “outraged their religious feelings” and adding that winking is “forbidden in Islam.”

Did we hear indignant statements from our intellectuals and academics against such “intolerance” (of which hundreds more examples could be cited) and violations of the sacrosanct “freedom of speech?” Did we witness national or international campaigns? I recall no such thing—yet such protests and campaigns occur with clockwork regularity every time a Hindutva group resorts to similar goondaism. As Minhaz Merchant put it recently, “Islamaphobia is rightly condemned. Hinduphobia though is acceptable in living rooms across upper middle-class urban India where secular poseurs are many in number.”

This “Hinduphobia” is conspicuous in the treatment of interreligious conflicts: by definition, minorities are victims while an imaginary “majority” is invariably the aggressor. If one protests—as one should—acts of aggression against minorities, one is secular; if one points out—as one equally should—that Hindus have often been victims too, one is “communal” or a “Hindutva” proponent. It is secular to condemn the 2002 riots in Gujarat; it is unacceptable to argue that they flared up in response to the unprovoked massacre of 59 harmless Hindu pilgrims at Godhra. No mainstream academic journal will entertain research papers on Hindu victims in Kashmir, West Bengal or Kerala (recall the massacre of eight Hindu fishermen at Marad, for which 62 members of the Indian Union Muslim League were convicted). No Indian academic will be invited abroad to speak on Islamist attacks on Hindu places of worship, from Gandhinagar’s Akshardham temple complex (where 30 devotees were killed in 2002) to the Sankat Mochan Hanuman temple at Varanasi four years later (ten dead, with some eighteen more elsewhere in the city). If at all, those acts of aggression are treated apologetically: the attackers had been “provoked.” If some condemnation of the 1984 anti-Sikh riots has been heard, albeit quite tame, it is perhaps because Sikhs are seen as a minority. And expectedly, if Hindus happen to become demographic minorities, as in Kashmir or a few Northeastern States (and soon in some districts of West Bengal), no one clamours for their minority privileges to be enforced.

Such language is deemed offensive in our “liberal” intellectual and academic spheres. Yet all it does is to call for equity: an equal State treatment of all communities regardless of their religions, an equal condemnation of attacks on any community whatsoever, and an equally

firm strike at the roots of all religious fundamentalism—which includes foreign funding to religious organizations.

Meantime, our “secular” political parties go on further creating minorities for their short-term gains. In 2001, the Rajasthan High Court rejected a plea by a Jain educational trust; Justice M.R. Calla warned, “If we go on making classifications like this, ... perhaps the pious concept of ‘WE THE PEOPLE OF INDIA’ would be defeated and frustrated and the people as a whole shall stand divided in innumerable parts.” Yet a “secular” UPA government accorded Jains minority status in January 2014, just as Karnataka’s Congress government recently did with the Lingayats. Justice Calla was right: division is indeed the rule of the game.

*

To a certain class of enlightened Indian intellectuals, nationalism is, at best, an obsolete and irrelevant concept; at worst, a dangerous one. Having generously labelled themselves “liberal,” they find that liberalism, resting on an uncompromising assertion of the individual’s rights and liberties, sooner or later clashes with the notion of a collective entity such as a nation. That notion fares even worse when confronted with post-modernism, which “deconstructs” its very legitimacy. Communism and Islam, both of which share in their original form a world-conquering ideology, promoted transnational allegiances, respectively to the Soviet Union and/or China and to the Ummah (it is something of an irony that our *desi* Communists call themselves “liberal” too, when historically Communism has been radically opposed to any form of liberalism—that is one of the many paradoxes of Indian politics).

In India, however, the greatest opponent of nationalism has been our fuzzy, confused and infinitely elastic notion of secularism. One way to study this conflict is to go back a little in time and revisit some of the ideas and ideals that animated the leading figures of India’s long struggle for freedom.

Bankim Chandra Chatterjee is a convenient starting point, with his *Vande Mataram* poem and mantra that inspired generations of freedom fighters from all sections of Indian society—even some Muslims, as is little known but well documented at the time of the 1905 Partition of Bengal. There is nothing “secular” about India’s national song, even after the verses invoking Mother India as Durga and Lakshmi were chopped off. Nor about Bal Gangadhar Tilak’s revival of Ganesh

Chaturthi, which proved to be effective in awakening nationalistic feelings cutting across caste barriers. In a 1906 speech at Varanasi, he said: “By the grace of Providence we shall ere long be able to consolidate all the different sects into a mighty Hindu nation. This ought to be the ambition of every Hindu.” At the same time, few leaders worked for Hindu-Muslim unity as much as Tilak. The same caveat applies to Sri Aurobindo (then known as Aurobindo Ghosh), who famously stated in his 1909 Uttarpara speech upon release from a year-long imprisonment in the Alipore Jail, “I say no longer that nationalism is a creed, a religion, a faith; I say that it is the *Sanatana Dharma* which for us is nationalism.” Or to Bipin Chandra Pal: “This ‘Mother’ in ‘Bandé-Mataram’ ... applied the old, the sacred, the dearly-beloved term, to a new concept, that of the Motherland. Through this salutation has come into being a new cult in the land, the cult of patriotism.”

This concept of Indian nationalism—for we must now distinguish the term from Western brands of nationalism—was shared by more stalwarts of the time, such as Lala Lajpat Rai or Subramania Bharati, the latter composing high poetry turning the cult of the motherland into *bhakti* for the divine Mother. Our modern intellectuals and historians have often accused all these leaders of having “communalized” the Indian freedom movement (of course turning a blind eye to the communalization of Muslim politics). However, building an exclusively “Hindu nation” was never their intention. As Sri Aurobindo put it in 1908, “The new [Nationalism] overleaps every barrier; it calls to the clerk at his counter, the trader in his shop, the peasant at his plough; ... it seeks out the student in his College, the schoolboy at his book, it touches the very child in its mother’s arms. ... It cares nothing for age or sex or caste or wealth or education or respectability; ... it spurns aside the demand for a property qualification or a certificate of literacy. It speaks to the illiterate or the man in the street in such rude vigorous language as he best understands, to youth and the enthusiast in accents of poetry, in language of fire, to the thinker in the terms of philosophy and logic, to the Hindu it repeats the name of Kali, the Mahomedan it spurs to action for the glory of Islam. It cries to all to come forth, to help in God’s work and remake a nation, each with what his creed or his culture, his strength, his manhood or his genius can give to the new nationality. The only qualification it asks for is a body made in the womb of an Indian mother, a heart that can feel for India, a brain that can think and plan for her greatness, a tongue that can adore her name or hands that can fight in her quarrel.” Gandhi later echoed this attitude:

“Indian nationalism is not exclusive, nor aggressive, nor destructive” (although the earlier leaders did not reject violence as a legitimate means to achieve freedom).

Indian nationalism is thus not about “Hinduism” but about acknowledging the cultural foundations of Indian civilization. As Subhas Chandra Bose put it : “Indian nationalism is neither narrow, nor selfish, nor aggressive. It is inspired by the highest ideals of the human race, viz., *Satyam* (the true), *Shivam* (the good), *Sundaram* (the beautiful). Nationalism in India has instilled into us truthfulness, honesty, manliness and the spirit of service and sacrifice. ... Even at the risk of being called a chauvinist, I would say to my countrymen that India has a mission to fulfil and it is because of this that India still lives.”

Most of India’s freedom fighters would have rejected the current slogan of secularism, as it runs against their very concept of the Indian nation.

*

A retired computer scientist who regularly visits an Indian institution of higher education recently told me how, in the course of his schooling in erstwhile Yugoslavia, he had studied the outline of the Mahabharata and the Ramayana. He was shocked when I answered that Indian schools can do no such thing: anyone attempting to do so would immediately be branded “communal” and accused of undermining the “secular” principles of Indian education.

Who determined these principles? Just as most India’s freedom fighters had an idea of India that was far removed from our nebulous and hypocritical concept of secularism, most pre-Independence thinkers had much to say on what a genuinely Indian education should be. Tagore, for instance, reviled the cultural disconnect Indian students suffered from: “Their education is a chariot that does not carry them in it, but drags them behind it. The sight is pitiful and very often comic. ... The education which we receive from our universities takes it for granted that it is for cultivating a hopeless desert, and that not only the mental outlook and the knowledge, but also the whole language must bodily be imported from across the sea.” Gandhi echoed this view: “I find daily proof of the increasing and continuing wrong being done to the millions by our false de-Indianizing education. These graduates ... flounder when they have to give expression to their innermost thoughts. They are strangers in their own homes.” The great art critic and

Indologist Ananda Coomaraswamy added: “The most crushing indictment of this Education is the fact that it destroys, in the great majority of those upon whom it is inflicted, all capacity for the appreciation of Indian culture.”

Indeed, as earlier as in 1908, having served as the first principal of Bengal National College, Sri Aurobindo had defined the problem with his customary lucidity: “In India ... we have been cut off by a mercenary and soulless education from all our ancient roots of culture and tradition. ... National education ... [is] the education which starting with the past and making full use of the present builds up a great nation. Whoever wishes to cut off the nation from its past is no friend of our national growth. Whoever fails to take advantage of the present is losing us the battle of life. We must therefore save for India all that she has stored up of knowledge, character and noble thought in her immemorial past. We must acquire for her the best knowledge that Europe can give her and assimilate it to her own peculiar type of national temperament. We must introduce the best methods of teaching humanity has developed, whether modern or ancient. And all these we must harmonise into a system which will be impregnated with the spirit of self-reliance so as to build up men and not machines.”

Did Independent India take steps to remedy the ailment and implement this programme? Quite the contrary, it gradually took deculturalization to greater heights, in a way that even our colonial masters would not have dreamed of. Today’s school and college student is profoundly ignorant of India’s cultural, intellectual, artistic, scientific or technological heritage. Sanskrit—indeed, all Indian languages—has been relegated to the status of a suspicious oddity. When, in 1994, “secular” groups approached the Supreme Court to prevent the CBSE from offering Sanskrit as an elective, Justices Kuldip Singh (a Sikh, incidentally) and B.L. Hansaria rejected the whole perverse argument and asserted that “The stream of our culture would get dried if we were to discourage the study of Sanskrit.”

