



Disaster Risk Management in India and community participation in resource conservation

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Abstract

It is matter of great concern to recognize the presence of mankind on the earth's surface with subsequent transformation occurred over it. With that perception it need to be interpreted within the context of destruction caused to our forest wealth, biological loss, population growth also put severe pressure on the agricultural resources. In the due course of action we have caused lot of destruction to the ecology. Disaster occurs naturally or due to man-made factors but their severity may be scaled down in terms of loss made to property and human lives. So it is more vital to provide a detail account of the geographical setting of Indian-sub continent which is much diversified in terms of relief, climate, water resources and agricultural potential that created the regional variations in terms of employment generation and magnitude of natural calamities such as tropical cyclone(Hudhud and Nilofar) , drought, earthquakes. The vulnerability scenario of India provide account of information that about 40 per cent area is vulnerable to earth quakes of varied intensities, 40 million hectares fall within the zone of floods, and 68 per cent experience drought conditions. The applied aspect of scientific know how prove to be vital to minimize the disasters impact upon humanity is a matter of immense consideration. The level of social economic development is so significant in managing the relief and rehabilitation programme in the time of disasters. The interdisciplinary approach caters fesible solution with the consideration of the area specific plan and policies like mock drill or community participation in rehabilitation and relief work to be mutually ensured. Over a couple of years successive central and state government adopted casual approach to dealt with the natural disaster issues with little emphasis upon the mitigation and reduction of frequent disaster at micro and macro level. Major emphasis put upon the three pronged strategy that prevention, preparedness and mitigation. The dire need emerges recently to put great emphasis upon the awareness campaign with mass level campaign in the carnival form. In this way, it is much peculiar of disaster management and dissemination of new approach and techniques to familiarize the people about them. There are host of problems associated with the disaster management in developing countries with special reference to India to be addressed within the socio-economic framework of community under consideration for research appraisal.

Keywords: Biodiversity, Vulnerability, rehabilitation, community, Mitigation

Introduction

Nature has put number of cyclic and non cyclic system upon which human survival depends immensely. The nature prosperity mainly portrays with the sound health of ground water resource, flora and fauna, forest cover, and sustainability of agriculture resources. The reciprocal approach certainly provides some sort of managerial skill in this regard to presence and human survival that safe in the natural sanctity. In recent years, the blind exploitation of natural resources in order to fulfill the material need irrespective their consequences upon the ecological health. The ecological approach may ponder some sort of consideration to disaster management that maintain balance with the demand and supply aspect of habitant. The abundant exploitation of natural resources created uncomfortable climatic conditions in which people found themselves uprooted and aloof. With the sound application of scientific knowledge and techniques it is possible to live an easy life but it may put pressure on existing resources that leaving little scope to repair or restore in future. The abundance of resource may also be problem to manage them with the available technology so that sustained efforts are needed to restore and develop them. To be familiar with area specific disaster plan to the community living there and repository of material to cope up with the disaster situation. In India number of casualties are so high as compare to developed countries attributed to the lack of coordination and information and delay in sending the relief and rescue teams over there, but the situation is much different in developed countries with provide adequate amount of material and logistic support system. The medical aid and early wring system found to be so poor and remain in the clutches of bureaucratic framework. The existing framework works out on set pattern formulated at central, state and district that major component further carry out respective work wherever they get order generally dispatched from the ministry of home affairs.

The foremost crisis being encountered in management of the disaster affairs pertain to be the security, medical and par-medical staff, sanitation and hygiene, relief camp, evacuating and caring of vulnerable sections like women, children, old people, and physically challenged persons who demand special care and consideration. The security and privacy to women to be ensure so that they feel secure and stay there without a fear and anti-social elements to be watched and avoided to frequent visit at there. An earlier experience warns to be very cautious and alert in order to avoid the mismanagement and myths and superstition spread by some adverse people to fulfill their self motive. The par-military and security forces with committed and motivated sprit are deployed so that any such adversaries can be avoided. The proper coordination among the government and non-government organization proved to be fruitful in further carry out the disaster related relief and rehabilitation programme. It has been established fact that increasing urbanization trend and industrial development enhanced the severity of disasters in developing countries in which India is not escapable of the adverse conditions poised by the resource exploitation from the inhabitants. The numerous research and reports refers to multidimensional aspect of disaster occurred with the additional burden put upon the resources in order to sustain their livelihood. The direct and indirect examples exhibiting the severity of devastation caused by the disasters to be recognized in the right perspective so that policies and plans may be practical and feasible within the framework of socio cultural environment prevailing in the territory. The structural and area specific plans to be envisaged so that minimum adversaries to be faced at the implementation stage and well acquaintance about the modalities associated with the disaster management plan. In the true

spirit and orientation it is so essential to think and focus upon the key issues which may provide the gist of the plan handling the potentiality of disaster.

