

## The Integration and Strengthening of Vulnerable Segments of Society in Disaster Risk Reduction Initiatives (Evidence from Developing World)

- Afshen Zeeshan** Lecturer, Department of Government and Public Policy, National Defence University, Islamabad, Pakistan.  
Email: [afsheenzeeshan1@gmail.com](mailto:afsheenzeeshan1@gmail.com)
- Shahzad Hussain** Assistant Professor, Department of Government and Public Policy, National Defence University, Islamabad, Pakistan.
- Muhammad Bashir Khan** Assistant Professor, Department of Government and Public Policy, National Defence University, Islamabad, Pakistan.

### Abstract

*Disasters have the capacity to increase the weaknesses and vulnerabilities of marginalized groups of society. It is the need of the hour to include these segments to make the process of disaster risk reduction successful. This research article presents comprehensive information regarding global agenda and efforts made by developing countries for the empowerment & resilience of weak people during natural and man-made disasters. This article provides information on vulnerable groups are exploited for reaping benefits of DRR policies. Case studies are studied from developing world like, Indonesia, Cambodia, Philippines, Nepal, India & Myanmar to highlight the initiative taken to empower these segments. This evidence has been used in recommending more productive actions for inclusion of vulnerable people in DRR mechanisms in developing countries.*

### Key Words

Vulnerability,  
Empowerment, Inclusion,  
Resilience, Capacity  
Development, Disaster  
Risk Reduction

### Introduction

DRR (Disaster Risk Reduction) is a systematic method for categorization, assessment & reduction of dangers associated with climate change phenomenon. It aims to decrease social and economic vulnerabilities faced during catastrophes and confront the possibilities that produce them. It should be a vital element of the techniques used by concerned organizations in performing their responsibilities (Madu & Khuei, 2017). DRR is an all-inclusive idea as it covers wide-ranging and extensive phenomena than old-style disaster management. There are scenarios for DRR actions in every field of development and humanitarian domain (Kruger & Bankoff, 2015)

The most generally used explanation of disaster risk reduction is presented on United Nations forum, especially UNISDR (United Nations Office for Disaster Risk Reduction) & UNDP (United Nations Development Program). According to them, DRR is the theoretic framework of modules considered with the visions to reduce weaknesses and environmental threats for the people used for evasion, preparation & alleviation of the adversative influences of catastrophes, under the umbrella term of sustainable development (UNISDR, 2009) Thomas & Phillips (2013) stated an explanation of vulnerability during disasters that is very important as it explains that vulnerability is the characteristic of an individual or community and environments of these individuals and communities affecting the capability to predict, face, fight and recuperate after impact associated with natural or man-made danger.

Vulnerability is among the crucial constituents of the DRR process.

### Threat = Danger x Vulnerability x Exposure

In last twenty years, approximately \$2.5 trillion have been spent on disasters, over 1.5 million individuals have been killed and approximately 4.5 billion persons have been suffered and in these figures, a particularly extraordinary number of children, women, old people & weak segments are witnessed (Georgeena, 2015). Perils related to climate, for example, hurricanes, scarcities & floods, are now increasingly regular & destructive and this is a consequence of global warming or climate

change. In this new structure of capriciousness, communities and states are fronting complex and connected threats, which are able to reverse years and often eras of growth.

Specific kinds of persons can face larger risks of misfortunes or global warming, associated with habitation in which they live such as inundation inclined regions or harvests that are developed by them, can indicate worse preparedness & managing capacity as these individuals possess little resources for disbursement in adapting or can show poorer flexibility and resilience and the reasons for this deficiency is the lack of monetary & social sustenance networks (Levy, 2018). Intermediation related to hazard administration are planned, well-thought-out and it is directed under the guidelines provided by the comprehensive information about social susceptibility data of various fragments of vulnerable people. Different complications and concerns arise during the definition of communally weak persons in DRR programs. An array of elements that are utilized for the description of societal weakness includes and it is not only limited to earnings variation, gender, family status, disability, age, language, literacy rate, etc. (Sterrett & Turnbull, 2013).

Those individuals who lie in the category of vulnerability to climate-related risks are supposed to manage numerous & intertwined exclusions. Their social, economic, ethnic, racial, political banishment exaggerates these vulnerabilities, partly due to constraints present in the way of participation in decision-making practices. Thus during disaster risk reduction designing, agents of weak segments do not consider themselves meticulously involved & accessed, consequently, DRR strategies incline towards overseeing the miscellaneous necessities by the sidelined sectors. A key cause making this segregation indicates that vulnerable people are generally perceived to be the sufferers and are not considered to be helpful in improving capabilities for managing disasters. The weak segments do not feel conversant regarding dangers they have to deal with and this situation gets harder in the process of taking suitable judgments and follow activity sequence in disaster risk reduction processes (Yangisawa, 2015).

