

SOC 489
**EXPLORING HUMAN VALUES: VISIONS OF HAPPINESS AND
PERFECT SOCIETY**

TERM PAPER



INDIA-WE THE PEOPLE: **STRUGGLING AGAINST DISASTER**

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INTRODUCTION

The word disaster implies a sudden overwhelming and unforeseen event. At the Household level, a disaster could result in a major illness, death, a substantial economic or social misfortune. At the community level, it could be a flood, a fire, a collapse of buildings in an earthquake, the destruction of livelihoods, an epidemic or displacement through conflict. It is a phenomenon that can cause damage to life, property and destroy the economic, social and cultural life of people. In contemporary academia, disasters are seen as the consequence of inappropriately managed risks. These risks are the product of a combination of both hazard/s and vulnerability. Hazards that strike in areas with low vulnerability will never become disasters, as is the case in uninhabited regions [1].

Researchers have been studying disasters for more than a century, and for more than forty years disaster research. The studies reflect a common opinion when they argue that all disasters can be seen as being human-made, their reasoning being that human actions before the strike of the hazard can prevent it developing into a disaster. All disasters are hence the result of human failure to introduce appropriate disaster management measures [2].

All communities are vulnerable to disasters, both man made as well as natural. **Flood** is one of the most severe disasters impacting human kind globally killing more than 1 million people in the last century alone. More than half of the total flood damage occurs in Asia with India accounting for as much as 28.3% - next only to China. A direct consequence of floods is immediate economic damage and damage to eco-systems and historical and cultural values. Indirect losses include loss of agricultural production and decrease in socio-economic welfare.

Taking a look into the major floods in past two decades in India, we find that the first major flood occurred in 1993. The trickle turned torrent covered a wide stretch right from Kashmir to Arunachal Pradesh. The loss of human lives and damage to property ran into millions of dollars. It was followed by 1994 floods of Kerala & Gujarat and 1995 flash floods of Haryana & Arunachal Pradesh. It proves that floods in India are a global phenomenon not restricted to a certain region. Year after year, major floods took its toll on major cities on India. Even the capital city New Delhi was not spared in the floods of 1999.

Adding to the already existing woes is the pathetic response of government towards flood management. There's no respite to the flood affected people even after siphoning off billions of dollars has been spent to alleviate the problem. Most of the money allocated evaporates midway. The National Disaster Management Authority (NDMA), whose chief job is to concentrate on prevention, preparedness, mitigation, rehabilitation, reconstruction and recovery and formulation of appropriate policies

and guidelines for effective and synergized national disaster response and relief has been apathetic to the plights on affected destitute. Participation of Non-Governmental Agencies and private sectors are very limited.

The UNDP, (2004) define risk as “the probability of harmful consequences, or expected loss of lives, people injured, property, livelihoods, economic activity disrupted (or environment damaged) resulting from interactions between natural or human induced hazards and vulnerable conditions” [3].

The UNDP and most literature express risk by the equation (Wisner, 2006; von Kotze and Hollaway, 1999):

Risk = Hazard x Vulnerability

Morimiya (1992) proposes another definition, i.e., that a risk is the extent of variance between an unwished state and the current normal one, which is observed as a potential gap. When it is applied to disasters, the variance is identical to the estimated damage to the present properties of society. [4]

In spite of the rise in investment in the flood control sector, the flood-prone areas and the flood damage in India are on a rise. The reason for this paradox lies in the short-sightedness exhibited by the expert technical opinion which has taken diametrically opposite stances in pre- and post-independence period. It opposed construction of embankments during the British rule. The colonial rulers desisted spending on rehabilitation operations. While in Independent India, the technical opinion, under the political compulsion to do welfare of the people, has whole heartedly supported construction of embankments and big dams. As a consequence, not only have flood control projects not performed according to the initial expectations but have in fact created a worse scenario. [5].