Of late, the media have generously ridiculed statements by various ministers rejecting Darwin’s theory of evolution or asserting that India had in the Mahabharata age an Internet of its own and satellite communications. Indeed, many more such silly misconceptions could be produced from pseudo-scholarly literature. But the central point has been invariably missed by our equally ignorant media: why should there be such a total neglect of ancient India’s genuine, well-researched and well-documented knowledge systems in the first place? Why should

an Indian student be allowed to learn nothing of ancient Indian mathematics, astronomy, medicine, water management, town planning, construction techniques, agriculture, environmental conservation, martial arts or board games? Nothing of Indian systems of philosophy, of psychology based on methods of self-exploration and self-fulfilment that go by the name of yoga? Nothing of systems of governance, polity, education, business, management, trade practices, ethics?

Any decent book on Mesopotamia or classical Greece will have a few chapters on the science and technology created by those civilizations; standard books of Indian history have nothing comparable. Our philosophy departments teach mostly Western philosophy; psychology departments blank out the whole yogic view of the human being; Bangalore University's M.Sc programme in mathematics has a module on the history of mathematics which includes (as it should) Greek and Arab developments, but not a word on Indian ones (or Chinese ones, for that matter): can we imagine a similar module in a Greek university saying nothing of ancient Greek contributions to mathematics? And why has India not lobbied for kabaddi to be recognized an Olympic sport, when beach volleyball can be one? The list goes on endlessly and can be summed up in a single sentence: The entire "Indian" system of education conveys the message that India never produced any knowledge worth teaching.

There may be much that needs to be discarded from India's past, but there is also much of timeless value. We rightly complain about the vulgarization and loss of values in Indian society, but refuse to address one of their chief causes: the misconceived secularization of education, which, in the Indian context, has resulted in cultural nihilism.

India's great secular confusion has cost the country very dearly.

French Perception and Evaluation of Indian Literature in the Eighteenth Century

Ravi K. Mishra* & Uma Shanker Pandey**

The paper explores French attempts to procure, study, and evaluate Indian literature in the eighteenth century. The paper deals with famous French personages and their engagement with Indian literature at various levels. Anquetil Duperron, Gentil, Polier, De Boigne, and Perron were some of the leading French figures whose intellectual engagements with Indian literature opened a new facet of the 'oriental' learning to the Occident. But the credit for this effort is generally attributed to the British 'Indologists.' Relatively less known is that a significant procurement of Indian textual material was the work of these French 'cultural' enthusiasts. The British 'Indologists' were heavily dependent upon these procurements for their study. But, these French 'cultural' enthusiasts are still on the margins while others have received much attention.

Duperron translated the Upanishads with the title 'Oupnekhat,' and made such a vast body of Indian literature available to the West. Antoine Polier took deep interest in India's past. He was the first European to have a complete copy of the Vedas. He even lent his copy to William Jones. On his return to France, he gifted his collections to various institutions which became the source of knowledge on India. Similarly,

* Dr. Ravi K. Mishra, Deputy Director, Nehru Memorial Museum & Library, New Delhi-110001, e-mail: ravikmishrain@gmail.com; mobile: 9810848143.

** Dr. Uma Shanker Pandey, Assistant Professor, Ramjas College, University of Delhi, Delhi-110007, e-mail: uma.francais@gmail.com

Gentil is credited for bridging civilizational gap between the East and the West. Unlike the British intellectuals, Gentil collected Indian manuscripts irrespective of their denominational complexion. The famous De Boigne and Perron also showed keen interest in knowing India. De Boigne made considerable literary procurements. Perron, the successor of De Boigne, made numismatic collections.

In the process, they procured, studied, appreciated, and collected a range of textual material available in India. This process, of course, did not end here. In fact, many of these texts found their way to European countries, acquainting and enlightening them about India's textual tradition and culture. What is more important is that many of these texts procured by the French were given to them by the British scholars and officials residing in India in the late eighteenth century, who used them for studying Indian history, culture, and society—a process that soon culminated in the rise of Orientalism. It may thus be argued that in an indirect manner, the French in the eighteenth-century India played an important role in the rise of the Orientalist discourse.

One important factor which facilitated the procurement of Indian texts for the French was their expertise in local language, particularly Persian and Hindustani, on account of their longer stay in India. It was pivotal in locating and collecting even rare manuscripts. Sometimes, they wrote the manuscripts themselves, as it was in the case of Gentil.

One of the leading Frenchmen who took deep interest in Indian writings was Jean Baptiste Joseph Gentil. He came to India in 1752 and took the employment in the Awadh state in 1763.¹ He remained in Awadh till the death of Shuja-ud-Daula in 1775. It was only after that he left the state.²

During his stay in Awadh, Gentil made passionate efforts to acquaint himself with India's past. It found reflection in his pursuit to collect Indian manuscripts, literary material and paintings. And no doubt, his proficiency in Hindustani made his exercise all the more convenient. His proficiency of Hindustani is testified by Gentil himself when he said, *je fus présenté au vezir. En me témoignant combien il était satisfait de voir près de lui un Français parler sa langue* (I was presented to the Wazir. On seeing me he was very happy to find a European speaking his (the Nawab's) language).³ While exploring and collecting Indian texts, Gentil did not discriminate on the basis of their denominational colour. He was as much passionate for Hindu texts as he was for Islamic manuscripts.⁴ The result of his intellectual quest was that Lucknow and Faizabad emerged as the hub of cultural exchange between

India and Europe. After his departure from India in 1775, he gifted most of his collections to King Louis XVI. As a result, Paris became the nucleus of academic learning on India.

Gentil's collections were extremely diverse, ranging from standard historical narratives such as the advent of Islam to themes related to cuisine, food culture etc. Besides, he also had copies of Hindu texts which had been translated into Persian. Thus, Gentil's collection was a whole mosaic of Indian literary tradition.⁵ In all, he had collected 183 Indian, Persian, Sanskrit (76 manuscripts), and Arabic manuscripts which were related to history, religion, art, and literature.⁶ Out of these, 98 were Persian manuscripts pertaining to a wide array of themes. Most of them written in *nastaliq* and *shikaste* they deal with themes such as *traité de la cuisine, boulangerie, pâtisserie* etc. followed by the narrative of the life of Christ in Persian by Jerome Xavier, an account of Guru Nanak in Urdu and a work on Medicine by Mohammad al Haravi. Gentil also procured the works of Saadi, Amir Khusrau, and Nizami. He also acquired various historical compositions in verse dealing with various events. For instance, 52 folios dealt with general history, then, there were other collections which focused on specific themes. The specific themes and category included—a history of the last years of Mughal emperor Jahangir by Mulla Kazmi Shirazi; a collection of poems on the history of the wars between the Mughals and the Marathas completed in 1742, which shed light on the history of Saadat Khan, Safdar Jung, and the invasion of Nadir Shah in 1739.⁷

Gentil also acquired many copies dealing with Prophet Muhammad's life and the lives of sufi saints etc. He also had books which dealt with the origin of Islam and its spread up to Indian subcontinent. He also had an exquisite copy of al-Kufi's *Book of Conquests* in 667 folios which originally belonged to Shah Jahan. Later it became part of Napoleon's library. He had 38 more manuscripts on the history of Islamic India. Then he also had seven works on Iran and Afghanistan.⁸

Particularly interested in a book which would present a complete history of Islam, Gentil obtained a copy of Mir Khond's work which presented such a history, beginning with the times of the Prophet and going up to 1523 AD. He had six volumes of Mir Khond's work compiled in the seventeenth and eighteenth centuries.⁹ What he regretted was that he was interested in the complete copy but he got only some portions. Similarly, he was again disappointed when he collected the work of Amir Jamil-ud-din al-Hosseni, *History of Muhammad, his Family and his Disciples*. It was in three parts. To the great

disappointment of Gentil, he could obtain three volumes of the first part, two copies of the second and could not obtain any of the third part. He also obtained with great pains the work of Nizamuddin Ahmad, *Tabaqat-i-Akbari*. He could procure two sets of volume I.¹⁰

Gentil took interest in collecting written material related to contemporary times. In his *mémoire* he mentions the research methodology adopted by him to acquire information about the contemporary times. It is indicative of his seriousness in doing research and presenting facts to the world. For instance, his methodology included several enquiries from friends to collect genuine information about the contemporary period (particularly the events of the first half of the eighteenth century). For that, he made close friends with some of the officers of Nadir Shah who stayed back after the invasion and held crucial positions. Taib Beg, a childhood friend of Nadir Shah stayed back and was in important position at the court of Awadh. Safeskin Khan who also stayed back and later served Nizam ul Mulk. Gentil met him at Aurangabad and made friends with him. Thus, these people became first-hand source of information about events related to Nadir Shah's invasion and other important events of that time.¹¹ Besides, Gentil collected information from whomsoever he could, as long as it was in the nature of primary source. For instance, he obtained a plan of a battle of 1720 from Sher Jung, Shuja-ud-Daula's uncle. He also had the details of the plan copied and presented it to Louis XVI in 1777.¹² In this sense, Gentil was able to obtain the most authentic version on many events pertaining to 1720-1750.

Collecting manuscripts was an intellectually excruciating but rewarding exercise. The location of texts, procurement, their evaluation according to their importance which needed expertise on the language to understand it, and then the entire exercise of copying it, certainly required patience and perseverance. For instance, in India the books or manuscripts were not sold in a normal manner in markets. One had to place an order with a scribe to copy a manuscript from the original. Thus, it was time-consuming and also needed constant supervision for the authenticity of the content. Gentil in his attempts either took the help of Indian scribes or wrote the manuscripts himself. In some of them he even mentioned his sources and the writers. Some of the manuscripts prepared by Gentil were:

Abrégé Historique des Souverains de l'Indoustan (1772). (Most of the material coming from *Tarikh-i-Farishta*)

Abrégé Historique des Rajas de l'Hindoustan (1774). (It was based on Sujjan Rai Bhandari's *Khulasat ul Tawarikh* (1695-96) which he had acquired in Bengal and had translated himself.)

Divinités des Indoustan tirées de Puranas (1774)

Recueil de toutes sortes de dessins sur les usages et coutumes de peuples Indiens. (Dealt with paintings and drawings etc, Faizabad 1774)

Mémoires sur l'Indoustan ou empire Mogol. (A manuscript published posthumously by his son in 1822, famously known as *Mémoire of Gentil*).