### **The Global Agenda for Integration and Strengthening of Vulnerable Segments of Society:**

HFA (Hogo Framework of Action), acknowledged nearly by 150 nations during the commencement of International Conference on DR in 2005, is offered as an excellent document for the weak parts of the community in comparison with other international policy outlines for disaster risk reduction. 13-A of this document highlights a viewpoint in context of gender and emphasizes that it must be mainstreamed in all DRR plans, guidelines, and decision-making initiatives, comprising of all groups linked with hazard investigation, early-warning, data administration, awareness, training & education. 13-E states about the social miscellany & age & weak individuals must be ranked on the top when designing DRR strategies. 13-F shows that weak groups and district level establishments must be accredited to handle & reduce risks associated with disasters by accessing significant details & statistics, available means and authority for deciding the actions for DRR. 16-3(H) defines that public involvement in disaster risk reduction must be endorsed by applying specific rules, developing linkages, managing those resources that are available voluntarily whether they are human or financial, describing responsibilities, and providing required facilitation. 17-2(D) comments about individuals-focused early-warning arrangements should be established within guidelines provided by a particular plan as these warnings are well-timed and rational to those at risk, on the basis of the demographic, social characteristics and means of support for the vulnerable people, encompassing course of actions about behaviors after distribution of these early-warning messages.

18-1(A) articulates the understandable information on threats because of disasters and defensive actions should be delivered, especially for persons in areas that are on high risks, for their empowerment and enabling individuals for taking a decision or act for reducing fears and constructing resilient attitude. The knowledge must incorporate correct traditional & native understanding and culture heritage and be modified to several target segments according to social & communal dynamics. 18-2(H) expresses about amalgamation of DRR knowledge into interrelated components of educational institutions' syllabuses should be supported and the employment of official & unofficial setups for expanding this information among children & youth. 18-2 (M) declares about fair approach to appropriate preparation & informative scenarios for weak groups and women should be guaranteed; sensitivity about gender and culture exercise in the form of dynamic components of training & education for DRR should be stimulated. 18-4(P) shows, obligations borne by media to boost an attitude of resilience during disasters and resilient societal groups' contribution during continual community education initiatives & community consultations at different social levels should be encouraged. 19-2(G) announces about implementation of social security networks for caring the deprived, aged & persons with disabilities, as well as people suffered by calamities should be supported. Rehabilitation measures including training frameworks in psychological and social contexts in for diminishing the psychosomatic destruction borne by weak people, particularly kids, as consequence caused by catastrophes should be improved. 19-2(I) encourages, it should be guaranteed about schemes designed for the moved individuals must not exaggerate the defencelessness during risks. 20-F reassures about specific methods for inclusion of energetic

contribution & enabling main stakeholders, containing groups, in DRR, for construction of passion for volunteerism should be presented (HFA, 2005)

Many countries recognize that there is lack of attention towards susceptible sets' necessities, matters & involvement in disaster risk reduction at the United Nations General Assembly's 61<sup>st</sup> session and presented statement about wish for encouraging determination to incorporate vulnerable folks' contribution in disaster risk reduction activities (United Nations, 2006). Disabled individuals, elderly, children and women's difficulties had been discussed during first meeting conducted by International Forum for Disaster Risk Reduction (2007). The conference ending declaration emphasized the fact about making elderly persons and women a significant part in formation of philosophy to prepare them for disaster & mitigation, especially at level of community was not recognized and because of their capability for supporting disaster risk reduction was generally ignored. A concern about weak persons' management of unequal influences related to calamities was also debated. Concluding statement certified to improve responsiveness, initiate activities to lessen vulnerable segments' problems in DRR, and facilitate these people's headship & assistances in DRR (United Nations Office for Disaster Risk Reduction, 2007)

The Manila Statement for International Initiatives on Disaster Risk Reduction, Climate Change, and Gender acknowledged by two hundred fifty members during 3rd Global Conference of Females in Politics, highlighted about privation of global covenants about sensitizing gender on climate change. Twelve key pledges were taken, encompassing, initiative for males & females should similarly be supported in global warming and disaster risk reduction policy formulation practices at societal, international, regional and national levels & costing regarding gender sensitivity should be monitored with the help of international establishments & states for making proper resource division guaranteed for increasing females' expertise, mainly the underprivileged & the most deprived, for improvement of the resistance to threats posed by global warming and catastrophes (United Nations Office for Disaster Risk Reduction, 2008).

