Review Paper

A Sociological Study on the Emergence and Growth of Disaster Education in India

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Abstract

A disaster is an unpredictable disruption of a smooth functioning of the society that causes the widespread human, material, or environmental losses which exceed the ability of the affected society to cope using only its own resources. Owing to having a better preparation against this situation, the government of India in its tenth five year plan implemented a special course (Disaster Education) in Central Board of Secondary Education (CBSE). Disaster education refers to the transformation of knowledge and the facilitation of understanding regarding the management of hazards and disasters; specifically, recognition of natural and human-induced hazards and reduction of vulnerability. Although, it has been a decade passed on to this particular education's incorporation in CBSE, it is found that the majority of the people of India who are living in the village areas remain oblivious about it. Hence, the present study is an attempt to portray the emergence and growth of disaster education and the institutional initiatives taken by the central and local level.

Keywords: Disaster education, public education, CBSE, India.

Introduction

Disaster as a catastrophe, mishap, calamity or grave occurrence affecting any area, arising from natural or man-made causes by accident or negligence which results in substantial loss of life or human sufferers or damage to and destruction of property, or degradation of, environment and such a nature or magnitude as beyond the coping capacity of the community of the affected area[1]. Hence, it is important to provide a special education that refers to the transformation of knowledge and the facilitation of understanding regarding the management of hazards and disasters; specifically, recognition of natural and human-induced hazards and reduction of vulnerability. It should be an important goal of education or learning to establish a community in which educator and learner can participate together. For example, in school, it will be all right just to involve pupils, teachers or school system itself to network with those who teach what one doesn't know and organization or group to work with on disaster prevention[2]. Education for disaster prevention through curricular and non-curricular activities must not become simply a list of tasks. It must be built upon the principle of integration, which facilitates the process of developing educational work in order to introduce variables and issues related to environmental protection and, in particular, to disaster prevention[3]. The education for disaster preparedness is an endless process that requires a constant collaborative effort from all parties concerned[4], it means both government and non-government organization should mutually take a step towards disaster preparedness[5].

What is Disaster Education (DE)?

Disaster Education has provided the awareness of protective actions for different hazards, thus a group of people and communities learn how to protect themselves from the entire crisis. The prime theme of this education is to design the awareness programme among the public in both short-term and long-term preparedness procedures and to furnish the knowledge; how to prepare in advance, how to act on warnings and how to reduce the risks from their home and communities in hazard prone areas to gain a better grasp of the ways to cope with risks[6]. Disaster education initiates preparedness activities, provides the knowledge about the hazards and its risk helps to overcome the bias in risk perception, and makes the people perceive the risk with clarity and certainty[7]. This educational endeavor should be a tool to create an awareness of disasters with basic information about various types of disasters. It should also contain action tips that help people reduce the risk of injury or loss in an actual disaster. These action tips should prepare the people for all the three stages that is before-during-after stages of a disaster. Disaster Education (DE) plays an important role in both (a) minimizing the impacts of the disaster on communities and (b) improving disaster preparedness, which helps people to restore normalcy and provide them physical and psychological assistance after such a traumatic experience and divulge the way of a quick recovery from the crisis. Information and communication technology play a very vital role in forecasting, early warning, monitoring risk assessment and damage assessment of disasters[8].