These manuscripts and their compilation are indicative of the fact that it was a painstaking exercise, a fact which was also attested by Modave when he admitted that it was not easy to obtain information on the 'religion of the Hindus.' Modave also mentioned that Gentil himself confessed that to have genuine knowledge on the subject at least 5 to 6 years time and heavy expenses were needed.¹³

Anquetil Duperron was another early Frenchman who did a pioneering work in acquainting Europe with India. His intellectual pursuit in India was the result of his sheer interest in the country and its culture. He says that his compatriots in India were surprised that he had come only with the zeal to know India.¹⁴ He came to India in August 1755 and returned to Paris in 1762. During his 6-year stay, Duperron accumulated a huge quantum of material on India embedded in books and manuscripts. He collected no less than 180 manuscripts, which he listed as '*Apportés de l'Inde*' in his famous work *Zend Avesta*. The most important collections were the Parsi material in seven manuscripts and material under 'modern Persian' dealing with grammars, dictionaries, texts on versification and texts about how to choose better expressions (*choix des meilleurs expressions*).¹⁵ Besides, the collection also had manuscripts dealing with the beliefs, customs, rites and rituals of the Parsis in India. His work *Zend Avesta* was published in 1771 and came up as an important academic work on the Parsis in India.¹⁶ It also created a polemical debate between Duperron and Jones.

Duperron also took particular interest in knowing and collecting material of correspondence called as *Insha* or letters. These epistle collections were the works of rulers or high dignitaries. Through his extensive research, he was able to procure the *Insha* of Abul Fazal which he kept under the title *Les trios daftars de l'Insha d'Abul Fazal, secrétaire d'Akbar*. The first set of *Insha* was the letters from Akbar (written by Abul Fazal) to the rulers of Persia and Turkey. The other set was the letters of Abul Fazal to Abdur Rahim Khan Khana. The

third set of epistles was called a rare collection for its writing style and linguistic expressions which rendered it difficult to be read by many. There were other set of letters as well written by Akbar to other officers. He had a precious collection of *Insha* or *farmans* or *parwanas* of Mughal emperors Akbar, Jahangir, Shah Jahan which were considered as models to be emulated in letter writing in India. In another set of letters, Duperron had the letters of Aurangzeb to his ministers and officers. In yet another set were the letters of the highest officers of the empire. They have been called as *Akhbarat Darbar Maala*. These sets of correspondence provide first-hand information on the events and are extremely helpful in reconstructing the history of the time.¹⁷

Duperron also procured a number of works of poetry. He had the works of Saadi titled *Gulistan* and *Bostan*, *Diwan of Hafiz*, the masnavi of Jalaluddin Rumi, and *Yusuf-Zulekha* of Hasan Nizami. He also managed a copy of Firdausi's *Shahnama*. Besides, he procured no less than twelve works dealing with the history of Iranian dynasties. Duperron also did not lose sight of standard historical works. For instance, he had *Tarikh-i-Hind* which was an account of Sindh and northern India from the time of the Ghurid conquests i.e. 1193 to 1579. Then he also had a copy of *Tabaqat-i-Nasiri* and *Jahangirnama* which were copied for Duperron by Nawab Muhammad Khan. Duperron also procured works related to Indian achievements in mathematics and astronomy. The most important was *Dar-Hisab*, a work of mathematics concerning the methods of computation of the Indians.¹⁸

Duperron was fascinated by the number of languages spoken in India. He wrote that in order to know India better, one should know nine languages. He further said that even if we live with Indian people, we largely remain strangers in India, without knowing the languages. His experience was reflected in his works that he undertook towards the end of his life, when he published on Sanskrit grammar and dictionary.¹⁹ He had been gifted a copy of Upanishads, translated into Persian by Dara Shikoh, by Gentil (which Jones got later). He later used this copy to translate it in Latin with the title *Oupnekhat* which was published in 1801-02. His passion for Indian learning finds expression in his works—*Legislation Oriental* (1778), *Recherches Historiques et Geographique sur l'Inde* (1786-1789), *Dignité du Commerce* (1789), and *Inde en Rapport avec l'Europe* (1798). The last work is particularly worth-mentioning for his encomium on the greatness of Indian civilization and attempts to bridge the cleavage between the Orient and the Occident.

Antoine Polier, who lived in India for a long period of 30 years (1758-88) was another illustrious figure credited for initiating Indo-European cultural exchange in the eighteenth century. Like Gentil, he also collected both Persian and Sanskrit manuscripts without any discrimination. He maintained a huge library at Lucknow which had a vast collection of books. The collection at the library throws light on his passion for Indian culture and civilization and the efforts put in by him to discover India's glorious past embedded in literary works. His library also contained rare books which were almost unknown in Europe. For example, he was the first European who had the complete set of the Vedas which he had copied from the Raja of Jaipur's collection after an extensive field research at Lucknow, Agra, Delhi, and Udaipur.²⁰ The other was the *Diwan-i-Aftab*, a poetic work of the emperor Shah Alam II.²¹

Polier's collections were used by William Jones for his Indian study. Polier gave him his personal copy of the four Vedas in 1786 which the latter kept in his library for almost a year.²² Jones owed some of the important collections to Polier. The other major work Jones acquired through Polier was 'a complete copy' of Prince Dara Shikoh's Persian Upanishads.²³ He had also asked Polier to provide him a copy of Rajtarangini.²⁴ Jones himself acknowledged the assistance provided by Polier in collecting oriental sources. Jones' admiration for Polier grew even more when the latter discovered a copy of *Ragavibodha* of Soma.²⁵ What is important to note here is that when Jones was still collecting these materials, Duperron had already worked on many themes (particularly on Zoroastrianism) for 10 years.²⁶ Gentil had already gone to Paris and had revealed the Orient to the Occident through his collections.

After his return to France, Polier gifted his collections to various libraries. His vast collections were distributed in the libraries of Bibliothèque Nationale, Paris, the British Museum in London, the library of King's college at Cambridge, Eton College in London, the Islamic Museum at Berlin, and the Bibliothèque Cantonale in Lausanne.²⁷

His collections also included the history and religion of the Sikhs. His range of collections included the Adi Granth, the Sikh religious text, the epigraphy of Ashoka Pillar at Firozshah Kotla, and the History of the rule of Shah Alam II. Polier was a friend of the emperor and acknowledged the latter's poetic skills. He had a copy of *Shah Alamnama* of Ghulam Ali Khan. But more importantly, his library also had a manuscript titled *Diwan-i-Aftab* which was the poetic work of

Shah Alam under the pen name of Aftab. He also had a copy of *Diwan-i-Makhfi*, the work of Zebunnissa, the daughter of Aurangzeb.²⁸ Polier took the help of even other Europeans who were fluent in both English and Persian.²⁹

The most important work of Polier for the study of modern India or of that time are his Persian letters called *Ijaj-i-Arsalani*. Polier also took interest in Indian music and dance. One testimony of it comes from his collection of Ragavibodha. In one of the paintings, Polier is shown watching a nautch girl.³⁰

Claude Martin (1752-1800) who made Lucknow his home was a leading cultured Frenchman in Hindustan. In fact, he was arguably the most enlightened figure in northern India. It finds testimony from his letters, the inventory of his house after his death, and a vast range of books that he kept in his library.³¹ He had more than 700 books in his library which included valuable collection of Persian and Sanskrit books and travel accounts.³² Martin also possessed the works of some of the major enlightenment writers. One could find the works of Sir Issac Newton, his disciple John Desaguliers (who worked at the Royal Society in London), Willem Gravesand and Robert Young, the supporters of Newton's philosophy, 70 Volumes of the works of Voltaire, along with *Vie de Voltaire*. One of the chief attractions of the library was the collection of books pertaining to practical knowledge. For instance, he had eight volumes of *Dictionnaire du Jardinier Français* (1791), Thomas Mawe's *Every Man his own Gardner* (1767), the Builders Magazine or Monthly companion for Architects, Carpenters, Masons, Bricklayers etc. (1774-1778). He also possessed books on cookery titled *The Art of Cookery made Plain and Easy* by Hannah Glasse (1747) and *The Professed Cook or the modern art of Cookery, Pastry and Confectionary made plain and easy* by Clermont (1776). Then his library contained the work of Kazimierz Siemienowicz's *The Great Art of Artillery* (1729) and *Machines et inventions approuvées par l'Academie royale des sciences, avec leur description* (1754) to produce guns, rockets and cannon.³³

He also took interest in developing knowledge on indigenous plants. For that he took the help of Philip Miller's work *Figures of the most beautiful, useful, and uncommon plants...and an account of the classes to which they belong* (1760). It was an English translation of the work of a great Swedish botanist Linneaus. And he also had a work titled *Elements of Conchology, or an introduction to the knowledge of Shells* (1776).³⁴ Martin made use of these books to collect, record, and

categorize natural objects like plants, shells, fossils etc. Indeed, he used these technical books to construct efficient vats to increase indigo production.³⁵ Thus, Martin tried to use scientific knowledge in practical life.

Martin's application of enlightenment ethos on Indian scene was most evident in his particular efforts to educate the women and children of his *zenana* (household). He wrote in his Will that he had educated the women in his *zenana*. He further mentions that he employed proper people to teach, among others, Boulone, his favourite, to read and write Persian, and the philosophy of Islamic religion. He even carried out philanthropic activities for the poor and the orphans. In his Will he left money for the poor of Lucknow and also for the poor at Calcutta and Chandernagore. His charity works are evident from the book in his collection titled *Care upon the Will of the Mason*. This book became a guide for him to bequeath money for those whom he never knew. He had said: "I would wish to prefer liberating any poor officer or other military men detained for small debt preferable to any other." He had even freed his African slaves. All these gestures are the hallmark of enlightenment concerns. And in this sense, Claude Martin can rightly be called as the leading Frenchman of the enlightenment in India.³⁶

Apart from his myriad collections in the library, the letters written by him form an important body of text throwing light on events of the time. These letters were written to a wide range of people, from Robert Clive on one end to servants and workers on the other. Out of the available letters, a large number of seventy-one letters were written to his servants. The second set of letters were to the London agents—William Raikes and Thomas Raikes. He was also in correspondence with de Boigne from 1789 to 1792, when the latter was in India and from 1798 to 1800, when he returned to Europe. So far, only 262 letters are available which is just a tip of the iceberg.³⁷ If we take a look at the available letters, it can be said that on an average he wrote 25 letters in a month. Therefore, in the last 25 years of his life in Lucknow he would have written about 7500 letters which was definitely not a small number. These letters written in Persian not only constitute a body of literature in itself, but they are also the testimony of his command over the language and the ability to express himself effectively in the adopted language to the respective addressee. These letters encapsulate the dynamism of the moments of people's lives. The discovery of hitherto unfound letters would provide valuable information about various events of that time.