The Beijing Framework for International Action on the integration of weak segments of society in DRR (2009) designated rules to apply disaster risk reduction guidelines with the help of global groups & states for generating resilience during disaster that is gender-sensitive at the national & local domain. It stresses upon political leadership to show readiness for incorporation of weak sets in DRR & enable countries for administering the weakness, peril & competency examination and assessment (United Nations Office for Disaster Risk Reduction, 2009)

Following are some case studies which can be debated to study best DRR modules that are being implemented by developing a world for inclusion and empowerment of disabled, women, elderly and children in DRR.

### **Alleviating Incomes by Involving Community in Preparedness – India (Malda, West Bengal)**

Susceptible for floods, storms and starvation approximately every year, West Bengal's district Malda, is tormented by fewer quantities of agricultural products and scarcity regarding occupations too. These conditions are the causes to increase relocation, hunger & many related problems, which multiply weaknesses for disasters. Labour without lands and marginalized agriculturalists, that constitute 70 percent of region's populations, are the real victims. World Vision Office in India, in alliance to Indian State & United Nations Children's Fund (February 2006), initiated a program planned for making people aware of preparedness & mitigation for disasters, whereas providing earnings variation & capital construction scenarios. Targeting fifteen thousand marginalized farmers and deprived persons, having an amazing focus on kids, this system worked for increasing the incomes as a precaution to face risks associated with disasters. Committed backing has been provided with the help of practicing diverse methods. Cognizance of preparation for disasters & response during these circumstances has been significantly enriched by rotating learning means to primary and high school students. Local Relief Action Groups have been organized with volunteer teams from villages, including women & youths, which are expert in application of first aid treatment now a day, response actions & harmonization to the district executive organizations during calamity periods.

### **Empowerment of Institutions for Persons with Disabilities in Disaster Preparation Nepal (Kanchanpur)**

Kanchanpur is the district that is located in the west of Nepal. In this district, floods become consistent tragedies that generate mostly considerable difficulties for disabled persons. Handicap International presented a plan in this district sponsored by Philanthropic Services Disaster Preparedness Program of European Commission during the year of 2012 that has been directed with the help of enhancing capabilities of district-level disabled persons' organizations (DPOs). These organizations were without earlier knowledge about comprehensive DRM. Workers who function for the disabled individuals from past ventures in other areas trained these organizations helped in different types of actions: firstly, they equipped the larger public about the rationale for including people with disabilities. Secondly, they accessed people with disabilities to remove the hurdles present there for their integration & for lifting their morale. Then DPOs instigated vulnerability and capacity assessments (VCA), which merged weak segments i.e., women, elderly persons, children and individuals with disabilities. Consequently, residents formed Community

Disaster Management Committees (CDMC) that applied the VCA's outcomes for articulation of disaster preparation & mitigation policies.

### **Highlighting Role of Women in DRR - Myanmar (Dedaye Township)**

Women perform a functional part in different matters of community in Myanmar, however, discriminatory practices based on gender are yet exercised and there are insufficient opportunities for females' governance in various divisions of society. Vehemence because of gender, mostly conflicts with women, is predominant, generally in problematic areas. As consequence of cyclone Nargis, a plan was commenced in Dedaye Township by Oxfam, that envisioned for reestablishment of principal agricultural products and earnings standards, production systems for social well-being, & strengthens alternatives to provide prospects for earnings that are based on individuals skills. Plan charted two main approaches: identification and assistance in decreasing weaknesses and for fostering expansion of females' earnings. The discussed two methods openly help womenfolk, who are among the weakest participants of the social order, and improve the competence of the whole community to sustain natural threats.

### **The Supremacy of Youths' Opinion in DRR in the Context of School Relocation – Philippines (Santa Paz)**

The Mine and Geo-Sciences Bureau (MGB) conducted a hazard analysis of avalanches in the area of South Lyte (2006), found risks associated with eight barangays in zones of Santa Paz Norte and Santa Paz Sur, and presented proposals for transfer of victim families. An elementary and a high school were in the range of two dangerous barangays. Mostly the kids showed approval for rearrangement but their parents were not in favor. They had the concerns for teens who had to face the problem of crossing a large distance to the school in case of relocation & loss for incomes associated to relocation of school (for example, dismissal of business dealing with lunch for local vendors). Moreover, numerous political organizations instigated a misunderstanding. The children's organizations in the school propelled an education movement & a great no. of pupils penned to the higher authorities in school sharing request for relocation. The pupil's request obtained one hundred one votes in its favor and forty-nine votes against it. The tents for school have been fixed on weekend in cooperation of kids and their parents and students dug drainage channels and the reason for these channels was the presence of this tent school's location adjacent a muddy ground. The water, tent & lavatories have been supplied by Plan's office of Philippines, as well as an assistance fund enabling deprived students to bear the expenditure of uniforms and other accessories. The pupils felt very happy and did not display any regret about the selection to relocate.