The World Bank Good Practice note elucidates that disaster education should follow up on the dual aims of promoting short-term recovery and ensure better disaster preparedness over the medium term. It is important and represents a priority, because, if human beings do not become aware of disaster risks, acquire the knowledge necessary, and develop the appropriate behavior, attitudes and level of involvement; they will not be able to prevent them. It facilitates and contributes to the creation of a culture of prevention and for the population and communities to take action to prepare for a disaster[9]. The subject matter of this education would address the activities carried out by the students and must be easy to understand and adapt according to the interest and needs of the region. The children should also be flexible, dynamic, creative, participatory, and subject to change and adjustments. Knowledge and innovation, education, formal and informal, has closely linked to disaster-reduction efforts. Advancement, transfer and sharing of knowledge are key institutions for disaster risk management. When it comes to living with risk, we must embrace education in all its forms, from drills involving disaster simulations in primary and secondary schools to advanced university and post-graduate studies. We must also capitalise on traditional local knowledge about hazards. Nor can there be sustainable development without education in disaster reduction. Education for disaster reduction and human security should not be a one-off affair, but rather a continuing process, offering individual lessons in coping with hazards not just once but several times throughout their lives[10]. Furthermore, education and elevating awareness of disaster risks must respond to society's changing needs and focus on empowering individuals throughout their lives. Educating all sectors of society on disaster reduction actions that are based on the application of sound scientific, engineering, and cultural principles to create sustainable systems therefore constitutes a long-term preparedness goal. United Nations Educational and Scientific Organization is well-placed to address the challenge of mainstreaming knowledge applications and education in disaster prevention and preparedness into the broader agenda of education for sustainable development. Therefore, it will be necessary for disaster education in the future to focus on the process of restructuring communities of practice and for not only transfer of knowledge and skill between individuals, but also the prime goal of education is to establish the community in which educator and learner would be participating together.

The Genesis of Disaster Education in India

The term 'Disaster Education' refers to the transformation of knowledge and the facilitation and understanding regarding the management of hazards and disasters; specifically, recognition of natural and human-induced hazards and reduction of vulnerability[11]. India as a nation is prone to various hazards due to its unique Geo-climatic conditions as a result of which flood, drought, cyclone, earthquake and landslide have been occurring consistently. About 60 per cent of the land mass is prone to earthquakes of various intensities; over 40 million hectares are prone to floods; about 8 per cent of the total area is prone to cyclones and 68 per cent of the area is susceptible to drought[12]. Hence experience and knowledge of past show that when attention has been given to an adequate preparedness measures, the loss of life and property has considerably reduced. However, incorporating of disaster education in educational institutes either in the formal school curriculum or in non-formal education makes the community and its member more efficient for disaster preparedness. Government of India, Ministry of Human Resource Development (MHRD) in its tenth five-year plan emphasized the need for integrating Disaster Education in the existing education system. The first attempt in this direction had taken by the Central Board of Secondary Education (CBSE), to integrate a short course on disaster management in the school curriculum[13]. The key purpose of incorporating this education in the pedagogic institutes intends to cross the boundaries of the school curriculum and make the local specific involving families and communities for disaster preparedness. The board strongly believes that, "educating a child is educating a community". Children are the dynamic and powerful force of change, are supporters in creating awareness in the community, and contribute a unique manner with energy and vision to find local solutions. After the recommendation of the Government of India ministry of home affairs, various state governments are in the process of integrating this education in their school curriculum are as follows: i. In Tamil Nadu state: the course curriculum has been drafted and will be incorporated soon. ii. Orissa state: *"Disaster Risk Safety"* (Bipati Biparjayao Surakhya) was launched by Orissa State Disaster Management Authority (OSDMA) for students and integrate a chapter on disaster management in the class VII Geography syllabus. iii. Maharashtra state: education ministry has initiated the process of incorporating disaster management in school curriculum. iv. Bihar state: disaster management has been carried forward through the Sarva Shiksha Abhiyan (SSA) and incorporated disaster management in course curriculum from class V onwards in social science. v. Gujarat state: disaster management classes have taken from class VII, VIII and IX. vi. West Bengal state: the government of state authority are in the process of introduce disaster management course in the schools run by civic body. vii. Jharkhand state: the state government of Jharkhand had included a text book on disaster management in the class IX syllabus as part of the social science subject

The curriculum on disaster management includes; the nature and types of hazards, natural and man-made disasters and for their management, efforts made in various regions for disaster preparedness and mitigation, role of community and schools in disaster management, partnering with various government and non-government agencies, use of modern and scientific technologies to combat disasters, and the survival skills. Although, people in coastal belt are getting various types of training for facing in all the forms of disaster, but disaster education in this direction is distinguished from training, it purports to step beyond the "transfer of skill from a trainer (i.e., instructor or facilitator) to a learner"[14].