Modave was another illustrious Frenchman. He came to India first in 1757 and returned in 1759. He came again in 1773 and made a journey to northern India where he remained till 1776. His *Voyage en Inde* is a narrative of his journey to Hindustan. He was a man of acute perception who was passionate about knowing and exploring India. He in fact wrote that most of the accounts available in Europe on Hinduism were inept and its true tenets were still unknown to the Europeans. Therefore, he said that his aim was to present true and less known facts about India which might serve in giving a just picture of its customs and manners.³⁸ Having panache for writing regularly, he wrote many important accounts related to history, polity, culture and religion of India. Some of his works are.³⁹

Un Mémoire sur les établissements de la cote de Coromandel présenté à M. le duc de Choiseul en 1760. (A mémoire on the French establishment on the Coromandel Coast)

Mémoire sur les principes auxquels on doit se conformer dans la conduit des affaires de la Compagnie relativement aux puissances de l'Inde, Septembre 1759 (mémoire related to the policies to be followed in dealing with Indian powers)

Mémoire sur la situation actuelle de l'Empire mogul, Octobre 1759 (memoire on the actual condition in the Mughal empire)

Fragments sur l'Empire Mogol, les Marates, les Rachepoutres (Rajput), les Patanes, les Rajas, les soubedars (an account of the Mughal empire, the Marathas, the Rajputs, the Pathans, the Rajas and the subadars)

Fragment sur l'Empire Mogol, sur les titres, les dignités, les vassaux, sur la forme de l'administration, sur les soubedars du Dekan (an account on the Mughal empire, the titles, the nobles, nature of administration, and on the subadars of Deccan)

Fragment sur l'Empire Mogol, sur les revenus du Mogol et la propriété des terres (an account on the Mughal empire, on their revenues, and the ownership of land)

Besides these works, Modave also wrote several letters concerning India. Modave's works were of historical significance because contrary to the work of priest Raynal *Histoire Philosophique et Politique des Etablissement et du Commerce des Européens dans les deux Indes* (1776) which was largely on the basis of secondary information, he himself had lived those times in the theatre of action he was writing about. He was also imbued with the idea of enlightenment prevalent in

France for he was in touch with Voltaire and provided him crucial information about India.⁴⁰

De Boigne (Indian career 1778-1796) and Perron (Indian career 1796-1803) were other Frenchmen who carried forward the 'love-Indian-culture' tradition further. De Boigne who was an officer of Mahadji Sindhia and ruled Upper India with Aligarh as the military base, made many literary procurements.⁴¹ He had also collected some Lucknow paintings which he carried with him to Europe in crates. De Boigne's sensitivity for Indian heritage was particularly displayed when he managed to secure a fixed allowance for the repair of the Taj Mahal.⁴² His successor Perron on the other hand was interested in numismatic collections and even tried to have the collected coins read from Indian experts.⁴³

These Frenchmen exhibited intriguing receptivity to Indian culture. They broke the European cultural mould and were completely 'Indianised.' They spoke native languages, adopted Indian customs and manners, and established matrimonial ties in India. For example, Polier wrote: *j'ai pris les coutumes et les usages des Indiens avec lesquels je vivais* (I took on the customs and the usages of the Indians with whom I lived).⁴⁴ René Madec also dressed up like the nobles of the country wearing thin cotton robe reaching up to the knees and a flat turban on the head.⁴⁵ Matrimonial alliances played a major role in providing organic connect with the native people.⁴⁶

These sets of evidence open a new window to facets of French presence in India. Attempting to bridge the gap between the Orient and Occident, these Frenchmen emerge as carriers of Oriental learning to the Occident before the arrival of 'Indologists' William Jones, Charles Wilkins etc. Apart from these Frenchmen, there are quite a few more about whom either little is known or who have been brought to academic forefront very recently. The military scientist Delamarr, French engineer Charles de Canaple, and medical surgeons Dr. Calvé, Dr. Macarty, and Dr. Visage are some such names which are still lying in obscurity or are only remotely known. Exploration of this dimension of French presence in northern India in the eighteenth century provides an alternative perspective to the dominant British narratives on India's past.

Notes

- ¹ Gentil, *Mémoire de Gentil*, Microfilm, Bibliothèque Nationale, Paris, pp. 5-6.
- ² Comte de Modave, *Voyage en Inde du Comte de Modave 1773-1776.*, edited by Jean Deloche, Ecole Française d'Extrême-Orient, Paris, 1971, p. 162; Gentil, 'l'Envie de Satisfaire ma Curiosité (1775)', in Guy Deleury, *Les Indes Florissantes: Anthologie des Voyageurs Français 1750-1820*, Paris, 1991, p. 33.
- ³ Gentil, 'l'Envie de Satisfaire ma Curiosité (1775) in Guy Deleury, *Les Indes Florissantes*, p. 32.
- ⁴ Guy Deleury, *Les Indes Florissantes*, p. ix; Urs App, 'William Jones' Ancient Theology,' in *Sino-Platonic Papers*, University of Pennsylvania, no. 191, July 2009, pp. 1-9.
- ⁵ *Mémoire de Gentil*, Microfilm, Bibliothèque Nationale, Paris.
- ⁶ Jacques Maissin, *Un Manuscrit Français du XVIIIe Siècle: Recherche de la Vérité sur l'état Civil, Politique, et Religieux des Hindous with introduction and notes by Rita H. Regnier*, Paris, 1975, p. 314.
- ⁷ Jean Marie Lafont, *Indika: Essays in Indo-French Relations 1630-1976*, Manohar, Centre de Sciences Humaines, New Delhi, 2000, p. 100.
- ⁸ Lafont, *Indika*, p. 100.
- ⁹ Volumes I and II in nastaliq were of the 18th century. Volume III and IV in nastaliq from 1570 AD. Volumes V and VI in nastaliq from early 17th century. Lafont, *Indika*, p. 101.
- ¹⁰ Lafont, *Indika*, p. 101.
- ¹¹ *Mémoire de Gentil*, pp. 137, 153.
- ¹² *Mémoire de Gentil*, p. 128.
- ¹³ Comte de Modave, *Voyage en Inde*, p. 297.
- ¹⁴ Anquetil Duperron, 'l'Impatience de Commencer (1754),' in Guy Deleury, *Les Indes Florissantes*, pp. 12-18.
- ¹⁵ The 7 Parsi manuscripts were: the Venedad in Zend and in Pehlevi, the Yashna in Zend and in Sanskrit, the two Vispered, one in zend and the second in zend and in Pehlevi; J. L. Kieffer, Anquetil Duperron, *L'Inde en France au XVIIIeme Siècle*, Paris, 1983, pp. 23-27.
- ¹⁶ Lafont, *Indika*, p. 97.
- ¹⁷ Lafont, *Indika*, p. 98.
- ¹⁸ Lafont, *Indika*, pp. 97-98.
- ¹⁹ Anquetil Duperron, 'Les Douze Langues de l'Inde' (1786), in Guy Deleury's *Les Indes Florissantes*, pp. 77-79.
- ²⁰ After having done extensive research to locate the copies of the Vedas, it was Don Pedro de Silva, given the title of Khwaja Khiradmand Khan, who informed Polier of the availability of the copy of the Vedas with the

Raja of Jaipur that Polier could finally get it. Jean Marie Lafont & Rehana Lafont, *The French & Delhi, Agra, Aligarh and Sardhana*, India Research Press, New Delhi, 2010, p. 73.

- ²¹ Lafont, *Indika*, p. 104.
- ²² Urs App, 'William Jones' Ancient Theology,' in *Sino-Platonic Papers*, University of Pennsylvania, no. 191, July 2009, p. 44.
- ²³ Urs App, 'William Jones' Ancient Theology,' in *Sino-Platonic Papers*, pp. 44, 75. Towards the end of the 18th century only 5 European scholars had Dara Shikoh's Persian Upanishad manuscripts which were considered rare. Anquetil Duperron (2 copies), Polier (1 copy), Jones (1 copy), Halhed (1 complete and 1 incomplete copy), and Boughton Rouse (2 copies). Out of these, two were Frenchmen.
- ²⁴ Lafont, *Indika*, p. 105.
- ²⁵ Lafont, *Indika*, pp. 103-104.
- ²⁶ It was only after having been provided with these works that Jones' erroneous conceptions about Persia and Zoroastrianism on which he had criticized Anquetil Duperron in 1771 were rectified. Urs App, 'William Jones' Ancient Theology,' in *Sino-Platonic Papers*, p. 62.
- ²⁷ *The Persian Letters of Antoine Polier—Ijaj-i-Arslani*, translated by Muzaffar Alam and Seema Alvi, OUP, New Delhi, 2001, p. 8.
- ²⁸ Lafont, *Indika*, p. 104.
- ²⁹ It might have made it more convenient to understand the nuances of the language and its comprehension. For instance, Polier took the help of Don Pedro de Silva, a Portuguese physician in the service of Raja Pratap Singh of Jaunpur. He was given the title of Khwaja Khiradmand Khan. He was fluent both in English and Persian. Polier took his assistance in the translation of many books from Persian to English, 'Letter by Polier to Khiradmand Khan Don Pedro,' in *The Persian Letters of Antoine Polier—Ijaj-i-Arsalani*, folio no. 245b, p. 241.
- ³⁰ Tilly Kettle was the first European artist to be at Awadh. He painted Polier in 1772 watching a nautch. He is shown in Indian dress. Rosie Llewellyn-Jones, *A Very Ingenious Man: Claude Martin in early Colonial India*, OUP, Delhi, 1992, p. 122.
- ³¹ *Letters of Claude Martin 1766-1800*, edited by Rosie Llewellyn-Jones, Permanent Black, Delhi, 2003.
- ³² S. C. Hill, *The Life of Claude Martin Major General in the Army of the Honourable East India Company*, Thacker, Spink & Co., Calcutta, 1901, pp. 110-124, 118-119.
- ³³ *Letters of Claude Martin 1766-1800*, pp. 5-7.
- ³⁴ *Letters of Claude Martin 1766-1800*, p. 8.
- ³⁵ Letter by Claude Martin to Messrs. William & Thomas Raikes & Co. (4th October 1795, from Lucknow), pp. 274-275; Letter by Claude Martin

to Messrs William & Thomas Raikes & Co. (25th June 1796, from Lucknow), pp. 291-292. He had constructed not one or two but a series of 25 vats which were stepped vats, with filter holes and sluice gates to process the indigo. Letters of Claude Martin, p. 53.