Classification of floods:

Floods can broadly be classified into the following categories:

1. **Flash Floods:** Flash flood is a rapid flooding of areas with steep slopes caused by heavy rains generally associated with a tropical storm. This flood happens very fast, at very high speed and hence is extremely dangerous.
2. **Coastal Floods:** A coastal flood occurs when a low-lying area is flooded by sea water. Its cause is associated with a severe wind which pushes the water up and creates waves. A characteristics feature of coastal flood is that the water level drops and rises with tides.
3. **Urban Floods:** This is the type of flooding generally associated with urban areas which may be caused by lack of drainage or other associated facilities. Generally, a flash/coastal/river flood is a precursor to Urban Flood.

4. **River Floods:** Also known as fluvial floods, they are caused by extended period of rainfall or melting of glaciers that cause the rivers to overflow their banks.
5. **Ponding:** As evident from its name, when more rainwater enters a water storage system as can be stored, it leaves the system causing flooding to occur. They are also known as Pluvial Floods.

Flood prone areas in India:

With reference to floods, India can broadly be classified into 4 different categories:

1. **Brahmaputra and Barak Region**
2. **Ganga River Region** along with numerous tributaries like Yamuna, Sone, Ghaghara, Gandak, Kosi, Mahananda
3. **North West River Region** consisting of rivers like Satluj, Ravi, Beas, Jhelum and Ghaggar
4. **Central India and Deccan River Region** comprising of rivers as Narmada, Tapi, Mahanadi, Godavari, Krishna and Cauvery covering Central and Southern India

Policies on Flood Management:

After a heavy and unexpected flood of 1954, Government of India took several steps to constitute number of teams to study flood pattern in India. Prominent among them include Regional Task Forces (1996), National Commission for Integrated Water Resource Development Plan (1996), National Water Policy (1987), Rashtriya Barh Ayog (1980), Working groups on flood control for five year plans, Ministers committee on flood and flood relief (1972), Ministerial committee on flood control (1964), Policy statement (1958), High level committee on flood (1957), Policy Statement (1954), etc. Many of the recommendations given by them have been accepted and applied in the field of India. However, some of these are not accepted by various agencies. Moreover, some of the recommendations, though viable, are not effective in Indian context. As clear from the aforementioned list, there has been a gradual shift from “flood” to “water” in averting floods in recent times.

CASE STUDY: FLOODS IN VILLAGES OF UNNAO

To get a deeper insight into our talks of facing disaster and its apprehensive management, let us take up a case study comprising of the flood affected areas in the villages of Unnao. First we would briefly discuss about the geographical setting of these areas. Going into the main problem, we would see the causes of these floods and the devastating effects of it on the people living in those localities. Explicit experiences of the people living near 'Ghats' in these areas will be discussed and then struggles of these people would be depicted. Henceforth, inefficiency of governmental organizations in handling these situations is discussed. Factors as to why these people are facing these calamities again and again are clearly chalked out. Some of the possible solutions in terms of preventions and precautions would be presented eventually. Finally, conclusions will be drawn based on the case study.

Geographical Setting

District Unnao lies in the plains of the Ganges and hence the land is highly fertile. The soil is mostly alluvial. The Ganges separates Unnao from Kanpur district. The district is bounded by river Ganges in the west. As per provisional data of 2011 census, Unnao had a population of 178,681, out of which males were 94,080 and females were 84,601. Our focus is on the Katri region of Unnao that are Katri Pipar Kheda, Rampura and Haibatpur and Ghats in these locations that are Golaghat, Ranighat, Bhairavghat and Bhramavart Ghat. From the people of Ranighat, we came to know that nearly 350 households comprising a total of about 1250 people lived there. They further mentioned that about 350 women and 350 children lived there. This was the case more or less in the Ghats nearby.

Floods are frequently occurring in these regions generally in rainy season. Almost every year high loss of properties is accompanied by these floods. Fortunately, in this year's monsoon there was no flood in these regions but there was a devastating flood in September, 2010 in which nearly 5000 people were affected and a minor flood with relatively low damage to property in August, 2011.

All of the water that results from melting of glaciers of Uttrakhand flows into river Ganga which added with rainy water is the main cause of rising water level on Ganga dams. The danger mark of the Narora dam is about 114m. When the water level crosses the danger mark, in order to ensure that the dam does not collapse, water is released henceforth to decrease its level. It is this released water that floods the Katri region of Unnao and cause high loss of property. Let us now discuss the problem and its effects in a detailed manner.