### **Creating Resilience among Disabled Children: Providing Knowledge Regarding Disaster Risk Reduction - Indonesia (Yogyakarta Province: Slemen and Gunug Kidal Districts)**

The Arbeeter Samareter Band Deutschland (ASBD), an organization, introduced the program on Gunug Kidal and Slemen that are districts in Yogyakarta province for provision of applied disaster risk reduction awareness and training to disabled children who are not enrolled in educational institutions. Trainers were trained by consuming provisions provided by government to deliver disaster risk reduction education. Teams sent by Government, and groups dealing with disabled persons, at the sub-district level were educated. The teams trained teams of the settlement which helped in training of disabled kids, family members of these kids as well as & neighbors. This education involved debility consciousness, training methods, applied disaster risk reduction approaches, and uncomplicated research practices & assessment. Community-level-training incorporated safe-room activities in homes & awareness of tremor training & evacuation simulation models. Subsequently, official acceptance of the organized information distribution scheme (utilizing the teams at village and sub-district level) with the help of local government became successful. This activity is currently in progression in different districts and being incorporated in DRR program.

### **Inspiring Females for Leadership Positions in Disaster Risk Reduction - Cambodia (Tako)**

Tako is a province in Cambodia, situated at Cambodia Vietnam borderline and is susceptible for yearly inundations. Oxfam initiated Tako Inundation Mitigation Plan in association with Chamreun Cheet Khumer (CCK) in towns of Tako. Women's leadership & gender equality were the key drives for the execution of this program. The package comprised of conducting methodical & comprehensive gender training & incorporated detailed activities for developing females' power and gender fairness. A broad chain of dialogs was conducted with women & numerous opportunities were given to improve public management expertise & skills. The environment has been molded to support female leaders in meeting each other, appreciating capabilities & having collaborative attitude. Notion functioned out with menfolk too for shaping optimistic approach within framework of gender impartiality & gain their backing for females' involvement. With the help of exercise, females' anxieties have been excellently reduced.

## **A Way Forward for Developing World**

The evidence from the developing countries highlights the importance of two main fields are recognized for which policy formulators and implementers both sets have to work for attainment of the goal of weak segments' insertion in DRR activities. The above-mentioned essential fields are capacity-development and vulnerability-based awareness mechanisms.

All diverse phases of capacity-development practice consist of numerous approaches.

- In the first step, all stakeholders are involved to obtain a unanimity to choose the goals and policies to be implemented during the entire practice.
- The second step examines the necessities of vulnerable groups and capacity resources available with societies and the organizations both framing capacity building plans.
- In the third step, all capacity development plans & methods must be established.
- Above mentioned methodologies must be practiced in the fourth phase of activity.
- In the last phase, consequences of given plans & strategies must be examined & measured to understand accomplishment of package or for changing planned activities (Zutshi, 2019).

Females and aged persons are more than just sufferers as in present situations they are considered significant representatives of change. They have exceptional knowledge and competences that execute an important part in confronting catastrophes based on their know-how. Improving involvement degree of womenfolk and old indicate safer communities for kids, persons with disabilities as well as all segments if their abilities are enhanced in a correct manner become more proactive in preparedness, mitigation & response and adopt appropriate course of actions as a result of early-warning messages. Capacity-development method to strengthen marginalized segments should be initiated as a mechanism that is managed locally to bring transformation in entire social order and must ascertain specialists, groups, and people that are able to perform a noteworthy role in implementing DM a& DRR initiatives. Investment is needed in training and skills-building of individuals' capacities particularly weak groups in disaster risk reduction & rehabilitation. Though provision of training is only one technique to develop the capacities and it is generally not directed as a secluded intrusion.

Weak people should be accepted as dynamic decision-makers & stakeholders in disaster risk reduction efforts. Empowering the weak fragments can be enhanced by involving and informing them and making their membership continual. It demonstrates about eradication of problems faced by disabled persons, elderly, females and kids are imperative for indication of their necessities & priorities, accessing information, capacity-development prospects, educating and prioritization of informal & formal education on DRR.

The following recommendations are mandatory to improve the situation on a continual basis.

- The quota schemes for weak people in decision-making activities in the context of disaster risk reduction must be introduced and institutions must play their due roles in these interventions.
- The vulnerable individuals should be provided a fair approach to knowledge, comprising of education, learning & early warning and capacity building to boost their confidence.
- Disaster risk reduction education should be made available for all vulnerable groups because it is considered as the only method to create feelings of integration and empowerment.
- The legitimate constitutional and human rights of these persons and approach to help & facilities in the context of DRM i.e., health services, payments, cash dispersals, insurance, employment, social security, credits, etc. should be made safe and secure.

Conclusively, actions for equal participation of vulnerable segments must be global. Utilization of vulnerability indicators, training & objectives should be established as main concern during formulation & implementation of disaster risk reduction programs.

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