³⁶ Letters by Claude Martin, 1766-1800, pp. 8-9.

³⁷ Letters of Claude Martin 1766-1800.

³⁸ Modave, 'Une Confusion Inextricable (1776),' in Guy Deleury's *Les Indes Florissantes*, pp. 30-31.

³⁹ Comte de Modave, *Voyage en Inde*, pp. 8-10.

⁴⁰ Modave mentions in his memoir that these works were largely based on secondary information, and therefore, were not authentic. He also criticized Alexander Dow, a British administrator (1735-1779) for not dealing with Hinduism elaborately and only borrowing from the previous works. Comte de Modave, *Voyage en Inde*, pp. 10, 294-295.

⁴¹ Maurice Besson, *Le Général Comte de Boigne 1751-1830*, Chambéry, 1930.

⁴² Victor de Saint-Génis, *Une Page Inédite de l'Histoire des Indes: Le Général de Boigne 1751-1830*, Poitiers, 1873, pp. 181-183.

⁴³ Alfred Martineau, *Le Général Perron*, Société d'Édition Géographique, Maritimes et Coloniales, Paris, 1931, p. 199. Martineau wrote: il mit sous les yeux et dans les collections de plusieurs savants des médailles inconnues que jamais les plus habiles d'entre eux n'expliquèrent.

⁴⁴ Polier, 'Après un Aussi Long Séjour (1788),' in Guy Deleury, *Les Indes Florissantes*, p. 43.

⁴⁵ *Mémoire de Madec*, French Nouvelle Acquisition, Département des Manuscrits, 9368 (Microfilm), Bibliothèque Nationale, Paris, (available in National Archives of India, New Delhi-1), pp. 48-49.

⁴⁶ Nearly all north Indian Frenchmen had entered into matrimonial ties with native women. For instance, Gentil, Claude Martin, Polier, De Boigne, Perron, they all tied nuptial knots in India. Perron's family was more Indian than French despite his marriage to the daughter of a French officer in Sindhia's service, Alfred Martineau, *Le Général Perron*, pp. 96-97. Perron's Indian family even lived in Aligarh till 1871, Herbert Compton, *A Particular Account of the European Military Adventurers of Hindustan from 1784 to 1803*, London, 1892, p. 345. Chevalier Dudrenec is another typical example of Indianization of these Frenchmen. He had not only begun dressing himself up in Indian style, but had also begun following various Hindu customs, Shelford Bidwell, *Swords for Hire*, London, 1971, p. 72. Gentil's confession regarding his expertise in Persian has already been mentioned.

Metaphysico-Epistemological and Ethical Issues in Postmodernity

Sanjay Kumar Shukla*

I

Modernity is a historical realization of key proposals from the progressive humanist agenda of the European enlightenment which developed “within the horizon of Reason.” The post-modernity is to be considered as a critique of modernity which includes the untiring efforts of Heidegger, Rorty, Foucault, Lyotard, Derrida and others. They argue that a dialectic of enlightenment is at the heart of the modernity project which includes a false universalism that blocks appreciation of substantive differences like race and ethnicity and which leads to various forms of domination. Habermas, being critical towards the project of modernity, has coined “communicative reason” as opposed to “subject-centered reason” of modernity. He offers the following distinctions: Rationality is referred in the communicative reason to be the disposition of speaking and acting subjects to acquire and use fallible reason, while subject-centered reason finds its criteria in standards of truth and success that govern the relationships of knowing and purposely acting subjects to the world of possible objects or states of affairs. It is when we conceive knowledge as communicatively mediated, rationality is assessed in terms of the capacity of responsible participants, where validity claim is granted to inter-subjective recognition. Communicative reason is expressed in a de-centered understanding of the world.¹

* Dr. Sanjay Kumar Shukla, Associate Professor- Philosophy Department, Ewing Christian College, Allahabad (U.P.)- India

Modernity has its focus in the discovery, articulation and ramification of subjective self. Self-reflection, self-assertion, self-gratification and self-articulation are the contrasting and conflicting means of fabricating the modern self. The post-modernity accepts the conditions of psychic fragmentation and its cultural implications as improvements over the rationally ordered psyche. The divided self is celebrated in its ruptured deconstructed state. Post-modernism argues against the very idea of consensus, and thereby rejecting any theoretical grounding for culture and value paradigm. The project of modernity is said to have been the fostering of progress by incorporating principles of rationality and hierarchy into public and artistic life. Lyotard visualizes modernity as a cultural condition characterized by constant change in the pursuit of progress. Post-modernity represents the culmination of the process where constant change has become the status quo and the notion of progress obsolete. The debate between modernity and post-modernity hinges upon universalism and relativism, as modernity endorses universalizing norms, while post-modernity pleads the case of multiple perspectives and relativism. Seyla Benhabib offers the post-modern critique of modernity as an anti-foundationalist concept of the subject and identity, the death of history and the notion of teleology and progress, and the death of metaphysics defined as the search for objective truth. Post-modernity is marked by increasing focus on civil rights and equal opportunity, as well as supporting the claims of feminism and multi-culturalism. Economic and technological conditions of our present age have given rise to decentralized, media-dominated society in which ideas are only simulacra, inter-referential representations and copies of each other with no real, original or objective source of communication and meaning. Hence, for post-modernist, the dominant form of discourse is not objective knowledge but inter-subjective pattern between reader and what is read, between observer and the observed. Post-modern trend of philosophy emphasizes the elusiveness of meaning and knowledge. It rejects the modernist view of freedom, rationality and progress. Concerning reason, post-modernists condemn modernist views which inflate reason to the status of an entirely independent neutral, unbiased and objective instrument with which truth can be found and located. Regarding progress, post-modernists are quick to point out that, contrary to the optimistic outlook of modernity, we are in some cases creating survival threatening conditions by an unbridled rush towards technological "progress." Whereas modernity places freedom and human autonomy as one of the highest human values, the post-

modernist, contrary to it, suggests human freedom to be illusory as it is determined by factors like race, gender and culture beyond our control.

There are different routes from the modernity to the post-modernity in the realm of philosophy 1. Jurgen Habermas maintains that post-modernity is exhibited through an irrationalist tradition from romanticism to existentialism, to French post-modernism via the figures of Nietzsche, Heidegger and Bataille into the proliferation of French post-modern theory. 2. For Ihab Hassan, the post-modern culture emerges out of modernism, pragmatism and changes in modern science, leading to William Jamesian vision of an “unfinished pluralistic universe.” 3. John McGowan traces the emergence of post-structuralist, neo-Marxist and neo-pragmatist post-modern theories from the tradition of Kant, Hegel, Marx and Nietzsche.

II

Metaphysics is defined as the “philosophical investigation of the nature, constitution and structure of reality.” The metaphysical debate between modernism and post-modernism can be located in realism and nominalism. Realism maintains universal to have an objective (not mind-dependent), transcendent existence (that is existing apart from, or transcending the individual and culture), and capable of being multiply-exemplified. Nominalism rejects such conception of truth, which corresponds with an objective mind-independent world. It maintains that no universals exist, but rather all that exist are particular, discrete things, meaning thereby nothing is transcendent. Realism upholds that moral values such as goodness and justice exist and are transcendent, objective and multiply exemplifiable. The same is true about human nature and propositions (the laws of logic). In nominalism we find moral values, human nature and propositions are created by individual or collectively by the society, not discovered as existent “out there.” Michel Foucault argues that “the domination of certain man over others leads to the differentiation of values; class domination generates the idea of liberty.”²² Concerning propositions, Jacques Derrida remarks that “the absence of a transcendental signified extends the domain and play of significations infinitely,”²³ which echoes the words of Nietzsche that “there are no facts, but only interpretations.” We can safely conclude at this juncture that the nominalistic metaphysics of post-modernity denies the transcendence, objectivity and multiple exemplifications of

moral values, human nature and propositions. It is truism to state that post-modernism is indefinable. However, it can be described as a set of critical, strategic and rhetorical practices employing concepts such as difference, repetition, the trace, the simulacrum and hyper-reality to destabilize other concepts like presence, identity, historical progress, epistemic certainty and the univocity of meaning. The later nineteenth century is the age of modernity as an achieved reality, where science and technology reshape human perceptions by obliterating the distinction between the natural and artificial experience. Post-modernity proposes de-realization which affects both the subject and the objects of experience, such that their sense of identity, homogeneity and substantive nature is dissolved or upset. The de-realization theme can be easily located in the philosophical writings of Kierkegaard, Marx and Nietzsche. Kierkegaard describes modern society as a network of relations in which individuals are levelled into an abstract phantom known as the “public.” Marxian analysis is based upon the fetishism of commodities, where objects lose the solidity of their use value and become spectral figures under the aspect of exchange value. We experience de-realization because commodities are products of our labour. This phenomenon has given rise to the situation of *Homo-Faber* in which man ultimately becomes the product of his own product. Nietzsche is also a precursor for post-modernity in his genealogical analysis of the core concept of Western metaphysical self or “I”. The concept of “I” turns out to be social construction and moral illusion.