Aim and Objectives

The present study carried out to present a general course of action prevailing globally about the natural disaster and resource management. The people participation has to be ensured in management of local resources and indigenous knowledge proves to be vital in their management efficiently. The study mainly encounters a range of issues associated with disaster management in emerging economies. Sines, long time the issue of people participation in resource management remained at low profile and unable to get some sort of help in the area specific knowledge of their resources.

There is an urgent need to put clear cut demarcation and estimation of the ideology adopted by the government and private agencies with regard to disaster vulnerability. Salient features of attention earmarked here with further course of action in resource management-

- Strong political intervention so vital to deals with the disaster management issues, so that political association may be separated at critical period of disasters occur in an area.
- Further improvement, enrichment and up gradation in the methods and knowledge available within the country and also obtain international cooperation to technology transfer pact and priorities to be demarcated and discovered on regional and continental level.
- Budgetary support to be sound so that frequent experiment and mock drill may be conducted to mark out the pro and cons associated with particular disaster graph earmarked in the locality.
- Remote sensing and GIS application techniques to be excessively applied in order to point out the trend and processes associated with the diverse disaster and accurate collection of the digital data to deal with climatic events. Climate change and global warming and resource management and depletion of resources have corresponding effect upon the ecology that may experience in near future.

Vulnerability scenario in India since independence

It is universally accepted fact that rapid population growth rate caused vital damage to natural resources with the application of the modern technology. All over the world, the population increased manifold caused number of social-economic problems like unemployment, degradation of resources (water and forest resources to great extent) and intense pressure upon the arable land to obtain the more food grains to feed the people. The grim picture of the overall phenomena led to think differently and consequent to which put the general perception so that restoration and preservation of remaining natural wealth to human survival. To take a detailed scenario of whole geographical extent of Indian sub- continent provide us insight information regarding the geology, relief, climate, water resources, and ecological fragility. In recent year's man environment interaction are so interacted in order to understand the associated processes to find out the reason to bring the situation. To establish the impending correlation among the physical features and

climatic events, and resulting natural disasters to be viewed within the spatial framework in order to understand the nature and frequency of natural disaster in past and present time.

India is more susceptible to number of natural and man-made disaster that its vastness also put it to establish cultural and ecological diversity in terms of climatic zones, coastal ecology, mountainous tract that there are large number of hills, plateau, gorges and ice capes and in same way the plain and low lying area have their own type of vulnerability regarding the more expansion and encroachment of natural region in order to obtain possession of fertile land upon the river courses and coastal zones and dumping tremendous amount of domestic and industrial waste, likewise the mountainous tract have their own type of problems like landslides, depletion of forest cover, irrational urban growth and large scale construction activity to make more road and bridges and dam sites. The total geographical extent of India is large with wide spread geological and climatic variations and demarcation of earthquake zones., flood alert with river overflowing or with the torrential rainfall in short time especially in monsoon season and rehabilitation and relief work to restore their normal life and forecasting to evacte them from the disaster site. As report published by the planning commission regarding the disaster management and consequences occurred with the casual approach adopted in handling the sensitive issues and opined that it is highly correlated and established fact that more urbanization and industrialization correspondingly bring disastrous events in urban areas in terms of environmental degradation, pollution, social conflicts, and deterioration the quality of life become the case of health problems.

To evolve a better and citizen friendly approach interwoven of social and scientific community is desirable despite the fact that it is not possible to think and devise a sound policy to demarcate and implement the disaster management plan. The reward and promotion of environment friendly eco-group and mass awareness campaign with the active participation of community certainly bring better results to encourage the masses to participate in environmental sustainability move at national and international forum. India is still so much behind in obtaining and providing the adequate amount of nutrition and essential food item despite the huge budget expenditure upon the food security move and the poverty and malnutrition led to the unbalanced growth. The unbalanced growth put hurdles in getting equal number of opportunities with regard to employment, education, social security, and political participation.