Assessing the Difficulties Faced

We visited the various places to dig deeper into the problem and get familiar with reality at grass root level. The main problem comes in the monsoon when authority releases water from the Narora dam. The pillars of Shuklaganj Bridge are completely submerged under water in case of severe floods. The affected areas include Katri Pipar Kheda, Rampura and Haibatpur and several villages of Unnao causing huge losses in terms of properties, mainly crops.



The **Narora Dam**: Current Situation

Grief During and After the Flood

These areas are affected by floods almost every year. They said the floods itself is not as painful as the rehabilitation after flood is. As described by local people the situation of flood stays around 15-20 days. Most of the houses in this area are kutcha houses and thus they get completely washed away in heavy rains. Since the area is in the plane of Ganges, its top soil is alluvial soil. Thus after the flood it becomes more like a marshy land or a swampy region and people face a lot of difficulty in cleaning up this land. They can't stand the site of 2-3 feet deep mud for about 15 days. This continues for several months and thus the actual trouble lasts for about 3-4 months. This also affects the education of children living in those areas because government schools remain close during this period. A local showed the pitiful conditions of the domestic animals and also said that many animals have died in the past 2 years. Chanda Devi quoted "During this time government can't even arrange for a doctor so arranging a veterinary doctor for our animals is far from our imagination. So these animals are set free so that they could help themselves and find a safe place."

Also the living conditions are not hygienic at all due to presence of stagnant water and thus people suffer from a lot of diseases. To quote a woman living there for about 20 years "We have to live at the temple for 15-20 days and often need to swim through water to get essential things from our houses. There are snakes and other insects but we are now used to it. Many people came for survey here but it is of no use. We are never provided relief from floods."

Preparedness of the Affected

The locals are fairly aware of the time of occurrence of floods and thus they start preparing beforehand about 10-15 days before such a situation is reached. They keep a track of water level of Ganga and also remain aware of the fact when authorities will release water from the Narora dam. Some villages are surrounded by water from all the sides and they can escape only with the help of rescuers.

To quote the experience of floods last year from a few local people “We are generally aware of the time of flood and thus start preparing in advance. Since all of our earning is in our home, our heart does not allow us to leave the home until and unless it is inevitable. Last time in the evening we saw the water level and it was sufficiently below the danger level but in the night due to heavy rain water level rose very quickly and in the night only water came into our house and we were forced to leave.”

The Local Authorities

The relief measures taken by local authority were temporary and not fair enough to address to the problems of affected people. Even in this situation, corruption shows its evil and rooted effects. If 100 rupees is allocated for the relief from central government to the affected areas, only 5 rupees is actually used for relief work. Rest of the money goes into the pockets of intermediate officers. From this little amount people were provided some basic food is provided like Khichdi, Dal-Bhaat etc. and temporary shelter by providing 2.5 sq. metre tarpaulin per family of 5. To quote a local “2.5 sq. metre tarpaulin and 4 Pudis is what we get. Even a mere wind of 10km/hr blows off their tarpaulin tents. Just imagine, how much relief it actually gives to a flood affected family?” This help is exactly like giving a drop of water in a dry dessert, which serves nothing.

Furthermore, there is no Flood Relief centre in vicinity of the village which was totally surprising. The availability of such a centre can significantly reduce the loss from such a flood and help in better preparedness of the situation. There was no aid for the people after the disaster when the major problem actually started. It is this very reason that there exists long rehabilitation period for lower classes.

Now, the people have no faith in government and lost hope of any help from it. To quote Hemu Thapliyaal “All these politicians and collector are waiting for such calamities to happen. Such calamities bring inflow of money from the central government. There is a personal incentive for the officers. This makes them happy because now they have a golden opportunity to earn some money from the budget allocated for relief”. It is this reason that is explained by the locals that government officials favour flood like conditions more.