The concept of difference as a productive mechanism, rather than a negation of identity, is also a hallmark of post-modernism in philosophy. Gilles Deleuze deploys this concept against Kantian and Hegelian idealism. His major focus is a thorough going critique of representational thinking, including identity, opposition, analogy and resemblance. Kant finds the representational unity of space and time upon the formal unity of consciousness.⁴ Deleuze maintains that individuality is not characteristic of a self or an ego, but of a differential forever dividing itself and changing its configuration.⁵ In Nietzschean fashion the “I” refers not to the unity of consciousness, but to a multitude of simulacra without an identical subject for whom this multitude appears. Hyper-reality is the result of the technological mediation of experience in post-modernity, where what passes for reality is a network of images and signs without an external referent, such that what is represented is representation itself. Baudrillard presents hyper-reality

as a terminal stage of simulation, where a sign or image has no relation to any reality whatsoever, but is “its own pure simulacrum.”⁶ The term “Post-modern” came into philosophical lexicon with the publication of Lyotard’s *The Post-modern Condition: A Report on Knowledge*, and here he pointed out that science has sought to distinguish itself from narrative knowledge in the form of tribal wisdom communicated through myths and legends, while modern philosophy has sought to provide legitimating narratives for science in the form of “the dialectic of spirit, the hermeneutics of meaning, the emancipation of rational self, or the dictatorship of proletariat.”⁷ He defines post-modern as incredulity towards meta-narratives, and de-realization of the world which means the disintegration of narrative elements into “clouds” of linguistic combinations and collisions among innumerable heterogeneous language games. Lyotard is regarded as the champion of difference and plurality in all theoretical realms and discourses, while energetically attacking totalizing and universalizing theories and methods. He remarks that “consensus does violence to heterogeneity of language games. Invention is always born of dissension. Post-modern knowledge is not simply a tool of authorities; it refines our sensitivity to differences and reinforces our ability to tolerate the incommensurable.”⁸ Hence, post-modernity is the rejection of metaphysical philosophy, philosophies of history, and any form of totalizing thought be it Hegelianism, liberalism, Marxism or positivism.

III

The loss of a continuous meta-narrative therefore breaks the subject into heterogeneous moments of subjectivity that do not cohere into an identity. Foucault employs historical research to open possibilities for experimenting with subjectivity, by showing that subjectivation is formative power of the self, surpassing the structures of knowledge and power out of which it emerges.⁹ He postulates the disintegration of the epistemic subject, as the continuity of the subject is broken up by the gaps and accidents that historical research uncovers. He is known for questioning conventional assumptions of the enlightenment, Marxism, rationality, subjectivity, power, truth and history. Foucault breaks with universalist, foundationalist, dialectical and normative standpoints and emphasizes principles of contingency, difference and discontinuity. He tries to show that all norms, values, beliefs and truth claims are relative to the discursive framework within which they originate. There is no

absolute, unconditioned and transcendental stance from which to grasp what is good, right or true. For Foucault, the appeal to foundations is necessarily metaphysical which assumes the fiction of an Archimedean point outside of language and social conditioning. We are tempted to identify another feature of post-modernism: the rejection of truth as “correspondence.” In correspondence theory of truth a proposition such as “snow is white” is true in virtue of it corresponding to the state of affairs (mind-independent objective) reality, that is snow being really white “out there” in the world. For the post-modernist, no appeal is made to an external reality beyond the individual and/or culture which ground a proposition as “true.” Richard Rorty has pointed out that “those who wish to ground solidarity in objectivity.....have to construe truth as correspondence to reality. By contrast, those who wish to reduce objectivity to solidarity.....view truth as, in William James phrase, what is good for us to believe. Hence, they do not need an account of a relation between beliefs and objects called correspondence.”¹⁰ The post-modern metaphysics explains the motivation to reject grand or meta-narratives, which by definition are comprehensive worldviews as considered to be accurate and “true” understanding of reality. The meta-narratives such as religious traditions (Christianity, Islam, Hinduism and Buddhism) and philosophical systems (Marxism, Humanism and Modernity) are to be unequivocally rejected due to their claim of having truths that transcend the individual or culture, and at the same time making tall promise of knowing the reality.

Structuralism was a philosophical movement developed by French academics partly in response to French existentialism. Post-structuralists were thinkers who moved away from the strict interpretations and applications of structuralist ideas. Thinkers who are well associated with structuralism can be cited as the anthropologist Claude Levi-Strauss, the linguist Ferdinand de Saussure, the Marxist philosopher Louis Althusser, and the early writings of psycho-analyst Jacques lacan and the literary theorist Roland Barthes. Those who began as structuralists but became post-structuralists afterwards include Michel Foucault, Roland Barthes, Jean Baudrillard, Gilles Deleuze, while established post-structuralists are Jacques Derrida, Pierre Bourdieu, Jean Francois Lyotard and Luce Irigaray. Post-structuralism is not defined by set of shared axioms or methodologies but an emphasis on how various aspects of particular culture determine one another. It tends to espouse relativism and constructionism in their philosophical

literature. Foucault rejected the Enlightenment's concept of freedom, liberation, self-determination and human nature. The ground for rejecting such concepts is the possibility of cultural hegemony, violence and exclusion by them. It can be safely stated that Heidegger, Derrida, Foucault, Lyotard and Rorty emerged as perhaps the major philosophical figures in the post-modern turn in philosophy. These thinkers were resolute historicists who assailed timeless metaphysical notions such as "Being" and overturned the Cartesian view of the subject in different ways, while each taking the "linguistic turn" in their philosophical discourse.

The work of Derrida must be understood in the context of critique of modern Western metaphysics and ontology. If the Western notion of ontology and being are false, then knowledge and meaning must be grounded in something. For Derrida this "something" is not an objective "being," but rather is a result of representational sign making and re-making. The phenomenology and logocentrism are two influential schools of thought shaping Derrida's ideas. Phenomenology is the study of how knowledge of phenomena is ascertained. The phenomenon is present to us, and this presence is what constitutes to the content of our consciousness. Logocentrism is the philosophical notion that "understanding and meaning can be given a fixed reference point by grounding it in a *logos*, some fixed principle or characteristic of reality: in other words, in a presence."¹¹ The thrust of Derrida's thought is to challenge the idea of an impersonal, abstract, indefinable being that grounds knowledge, meaning and language. According to him, words do not derive their meaning from a *logos* or the presence of objects in our consciousness, rather, words find their meaning in other words, which in turn derive their meaning from some other words. We do not apprehend the essence of objects in consciousness but rather attach signs or signifiers to our experiences, and made intelligible to us through previous knowledge of signs. Hence, within this inter-linguistic world of meaning that operates apart from metaphysical or ontological foundations, words have no fixed meaning or referent. Rather, words have their meaning within their immediate "difference" to other signs. This reality of meaning, this inter-linguistic free play of signs is what Derrida calls 'deconstruction.' Deconstruction is a basic element in all of language as it reveals the process of meaning, knowledge and thought crumbling under its foundationlessness. He upholds that there is no immediate access to reality, no "transcendental signified," not mediated

through a socially-constituted language. The attack on metaphysics is central to Derrida's thought, as for him, the entire Western legacy of philosophical thinking is metaphysical in the sense that it seeks to erase time, history, difference and contingency from the world. Philosophical concepts such as "forms" "clear and distinct ideas," "absolute knowledge" and "transcendental subject" all seek to stop the dissemination of meaning within a closed system of "truth." This repression of meaning inevitably leads the metaphysical texts of Western philosophy into paradoxes, contradictions and incoherence, and therefore demanding "deconstruction." To deconstruct does not mean to destroy, rather it attempts to undo logical contradictions, to overturn rigid conceptual oppositions, while releasing new concepts and meanings that could not be included in the old metaphysical system. Hence, Derrida like Nietzsche, wants to leave us without any transcendental illusions, metaphysical unities and foundations that constrain thought and creativity.

IV

There is a methodological gap between modernity and post-modernity, as post-modernists reject the norms of strict logic and rationality, which characterize modernity. It attempts to transcend the contours of system-prone thinking. At the center of modernity are foundationalism, essentialism and teleology which include such issues as human subjectivity (the *cogito*, the transcendental subjectivity and *Geist*), rationality, unity, freedom, morality, and so on, whereas post-modernity incorporates themes such as fantasy, sexuality, plurality, discontinuity, irrationality and fragmentation. In post-modernity, reality follows diverse models, which are rich in conflicts, history is viewed from ruptures and mutations, and there is a radical negation of totalitarian thinking.¹² Mary Klages, in '*Postmodernism*' has pointed some basic characteristics of post-modernity as: 1. Post-modernity is the critique of "grand narratives" because such narratives in favour of "order" serve to mask the contradictions and instabilities that are inherent in any social organizations or practices. It rejects grand narratives about large-scale or global universal concepts in favour of more situational and provisional "mini narrative" about small practices and local events. 2. Knowledge is not good for its own sake, as its functionality or ability is more important. Knowledge is not to assess or evaluate truth, goodness or beauty, but rather to see who decides what knowledge is, and who

knows what need to be decided. 3. Post-modernity rejects the notion of absolute truth, as truth is determined by socio-historical conditions. It rejects and replaces foundationalism by contextualism. 4. Post-modernity is against the notion of absolute religion and monopoly of truth. It promotes “religious inclusivism” and usually leans towards the New Age Religions. 5. Post-modernity rejects the possibility of any absolute ethical standards as they are determined by cultures which have distinct individuality and uniqueness. It endorses the philosophical standpoint of “ethical relativism.” 6. Post-modernity is a revolt against the rationality principle of enlightenment. Since Descartes, the dominant theme of Western philosophy has been that of the human subject representing the objective world to himself. Lyotard draws attention to the fact that reason tends to operate with structured system of concepts, which excludes the sensual and emotional, but these, exclusions can never be entirely met.