With the whole range of issuer that vulnerability is largely associated with the poverty and economic development, food security, access to public services and inclusive growth are the pivotal version depict in the government of India vision for inclusive growth in recent years. The huge section of Indian society is deprived to obtain and acquire the equal participation in government social security schemes. It has been emphasized upon the fact that norms to establish parity and equality in respect of goods and services to all whole citizens irrespective of caste, creed, religious biasedness. The factors like poverty, illiteracy, discrimination, participation in growth and development of infrastructure without political and other favoritism are point of contention of planner and researchers. Reports and media coverage resembles a different and grim picture about the electricity, water quality and accessibility, crime and exploitation, cultural and social conflict. The prevalent diversities found in relief, climate, earthquake intensity, flood and drought scenario, desertification, deforestation, ecological fragility and encroachment of natural course of rivers and

costal area become a cause of birth to number of vulnerabilities denoted by natural and anthropocentric disasters in India.

Vulnerability mapping and Disaster Management in India

To present a detailed overview of geographical characteristic that largely prevailing in India, it is vital to employ the modern and advanced scientific techniques so that may render us the peculiarities associated with the geographical unit. In recent years remote sensing and GIS techniques contributed so much in establishing a data base to devise and know the micro details and mapping out them with the help of digitization of number of co variables of geographical importance. It is not so easy to understand the geographical problems of disaster making nature that have to be correlated to find the exact point of consideration. The proper planning with the compliance of the set norms and regulation so that collected data and randomization of variables to be correlated and interpreted with proper mapping. The risk sharing among the different stakeholder to be more realistic and feasible in order to point out the area of major concern with reference to vulnerability index being used with the concerned ministry in India. It has been agreed unanimously that uncontrolled development has enhanced the vulnerability of inhabitants in numerous ways that decline the livelihood opportunities with the exploitation of resources to fulfill the immediate need of industry and to greater extent put emphasis upon the environmental sustainability to conserve the potential resources. In tenth five year plan approach paper it has been envisaged that efforts to be made to cause least damage to environment and put more thrust upon the concept of do not harm in undertaking the welfare and ecological approaches. In this miner it has been thought it would certainly bring the positive impact to reduce the risk of further vulnerability to people. People are being enlightened and cautioned to follow the eco friendly behavior to live a healthy and undisturbed future from the fury of unprecedented natural phenomena such as flood, desertification, and drought and food crisis.

The geo-climatic diversity led to diversification of social, cultural, economic vulnerability in India that needs to be clarified and studied in right perspective to know the problems and processes associated with it. Scientific and economic development put the nation in such order to take the bold steps and decision to draft voluminous plans to ensure the safety and lessen the vulnerability of people. With great enthusiasm and spirit the policy matter to be discussed and evaluated so that concrete and least chances of failure in their applicability in prescribed geo-climatic conditions. To ensure the community participation in providing the first hand information that inhabitants are the real informer about the modalities and problems prevailing in the present area of consideration. The exclusion of community in devising the plan and policies exaggerate the scope of failure at implementation phase as it is being perceived while taken into account the thought of plan formulation. India faced tremendous loss in the form of material and human loss and about 2 percent of GDP is being spent to recover and restore the normal course of life in different geo-climatic zones. It is so urgent and demanding that India formulate and robust plan to remove the bottleneck found at the different stages in disaster management planning in India. The traditional approach to assess the disaster related destruction to be deserted and in place of that advanced and digital methods may be boon in viewing the critical scenario in short time span. The responsibility to deal with disaster related tragedies and accidents to be shared by the government agencies, social

organizations and voluntary groups and trained staff and local people participation is so urgent that they be send and provide immediate first aid and relief material in critical time period and may save the life of large numbers of victims.

Conclusion

It has to be taken into account that the present scale of development all over the world responsible to create unwarranted natural disaster. The complexity of factors responsible to bring about the range of disaster in different parts of the earth and rapid pace of economic development due to higher demand in domestic and industrial sector. The resource management needed an interdisciplinary understanding to draft a plan to combat the vagaries of nature. Man and environment interaction increased manifold in recent years which has posed threat to welfare of human being in terms food scarcity, tropical cyclone and destruction causes by them through torrential rainfall in coastal plain of India. The further encroachment of land frontier by the people to utilize them for agriculture, tourism, and residential purposes are the cause of much concern. It is so pertinent to mention here that time has come to rethink about the direction of development with cordial balance with natural zonation of climate and relief. To set aside the development anomalies to save our natural resources and human being it dire need to think globally and multi dimensionally. The local and regional approach be interconnected with global chain and the climatic factors.

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