Also we came to know an interesting thing from the local people that if such a thing occurs in proximity to elections then the relief provided is substantial and the after

effects are not so painful. There are about 5-6 candidates and everyone comes to console the people and make promises that he/she will definitely do something to cope up with this. Also each of them would bring some food packets and thus in such cases more than the normal food packets are provided to the affected people. These candidates also employ people to restore the conditions back to normal.

To quote the Sarpanch of village Katri Pipar Kheda “We have talked to higher officials regarding the problem of floods here and asked them to take appropriate measures so that the villagers can easily settle back after the floods are gone. But they are not interested in the development of the village as they always give an excuse like this village is situated near a Ganga Ghat, so it will be submerged in near future, say 10-12 years from now, so the money of the government would be spent in vain as the water level is rising and thus no step are taken”.



Local people discussing with us about their **problems and grievances**

Repeatedly Facing Calamities

The basic reasons as to why these people have to face these problems repeatedly are discussed in this section. Let us take each of the problems one by one and have a closer look at them.

Corruption

The very basic problem of the people living in Ranighat was due to corruption in the respective governmental offices. Each household living there is way below poverty line and yet none of them had a BPL (Below Poverty Line) card which was their basic right. When they were asked the reason behind this inconsistency, they reported that they had to meet a demand of Rs. 4500 posed by people at commission office. They take it as the fee for completing the form. Due to this very reason, they are forced to live in the Ghats. Otherwise, those who would have met the exorbitant requirement of these officers would have their BPL cards and are hence entitled to flats in Ramadevi Colony. The level of corruption in these areas is so high that these flats are currently under the possession of elected MLA's of Shuklaganj.

Another fact is that the drainage systems present in these areas is very poor due to which frequent water clogging areas are highly contaminated. Even after repeated requests and complaints to the elected MLA of the area, no action has ever been taken. They are never ready to part with their office money for such matters which they think are totally unimportant. A cleaning of the small area of Ranighat was done, once the elections were near whose situation was precisely same after the election. Even only if the drainage systems of these areas are properly cleared, improved and planned accordingly, the people of these localities stand a better chance to face the frequent floods.

Poverty

It is another problem that all of these households share in common. This is why they are forced to reconstruct their homes in the same area once it has been washed away by the floods. It is this very reason why nearly all the houses are Kutcha houses (Mud houses). Also they know it in their hearts that in the very next year, they might have to again reconstruct their houses. A big scoop of their very little savings is going in restructuring their homes every year. Sometimes they are lucky and this period becomes two or three years. Most of the times poverty is the reason why they cannot afford to send their wards to schools after upper primary.

To quote a local, "Even we people want to live a better life, send our wards to better off schools and have a regular employment instead of doing petty jobs. Do we not deserve these basic subsistent needs?"

Social Stratification

Social stratification is the division of society in permanent groups or categories linked with each other by the relationships of super-ordination and sub-ordination. This vertical division of society is a well-known social phenomenon and has its importance especially in certain periods of history.

When we enquired from the locals about social stratification in the village there were mixed replies from various people belonging to different caste. To quote a person belonging to lower class “During the time of flood everyone does not get the same kind of relief both in quantity and in quality. People who are Brahmins and belong to other higher classes they are given entry first in the temple and then we have to stay on the stairs of the temple or in its veranda. Also the members of Panchayat belong to higher class and thus they overlook such problems of these people. Nobody cares about our conditions. We are the last to receive any help. Last year 3 children, out of which 2 were infants, belonging to our class died due to negligence from authority towards us.”

Moreover, there are other problems for the lower classes. The benefits of government schemes could not reach to these people when they required it the most. The first ones to reap the benefit of these schemes are the people belonging to the upper class. The authorities are quite friendlier towards these people. To quote Hemu Thapliyaal “In the public distribution shop, which is situated at a distance of 2 km. from our locality i.e. the ration shop, we receive our share of requirements only after the requirements of the Brahmins are fulfilled. These Brahmins have always taken more than what they need. It is due to this reason that our requirements have never been fulfilled at a ration shop and due to very high prices, we are unable to afford our necessities elsewhere.” This can be attributed to their awareness level. Overall the education level is poor but it is even worse for the children belonging to these classes.