Modernity endorses a free critical inquiry as well as rational attitude towards solving problems. For post-modernity rationality is highly overrated as a tool to judge, to inquire and to decide what to believe and to do. This is because what appears reasonable or rationally tenable is relative to the culture or historical period from which one is operating. If we accept post-modern epistemology then we cannot set the goal of objective unbiased inquiry, rationality and the search for truth. Calvin Schrag, in his famous article *Postmodernism and Liberal Education*, has pointed out post-modern philosophy to be anti-foundationalist and it is preoccupied with an interpretative analysis of our variegated social practices. Being anti-foundationalist, post-modern thinkers believe that it is possible for us to have many competing and equally tenable rational views upon particular issue. With an emphasis upon narrative and interpretation, rather than analytic methodologies, these thinkers are critical of philosopher’s attempt to discover universal methodologies. Schrag claims that post-modern philosophy is a search for instabilities, shifting paradigms, uncertainty, unpredictability and incommensurability.¹³ It endorses contextualist epistemology, which believes that what counts as a reasonable belief is determined by one’s paradigm, form of life, culture or *Gestalt*. Any belief claiming epistemic warrants is always context dependent and therefore no belief can have warrant transcending all contexts. Thomas Kuhn claims that what counts, as evidence for one belief as opposed to its alternatives is context or paradigm dependent. If the rationality of all claims is indeed context dependent

then no reasoning skills or evaluative procedures apply to all disciplines.¹⁴

The problem of epistemic justification is of great relevance in Western epistemology. Foundationalism, coherentism and contextualism are different theories dealing with the problem of epistemic justifications. According to foundationalism, some propositions or beliefs are basic in the sense that they are absolutely certain, foundational and self-evident. It has used the metaphor of a pyramid to describe the structure of a set of justified beliefs. It consists of a broad foundation of perceptual beliefs and superstructures of worldly beliefs that is beliefs reporting to what is happening in the world around us. The perceptual beliefs are to be justified non-inferentially by direct appeal to our perceptual experiences, while the super-structural beliefs are to be justified inferentially. The direction of justification is upward through successive layers of propositions and this is named as Pyramid Theory of Knowledge.¹⁵ The main objection to foundationalism is that there are no infallible beliefs, and therefore our basic beliefs cannot be taken as foundation of knowledge. Popper claims that the foundational theory attached with absolute certainty is based on a mistaken assumption. He has suggested to give-up the idea of ultimate sources of knowledge, and claims that it is mixed up with our errors, prejudices, dreams and hopes. He maintains that our knowledge grows by method of conjectures and refutations. We attempt to solve our problems by a process of elimination, something approaching adequacy in our tentative solutions.¹⁶

Coherentism is characterised by its opposition to foundationalism. It dispenses with the notion of justification by appeal to perceptual experience and takes the view that beliefs can be justified only inferentially. Davidson pointed out that what distinguishes a coherence theory is simply the claim that nothing can count as a reason for holding a belief except another belief.¹⁷ Coherence theory of justification is associated with three doctrines: 1. A belief is justified to the extent that it coheres with the believer's other beliefs. 2. No subject of the beliefs is more basic than other beliefs. 3. No belief is certain because any belief, even self-evidently certain beliefs, may be rejected atleast, in principle, on the basis of evidence.¹⁸ Contextualism tries to correct both foundationalism and coherentism regarding the problem of epistemic justification. It does not accept the possibility of foundational, self-evident and infallible propositions or beliefs as truth of a particular belief is to be decided on the ground of a context. Contextualism is

against coherentism, because a belief is not justified on the basis of coherence to be found in the set of beliefs, rather its verification is to be determined by a particular context or standpoint. The situational context determines the epistemic merit (truth and validity) of a particular belief, and it is needless to say that somebody's evidence may be sufficient for being justified in one context, while it may fail to do so in another. Hence, contextualism is the view that contextual factors like the speaker's goals, expectations, intentions and the overall purpose of the conversation play a crucial role in the evaluation of 'justification' — ascriptions.¹⁹

Contextualist maintains that logic and rational arguments have no privileged force in post-modern debate. Post-modern thinkers maintain that foundationalist epistemologies are self-referentially flawed, and hence should be rejected. The critics of foundationalism raise the issue whether the propositions that define the foundationalist epistemology are self-evident or evident to the senses. But these propositions are neither self-evident nor evident to the senses, and therefore the foundationalist epistemology is self-referentially flawed. The problem with epistemological contextualism seems to be the same as faced by cultural relativism. Cultural relativism maintains that what is ethically right or wrong is relative to one's own culture. Just as cultural relativism reduces itself to individual moral subjectivity, similarly contextual epistemologies become subjective epistemologies where any specific or set of individual differences may constitute a different context. It is from the above mentioned discussion regarding epistemic justification we can safely conclude that foundationalism, coherentism and contextualism have their own merits and demerits. It is not appropriate to consider them as mutually exclusive in nature, rather there is a great possibility of mutual supplementation. Hence, it is truism to state that whether it is the case of justifying the belief or interpreting the text, we must/should employ the criteria of rationality, coherence and context in our epistemological exercise.

V

Modernity stripped morality of its transcendent religious frame of reference, and thereby its ethical foundation is rationalistic, humanistic and secular in nature. Subjective self-expression is the goal of modernity. Post-modern ethics includes individualistic, playful and pleasure seeking attitude towards life. It is rooted in authority crisis. The crisis involves

traditional institutions (family, church, state, police) through which modernism sought to organise a rational and progressive society. An identity is marked by market acquisitions and not by ideologies. Gilles Lipovetsky has observed that in post-modernity “imaging” dominates reality. In contrast to modernism’s work ethics and individual savings, post-modern ethics affirms the value of consumer spending, free time and idleness. The pursuit of gratification, pleasure and private fulfillment is the supreme ideal in post-modern society. The worship of personal autonomy and diversity of lifestyle becomes important. Pluralism provides a multiplicity of values, with individual opinions and whims, but none with authenticity. The culture of personal freedom, relaxation, the natural, the humorous, and freedom of expression emerge as something sacred. The irrational is legitimized through affections, intuitions, feelings, carnality, sensuality and creativity. Post-modern ethic proclaims the individual right to autonomy, to happiness, and to individual fulfillment, and at the same time disregards higher, unconditional values such as service to others and self-denial. Post-modernism does not propose moral chaos, but redirects ethical concerns through a weak, ephemeral, painless commitment to values that do not interfere with individual freedom. There are some positive contributions made by post-modern initiative for problems that threaten human life today such as environmental concern, gender justice, struggle against violence and all sorts of discrimination, and multiculturalism are dominant themes of post-modern ethic. Hence, post-modernity does not have a moral motivation as it pursues the individualistic search for personal fulfillment and autonomy.²⁰

The post-modernity has to respond adequately the nature and possibility of its ethics. It can be argued that post-modern ethics is contradiction in terms, since moral and ethical claims must necessarily have a solid foundation and post-modern theorizing is anti-foundationalist. It is truism to state that post-modernity indubitably rejects the foundational status of the modern meta-narratives but it does not amount to undermine the validity of their political and ethical values. Z. Bauman has rightly pointed out that the issue of foundations really differentiates the post-modern ethics from modern one. Modern ethic has not transcendental source as God but it is created by us. People must obey a comprehensive and unitary code of ethics guided by reason. Reason, thus, provides modern ethics with new foundation, and this foundation secures universalizing norms as all human beings

are considered to possess, or to be capable of acquiring, that reason which informs moral rules.²¹ Modernity is animated by a belief in the possibility of a *non-aporetic* (indubitable) ethical code rooted in reason and universal validity for all human beings. Disbelief in such possibility made the emergence of post-modernity a ground reality. Post-modernity affirms that ethics is incurably *aporetic*, as few choices are unambiguously good; that ethics cannot be grounded in reason or any other extra-discursive essence. *Aporetic* means a philosophical puzzlement or a rhetorical expression of doubt. The etymology of *aporetic* is 'a' and 'poros' (without a passage), and Plato's early dialogues are often called *aporetic*. In post-modernity the ethical codes are not completely universalizable, as what is believed to be moral in one place and time is certain to be frowned upon in another, and as ethical codes are always the result of political struggles that can only pretend to promote a universal ethics.²² The critique of essentialism implies that ethical judgment cannot be made *a priori*, not even in the sense of establishing a minimal content for a categorical imperative. But it is argued that the loss of foundation in post-modernity will lead to immorality and social dissolution. Richard Rorty refutes the charge of ethical relativism against post-modernity as it has no *locus standi*. The world is out there, but truth is not.²³ Truth cannot be out there; it cannot exist independently of the human mind because descriptions of the world cannot exist in that way, they cannot be out there. The world can, once we have programmed ourselves with a language, cause us to hold beliefs. But it cannot propose a language for us to speak.²⁴ If this view is accepted, relativism ceases to be a problem, for there will be no extra-discursive moral truth to accept or challenge. We will always approach the question of what is true and false, good and evil, right and wrong, within the discursive framework we find ourselves in. We can establish what seems to us right, true and good, but the possibility of transcendental grounding of our beliefs is forever ruled out.²⁵

The post-modern ethicists maintain that all attempts to ground ethics in an extra-discursive instances are doomed to failure, and can at best be described as hegemonic attempts aimed to partially fix the discursive context of ethical judgment. We witness this phenomenon that the discourse is always penetrated and destabilized by the field of discursivity, and this discursive context of ethical judgment opens up an inherently undecidable terrain in which absolute truth cannot be ascertained. E. Laclau argues that anti-foundationalist stand of post-modernity does not lead to immorality or to a relativist gloom.

The post-modern experience, on the contrary, of the radical contingency of any particular content claiming to be valid is the very condition for ethical over-investment that makes possible a higher moral consciousness. Anti-foundationalism is strictly incompatible with the idea of universal ethics grounded in some outer-worldly or inner-worldly essence. The uncertainty arising from the disappearance of unshakable ethical foundations is indirectly nurtured by Foucault recommending 'aestheticization of ethics,' whereby, each subject must constantly reinvent himself by constructing his own mode of enjoyment and self-mastery. The ethical conception of the good can always be deconstructed and redescribed in a way that makes the good look bad. It is due to this problem that several scholars have drawn the conclusion that a post-modern, deconstructive ethics is contradiction in term as deconstruction deconstructs any ethical foundation. But Critchley claims that there is an ethical moment in deconstruction, which is perhaps even the goal towards which the Derrida's work is directed. The kind of ethics seemingly present in the deconstructive double reading of texts is an ethical experience in the Levinasian sense of term. The ethics articulated by Levinas is not reducible to socio-political order of ethics and morals that organizes and improves human life.²⁶ Levinasian 'ultra ethics' is not an ethics in the traditional sense of the term, but rather an ethical experience that cannot be exhausted by ethical and moral claims. The ethical experience refers to the relation of singular I to an alterity of an Other, who is not lost in the crowd as 'one of many.'²⁷ What makes my relation to the Other ethical is my non-reciprocal and unconditional acceptance of the obligation to respond to the Other's demand. Hence, Derrida tends to equate the Levinasian ethics of 'the relation to the Other' with his own concept of 'justice' and 'democracy to come.' He is committed to ethical values of emancipation such as the elimination of exploitation and discrimination, the assertion of human rights, the consolidation of civil and political freedom, etc. The deconstruction of ethical and moral foundation forces us to be ethical *bricoleurs* who take up and articulate the context-bound ethical and moral claims that we come across and think will serve as reasonable and appropriate guides for our beliefs and actions. Our decision to apply a certain ethical or moral standard is not and should not be governed by any metaphysical principle, and Levinasian ultra-ethics does not constitute a hard and first rule limiting our choice of ethical and moral standard. It rather calls us to recognize our infinite responsibility towards the Other, which we cannot comprehend or domesticate.²⁸