Institutional Initiatives in Management the Disaster in India

The Government of India has adopted mitigation and prevention as essential components of their development strategy. The plan emphasizes the fact that development cannot be sustainable without mitigation been built into the development process. Each State is supposed to prepare a plan scheme for disaster mitigation in accordance with the approach outlined in the plan. In brief, mitigation is being institutionalized into developmental planning. Hence various institutes and organizations emerged for managing the disasters. Among these institutions, National Institute of Disaster Management (NIDM) and National Disaster management Authority (NDMA) are the premier institutes for training and capacity development programmes for managing the disasters in India.

National Institute of Disaster Management

The National Institute of Disaster Management is a first national organization working for human resource development at national level in the area of disaster mitigation and management. It came into existence since October 16, 2003 by a Government of India order upgrading the National Centre for Disaster Management (NCDM) which was located in Indian Institute of Public Administration, New Delhi. NIDM will be gearing up the national, state and district level administration to tackle natural calamities and will also be coordinating research projects, training programmes and will build a database of natural disasters with case studies. The visions, missions, strategies, and objectives of NIDM are given below.

Vision: is to be the leading center of excellence in the field of disaster risk mitigation and management in India and Framework for development practitioners, central, state and local government officials, NGO representatives, community leaders and others interested in the challenges and issues related to disaster risk reduction and management.

Mission: is to work as a think tank for the government by providing policy advice and facilitating capacity building services including strategic learning, research, training, system development and expertise promotion for effective disaster preparedness and mitigation.

Strategy: is certain that once the movement for a comprehensive strategy has begun, the momentum has not diminished with time, rather picked up, with remarkable initiatives being taken over the world. NIDM builds a national hub to share and learn and to create a critical mass of institutions, trainers and trained professionals.

Objectives: i. To undertake quality research covering both natural and human induced disasters, with a multi-hazard approach. ii. To work as a National Resource Center for the central and state governments in the country through effective knowledge management and sharing of best practices. iii. To professionalize disaster risk reduction and emergency management in India and other neighboring countries by developing an independent cadre of professionally trained emergency and mitigation managers. iv. To promote formal training and education for disaster management in India and in the region. v. To build working partnerships with the Government, universities, NGOs, corporate bodies and other national and international Institutes of eminence. vi. To link learning and action by building a synergy between institutions and professionals in the sector.

National Disaster Management Authority

On 26th December 2005, the Government of India enacted the Disaster Management Act, which envisaged the creation of the National Disaster Management Authority (NDMA) under the chairmanship of prime minister and State Disaster Management Authorities (SDMAs) headed by respective Chief Ministers had given the responsibility for assisting the authority to draw up a disaster management plan, coordinating and monitoring its implementation as also coordinating response to a disaster[15]. NDMA is India's most successive institutional mechanism for effective disaster management, which has been prepared the national policy framework after due deliberations, and keeping in view the National Vision 'to build a safe and disaster-resilient India by developing a holistic, proactive, multi-disaster and technology-driven strategy for Disaster Management (DM). This will be achieved through a culture of prevention, mitigation and preparedness generate a prompt and efficient response at the time of disasters. The entire process will be the central stage of the community and will be provided momentum and sustenance through the collective efforts of all government agencies and Non-Governmental Organizations. NDMA has adopted a mission-mode approach involving a number of initiatives with the help of various institutions operating at national, state and local levels. The central ministries, states and other stakeholders have been involved in the participatory and consultative process of evolving policies and guidelines. The themes underpinning this policy are: i. Community-based disaster management, including last mile integration of the policy, plans and execution. ii. Capacity development in all related areas. iii. Consolidation of past initiatives and best practices. iv. Cooperation with agencies at national, regional and international levels. v. Compliance and coordination to generate a multi-sectoral synergy. vi. Promoting a culture of prevention and preparedness - by Centre-staging DM as an overriding priority at all levels and at all times. vii. Encouraging mitigation measures based on state-of-the-art technology and environmental sustainability. viii. Mainstreaming DM concerns into the development planning process. ix. Putting in a place a streamlined institutional techno-legal framework in order to create and preserve the integrity of an enabling regulatory environment and a compliance regime. x. Developing contemporary forecasting and early warning systems backed by