Thus it can be readily seen that social inequality has resulted in profound trouble for some people. There is a need to eradicate this thing as every human is equal and thus no one should suffer more due to any natural disaster or calamity just because he took birth in some lower class.

Morality and Religion

Morality and religion are usually recognized not only among the most influential forces of social control but also among the most effective guides of human behaviour.

A characteristic feature of all the people living in these areas was their religiousness. All of them had belief in God. To quote a local “Whenever we are in some big problem, God has always helped us and gave us the confidence and power to face it. Every year just before the monsoon there is a **Hawan** in the temple. In some

villages they call saints/babas just to cast some spell so that there is no flood in the village in that particular year.”

There are many superstitions prevalent in the community, some of which are as follows:

1. More we offer, the safer we are: People in these areas sincerely believe that their God would be happy by the amount of offerings they make to him at the individual level. In the Hawan, they make offerings in the temple even when they can't meet their daily needs and the children in their houses have to remain hungry for days. They firmly assume that if their God is happy, there would not be any flood in that year.
2. Hawan, Only way to please God: The practice of organising Hawan is being followed from the past 20 years. Almost all people of the society engage themselves in organising the Hawan, leaving their daily work, which further add to their list of problems. Hawan is their only chance of pleasing their God.
3. Family with Widow, A cursed family: Widows are not allowed to make offerings in the temple. Their presence is considered inauspicious by the people. In fact, this practice is so much strong in these localities, that the whole family is barred from entering the temple. They can only enter the temple, once they have thrown the widow out of their family.

We can clearly see that until and unless the morality of the people in these areas is uplifted, they would continue to suffer in the coming years.

Apart from the same kind of belief system towards God we also came across a few people with completely different perspective. To quote a woman living there for 25 years “When I came into this village I also had blind faith in religion. I felt that the sufferings in our life is due to sins committed in previous life and will lead to betterment of afterlife. I also participated with reverence in all the Pujas and Hawans that were organized in our village. But this had no effect on floods; neither had it helped in alleviating our problems. With the passage of time I realised that everything shouldn't be related to religion when we are unaware of the actual reason due to illiteracy. There is no point in blaming God for the deeds of some people. I have achieved wisdom while fighting against this. I also gained some knowledge about the actual reasons as I interacted with some of the officials about our problems. Now I try to create awareness amongst my fellow villagers but it is very difficult to change their minds. It took me so long to understand how can I expect them to believe me? But I'll try my best to save the innocent villagers from fraudulent babas.”

Prevalent Diseases

The first thing that comes to our mind with regards to floods is

*“Water, water everywhere,
Nor any drop to drink.”*

These lines are from Samuel Taylor Coleridge’s famous poem, “The Rime of the Ancient Mariner”. At the times of floods, safe drinking water is in clear shortage. The spread of diseases due to contaminated water has very severe effects.

People mentioned that Typhoid and Cholera are only observed during the time of floods, though Malaria and Dengue are common and are affecting people at large. They said that this is mainly due the fact that stagnant water which is accumulated in the large pits, after the flood has passed away becomes the breeding grounds for mosquitoes. Mosquitoes are a problem to them for almost 10 months. Generally flood waters bring huge piles of garbage along with it which aids the breeding of mosquitoes and henceforth spreading of such deadly diseases.

At the time of floods huge sanitation problems are prevalent. There are not enough toilet facilities and, because most evacuation centers are public elementary and high schools, we can safely assume that they have even fewer shower facilities. That’s why sanitation is always a big issue in the aftermath of any calamity and disease breakout in evacuation centers is not uncommon.

Evacuees are forced to live in cramped conditions where they have limited access to toilet and bath facilities. With the shortage of volunteers to feed the evacuees, just imagine how the few toilets can be cleaned with regularity.