VI

Michel Foucault, a post-modernist philosopher, does not understand ethics as a moral philosophy with normative or metaethical orientation, rather he defines it as a relation of self to itself in terms of moral agency. Ethics denotes the intentional work of an individual on itself in order to subject itself to a set of moral recommendations for conduct and, as a result of this self-forming activity or “subjectivation,” constitutes its own moral being. Foucault maintains that modern ethical thought attempts to derive moral obligations from human nature and yet modern thought also holds that human nature can never be, given the fact of human finitude, fully given to human life. Consequently, modern thought is incapable of formulating coherently a set of moral obligations.²⁹ This argument is essentially a part of his larger attack on modern humanism and its conception of the human being as subject, a being that supplies for itself the foundation of knowledge, value and freedom. He further deepens the reasoning on the basis of historical constitution of the subject by discursive practices and techniques of power. All these arguments comprise a multifaceted attack on the modern notion of self-constitution. But later on Foucault elaborated a conceptual framework that grants self-constitution considerable importance. He explains his “history of thought” as the history of “focal points of experience” in which human beings conceive and perceive themselves. These focal points are studied along three axes: the axis of knowledge, or the rules of discursive practices that determine what counts as true or false; the axis of power, or the rationalities and techniques by which one governs the conduct of other; and the axis of ethics, or the practices of self through which individual constitutes itself as subject.³⁰ Hence, we witness a drift from early to later views in the form of moving from the formation of subjectivity by discursive practices and power relations to subject as both constituted and self-constituting.

Foucault has made distinction within philosophy in the form of philosophy simpliciter and philosophy as a spiritual activity. Philosophy considers what enables, conditions and limits the subject’s access to the truth, but philosophy as a spiritual activity furnishes injunctions or moral codes to care for oneself — a philosophy conceived as ethical work that must be performed in order for an individual to gain access

to the truth. The injunction to know oneself was therefore a demand to attend to one's relationship to the truth as a function of caring for oneself. It is entirely different from Cartesian standpoint in which the truth or falsity of self-knowledge is determined by the criteria of clarity and distinctness. The Cartesian insight is further intensified in Kantian philosophy as the features of the subject's own thinking must be constitutive of the very possibility of knowledge, and it cannot be treated as directive to spiritual and ethical development. Hence, he upholds that the care of the self is the ethical transformation of the self in the light of the truth, which is to say the transformation of the self into a truthful existence. Foucault, in the last phase of his life, began to focus his attention on the particular ancient practice of caring for the self, namely frank-speech (*parrhesia*). *Parrhesia* is the courageous act of telling the truth without either embellishment or concealment for the purpose of criticizing oneself or another, and it is only through this one freely owns subjectivity. The striking discovery of Foucault's 'Archaeology of Modernity' is that no morality is formulated in modernity. Modernity thinks so much of the unthought that it fails to address the ethical question of how one is to live well. The Kantian categorical imperative is an instance of an absence of morality. Foucault explains that "The Kantian moment is the discovery that the subject, in so far as he is reasonable, applies to himself his own law, which is the universal law."³¹ Recognizing the Sartrean undertone in Foucault's reading of the Kantian categorical imperative, Drefus and Rainbow argue "whoever achieves total clarity about himself and society would, indeed be a sovereign chooser, but a sovereign that no longer had any reason for his choice."³² Acting on a maxim that can be universalized is the action of a reasonable subject but it postpones, if not leaves out "doing good." The absence of morality in modernity prompted Foucault to do an excursion into Greek thought and culture. The search for "aesthetics of existence" is his response to such absence of morality. Ancient Greeks were concerned with constituting a beautiful, aesthetic life out of their own lives more than anything, and here relevant questions would be: what makes the "aesthetics of existence" beautiful? and what makes the existence moral? Explaining the moral values of "aesthetics of existence," he maintains that it is a way of life whose moral values depend on certain formal principles in the use of pleasures, in the way one distributes them, in the limit one observes, in the hierarchy one respects.³³

It is important to appreciate the political and cultural advantages that emerges out of the historicist recasting of being in post-modernity. If we recognize the historicity of being and accept the fact that human beings are exclusive authors of their world then it is going to have a liberating effect on human kind. Another advantage of post-modern perspective is that “the perception of the contingent character of universalistic values will make us all more conscious of the danger that threaten them and of their possible extinction.”³⁴ If we believe that what is ethically good and morally right is guaranteed by God, rationality or the essence of man, we might be less inclined to actively participate in the preservation of those ethical and moral values than if we realize that only our responsible defence of what is good and right will ensure the persistence of our ethical and moral standards.

Notes and References

1. Habermas, Jurgen, *The Philosophical Discourse of Modernity*, pp. 314-15.
2. Foucault, Michel “Nietzsche Genealogy and History” in *Language, Counter-Memory, Practice: Selected Essays and Articles*, Donald F. Bouchard and Sherry Simon (trans.), Cornell University Press: New York, 1977, p. 150.
3. Derrida, Jacques, *Writing and Differences*, Alan Bass (trans.), University of Chicago Press: Chicago, 1978, p. 280.
4. Kant, Immanuel, *Critique of Pure Reason*, Norman Kemp Smith (trans), Macmillan & Co. Ltd., London, 1964, pp. 135-37.
5. Deleuze, Gilles, *Difference and Repetition*, Paul Patton (trans.), Columbia University Press: New York, 1994, p. 246.
6. Baudrillard, Jean, *Simulacra and Simulation*, Sheila Faria Glaser (trans.), University of Michigan Press: Ann Arbor, 1994, p. 6.
7. Lyotard, Jean Francois, *The Post-modern Condition: A Report on Knowledge*, Geoff Bennington and Brian Massumi (trans.), Univesity of Minnesota Press: Minneapolis, 1984. p. xxiii.
8. Ibid, p. 75.
9. Foucault, Michel, *The Use of Pleasure: The History of Sexuality*, Vol. II, Robert Hurley (trans.), Random House : New York, 1985, p. 9.
10. Rorty, Richard, “Solidarity or Objectivity” in *Objectivity, Relativism and Truth*, Cambridge University Press: Cambridge, 1991, p. 22.
11. Erickson, Millard, *Truth or Consequence: The Promises and Perils of Post-modernism*, Intervarsity Press: Illinois, 2001, p. 115.

- ^{12.} Singh, Raghvendra Pratap, *Consciousness Indian and Western Perspective*, Atlantic Publishers and Distributors Limited, New Delhi, 2008, pp. 355-56.
- ^{13.} Schrag, Calvin O., *Liberal Learning in a Post-modern World*, The Key Reporter, vol. 54, No. 1, Autumn, 1988, pp. 1-3.
- ^{14.} See for detail discussions Kuhn, Thomas, *The Structure of Scientific Revolution*, 2nd Edition, University of Chicago Press: Chicago, 1962 “Changes in paradigm are not deliberation and interpretation, but a relatively sudden unstructured events like the Gestalt switch..... Just because it is transition between incommensurable, the transition between competing paradigms cannot be made a step at a time, forced by logic and neutral experience,” p. 122.
- ^{15.} Pollock, John L., *Knowledge and Justification*, Princeton University Press, New Jersey, 1974., pp. 23-24.
- ^{16.} Popper, Karl R., *Objective Knowledge: An Evolutionary Approach*, Oxford, 1972, pp. 259-61.
- ^{17.} Davidson, Donald, *A Coherence Theory of Truth and Knowledge*, in E. Lepore (ed.) *Truth and Interpretation, Perspectives on the Philosophy of Donald Davidson*, Oxford: Blackwell, 1986, p. 310.
- ^{18.} Kirkhan, Richard L., *Theories of Truth*, Bradford Books, Cambridge, 1997, pp. 217-18.
- ^{19.} Shukla, Sanjay Kumar, *Modernity and Post-modernity Debate: Related Issues and Challenges*, Satyam Publishing House, New Delhi, 2014, p. 45.
- ^{20.} *Ibid.*, pp. 53-54.
- ^{21.} Bauman, Z., *Postmodern Ethics*, Blackwell Press: Oxford, 1993, p. 68.
- ^{22.} *Ibid*, pp. 10-14.
- ^{23.} Rorty, Richard, *Contingency, Irony and Solidarity*, Cambridge University Press: Cambridge, 1989, pp. 4-5.
- ^{24.} *Ibid*, p. 50.
- ^{25.} Behera, Satrughana, *The Ethical Challenge of Postmodernism: Some Reflections*, Journal of Indian Council of Philosophical Research, Vol. xxiv, No.1, January- March, 2007, p. 75.
- ^{26.} Critchley, S., *The Ethics of Deconstruction: Derrida and Levinas*, Blackwell Press: Oxford, 1972, p. 4.
- ^{27.} *Ibid*. p. 17.
- ^{28.} Critchley, S., *Deconstruction and Pragmatism*, C. Mouffe (ed.), Routledge Publication: London, 1996, p. 35.

29. Foucault, Michel, *The Order of Things: An Archaeology of Human Sciences*, Vintage Books: New York, 1970, pp. 326-27.
30. Foucault, Michel, *The Government of Self and Others: Lectures at the College de France, 1982-83*, Graham Burchell (trans.), Palgrave Macmillan: New York, 2010, pp. 1-5.
31. Foucault, Michel, *The Order of Things*, p. 343.
32. Drefus, Hubbert and Rainbow, Paul, *Foucault: Beyond Structuralism and Hermeneutics*, 2nd Edition, Chicago University Press: Chicago, 1983, p. 37.
33. Foucault, Michel, *The Use of Pleasure in the History of Sexuality*, Vol. 2, Hurley, Robert (trans.), Pantheon Books: New York, 1985, p. 89.
34. Laclau, E, 'Community and its Paradoxes: Richard Rorty's Liberal Utopia' in *Community at Loose Ends*, Minnesota University Press: Minneapolis, 1991, p. 97.