responsive and fail-safe communications and Information Technology (IT) support. xi. Promoting a productive partnership with the Media, NGOs and the Corporate Sector in the areas of awareness generation and capacity development. xii. Ensuring efficient response and relief with a caring humane approach towards the vulnerable sections of the society. xiii. Making reconstruction an opportunity to build back better and construct disaster-resilient structures and habitats.

Public Education and Training for Disaster Management:
Public education is a strategy, plans and guidelines which form a foundation of long-term public information how to act in all the stages of disaster. It has particularly strong usage in regard to educating for public safety. Public disaster education is a key component of a jurisdiction's emergency management programme, and it includes goals, objectives and tasks not directly related to a single incident, and response and recovery operation[15]. Planning for public education should also be closely linked to the public information functions, which is frequently tested through exercises and actual events. Although messages and delivery techniques differ, a jurisdiction's public education programmes and preparations for disseminating information to the public during a crisis should benefit from the hazard identification process and knowledge of populations, including locations of people with special need. Sloan[17] conducted a survey following the Hurricane Katrina 2005, found that out of the 680 adults merely 80 per cent of the adults were evacuated themselves before the storm his, rest 20 percent were physically inefficient and some of them ignore to leave that place. The majority of them received public disaster education prior to the natural calamity. Therefore, Public disaster education aims to bridge the gaps between sociological and psychological research on public education policy and implementation in the field of disaster.

Training is a vital component for disaster recovery intervention designs for varied target groups which will be providing personal, psychosocial or community based services to affected communities[18]. Training is an inbuilt function of capacity building as trained personnel respond much better to different disasters and appreciate the need for preventive measures. Training facilities for government personnel involved in disaster management are conducted at the national level by the National Centre for Disaster Management (NCDM) in the Indian Institute of Public Administration (IIPA), in New Delhi which functions as the nodal institution in the country for training, research and documentation of disasters. At the State level, disaster management cells operating within the state Administrative Training Institutes (ATIs) provide the necessary training. Presently, 24 ATIs have dedicated faculties. Hence, Proper training and relevant education give a clear and coherent dealing with disaster.

Discussion

Disaster education was incorporated as a part of course work since tenth five year plan, the principal objectives are to inculcate, right at the school level, the knowledge and preparedness about disasters and making it a part of the thinking process of life. The prime theme of this education is to design the awareness programme among the public in both short-term and long-term preparedness procedures and to furnish the knowledge; how to prepare in advance, how to act on warnings and how to reduce the risks from their home and communities. The knowledge about disasters and its management is not only vital for the government officials, Paramilitary forces, healthcare practitioners and other stakeholders but also for the entire population. If common people know what has to be done when tragedy strikes and can take immediate measures, and damage to life and property can be reduced. In the current era, disaster education is a new field which needs to be explored from top to bottom level, not only to safeguard our environment, but also by this knowledge people should learn how to recover or rescue their families, households and communities.

Conclusion

Disasters are prolonged issue that affects human civilization since the dawn of its existence. Managing any form of disaster is largely depending on the management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, particularly during preparedness and response, in order to lessen the impact of disaster. Owing to having a better preparation against this, CBSE took the opening move to incorporate disaster education in the school curriculum which not only to guide the preparedness activities, but also provide the knowledge about the hazards and risk, and makes people perceive the risk with clarity and certainty. Hence, integrating disaster education in educational curriculum helps the students in the class in preparing their family and the community and other groups of people to prepare themselves during all the three stages such as before-during-after stages of a disaster. Therefore, it is apparent that government and other non-government organization should spread this education throughout the country and aware the public for any hazards in advance through a long-term strategic effort.

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