Widespread Illiteracy

This problem is inhibiting the growth of these localities. Most of the children in Ranighat are educated only up to lower primary level. 25% of the total children are educated up to upper primary i.e. up to Std. VIII. The girls usually drop out either after lower primary or after upper primary education. Then they are usually engaged in household chores. Only 2 boys of that locality i.e. hardly 1% are receiving education after upper primary. They mentioned that they were attending a school which was very far from their locality and whose fee was high as per their standards. They told that their dreams of further education after XII are impossible since they would have to help their fathers to meet the daily need for the household. We would not be completely wrong at all to say that even their education is going in vain without reaping its fruits. Now you can clearly guess the scope of the development of such an area where so low literacy rates are prevalent.

Lack of Awareness

This problem is keeping them under exploited situations. They described incidents which depicts this. Two college chaps instilled hope in the people of these areas that they are from a government organisation and they required some amount of contribution from each of these households which was Rs. 20 in this case in order to construct a proper drainage system. These households contributed to the cause without giving a second thought. After that day, they never saw these college chaps even in the nearby areas. They also came to know that the same chaps robbed off people of their money in the nearby areas presenting the same cause.

These are more or less the factors which force these people to face the calamities again and again. We also note that these factors are very much interconnected or intertwined. Even if there are any other factors than those presented above, their roots can be found in the problems presented.

We now move on to the solutions presented in terms of precautions and preventions of these calamities.

Plausible Solutions to their Problems: Precautions and Preventions

Flood preparedness measures are essentially divided into two major categories:

- Structural Varieties: It helps in “**modifying the floods**” by making embankments and related flood protection walls. Here we keep *water away from people*.
- Non-structural Varieties: It helps in “**modifying the losses due to floods**” by making building shelters, measures such as zoning within flood plains, public awareness campaigns and capacity building for a range of preparedness. In this scenario, we keep *the people away from water*.

After visiting the affected areas along the Ghats and talking to the distressed, we realized that the problem of rehabilitation is even more aghast than that which is encountered during the floods. Recalls Moti Bai, a resident of Ranighat, “For the past two years, we were provided adequate shelter and food during the duration of flood. But as soon as water started receding, we were left on our own fate and then we had to face the real problems-most of the mud houses along with the crops were destroyed and the ground was rendered unfit to walk on.”

Government Organizations have a pivotal role to play in flood preparedness in both structural and non-structural variety.

The least they can provide is proper embankments, flood protection walls, *kharanja* (thick stone tiles, observed in pavements), etc. If accomplished, the major hurdle of rehabilitation can be solved to a great extent. The residents of the locality say that government is apathetic to their plight. The most rampant problem which plagues the affected people is pervading corruption among government officials and political

organizations because of which funds allocated for aforementioned problems are diverted to fill up the pockets of corrupt officials instead of using them for flood preparedness. They have visited government offices umpteen numbers of times only to return empty handed. Every visit costs them anywhere between 250-300 Rupees. Some of the affluent and brave residents of village even dared to make brick houses only to land themselves in even more debts of the moneylenders nearby. The compensation amount given by government is hardly enough to help them restore to normal. Another basic need of the locality is proper drainage system. Lack of proper drainage system aptly transforms the land into breeding grounds for mosquitoes thereby leading to widespread epidemics.



Marshy areas on alluvial soil is breeding grounds for **diseases**

The whole locality has only one hand pump and thus the need for freshwater during flood times is not adequately satisfied and thus the government should undertake construction of reservoirs for clean water storage which must be regularly cleaned.

Complete flood control in terms of structural methods of flood protection are neither economically viable nor these are environmental friendly. Therefore, non-structural methods are becoming popular in mitigating flood disaster.

Non-structural methods include Flood Plain Zoning and Flood Forecasting and warning. Sonu Dixit, a local reporter from Golaghat, shares his miseries with us, "There's no effective Warning System in place which can release warnings in advance and thereby help the authorities in better flood preparedness and also effective flood mitigation. Some years back, this was not a major problem as the water during the flood advanced gradually thus providing adequate time for evacuation. However, on 12th September 2010, due to heavy rains, the water level

rose to flood the village in a matter of few hours during the night.” One of the preventive measures is to participate in floodplain zoning.

Floodplain zoning is a soft engineering management strategy whose aim is to reduce flood plain development. An area or ‘zone’ of the floodplain is protected against to minimize financial loss via damage to property. This area can naturally flood, without risking damage to people or property. Landowners in areas that adopt local ordinances or laws to limit development on flood plains can purchase flood insurance to help cover the cost of damage from floods.

Community problems such as illiteracy & poverty and floods are something that is intertwined into each other. The root cause is lack of proper primary education. In one of the village surveyed by us, out of the 1250 permanent residents, only 2 had completed secondary education. Only jobs the youth of the villages get are as construction workers or as mechanics. The gravity of the problem can be judged by the fact that not even a single person had a monthly income of more than 3000 Rupees. Because of such a meagre income, they can't afford to make their own brick houses. Hence government should address their problems and provide help during and even after flood times.

In order to combat flood problems, the Water Resource Development has chalked out action plan for implementation during the 11th Five Year Plan:

- Raising and embankment of existing embankment system, so as not to cause any dwindling of already protected areas.
- Removal of drainage congestion to bring more areas under protective arena.
- Flood proofing program such as raised platforms.
- Annual scientific collection of flood damaged data, basin wise preparation of flood risk maps and flood plain zoning.

An integral component of a multi-hazard disaster management plan is a detailed **Flood Preparedness Plan (FPP)**. The salient components of FPP are:

- Assessment of portable needs
- Institutional mechanisms for implementation of FPP
- Activating early warning and disaster response systems
- Resource mobilization and allocation
- Communication within and outside the community
- Sectoral Components for specific measures such as search and rescue, emergency, medical assistance, food and nutrition, etc.

‘Forewarned is forearmed’. We can embrace ourselves to cope up with the new trend of heavy rains and floods. A major upgradation of observational network would go a long way in helping improve the ability to forecast episodes of unusually heavy rain at least a day or two in advance. Flood situation arises here almost every year and hence it is important to prepare for a disaster in advance. Floods displace a

number of people and cause heavy loss to property. The economy also gets affected due to damage of crops directing affecting the agriculture sector. The country needs a better and effective flood mitigation system to ensure the safety of its people and economy. It is also most important to make sure that all these measures come together properly in order to improve resilience and enable an effective relief operation when catastrophes strike.

CONCLUSION

Regular floods have been a major cause of concern in post-independence India. Unfortunately, most of the governmental committees constituted have paid little heed to the grave problem. In the case study, we looked over effect of flood in district Unnao and how flood mitigation strategies can effectively avert such a crisis. Unnao, a district located in the plains of Ganga has highly fertile alluvial soil. The flood situation arises because of heavy discharge of rain water in the monsoon from Narora dam.

After talking to the locals, we realized that the problem is more of rehabilitation rather than flood itself. Generally, they are aware before hand of the occurrence of flood owing to constant monitoring of the water level of Narora dam. Unfortunately, these flood situation provide a great platform for the local politicians to accumulate great wealth but doing only a little for the public. Lack of proper drainage system and public awareness coupled with rampant corruption totally ruptures the flood management strategies. Another grave problem is the existing social divide in the society along with blind belief in witchcraft. The aftermath of a flood also poses very serious problems of epidemic diseases like cholera or typhoid.

Coming to flood preparedness, they can essentially be divided into two categories viz. Structural Varieties and Non-Structural Varieties. Also effective flood preparation strategies including proper embankments, flood protection walls, kharanja, etc. can go a lot a way provide relief to the affected. They should also be provided with Brick Houses. Certain unconventional strategies of flood prevention have to come in limelight. They include Flood Plain Zoning and Flood Forecasting. Also, the 11th Five Year Plan has chalked out a detailed action implementation plan. Apart from this, Flood Preparedness Plan also addresses flood management.

We conclude our paper by saying that we can only hope that if the presented preventions and precautions are followed, the people struggling under the havoc of disasters like floods stand a better chance to make their way through the disaster. Government authorities must seriously look into the problems of the affected. Strength and Power to fight back disasters can also be considered as a measure of development of a country. Considering this, a nation like India has to pave a long way to eventually evolve from a developing a country into a developed country.

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