

The inclusion of education of disaster risk reduction: what matters in Pakistan educational policy?

Khadija Jaffar

Department of Education, Faculty of Social Science, Balochistan University of Information Technology and Management Sciences (BUIITMS) Quetta, Pakistan.

Amjad Reba

Institute of Education & Research (IER), University of Peshawar, Pakistan.

Hazri Bin Jamil

School of Educational Studies, Universiti Sains Malaysia

Muhammad Iqbal

Postgraduate Medical Institute Quetta(PGMIQ). University of Balochistan, Pakistan.

Emails: Khadija.jaffar@buitms.edu.pk, amjadreba@uop.edu.pk, [fazri@usm.my](mailto:hazri@usm.my),
miqbaljaffar@gmail.com

Abstract

The goal of DRR is to reduce vulnerabilities and disaster risks throughout a society in order to prevent or mitigate the negative effects of natural disasters. In Asia, Pakistan remains one of the disaster-prone countries. Several natural disasters have affected various parts of Pakistan, the most recent one is the massive flood disaster that happened in Pakistan. The policy of Education in Emergency which centered Disaster Risk Reduction (DRR) as themes that collectively catered to the teacher's professional development, inclusion in Curriculum, and School Safety Plan. This article analyses and presents an insightful understanding of the Education in Emergency (EiE) policy and its implementation in Pakistan. The study uses document analysis and semi-structured interviews as methods to obtain information and data. The findings of the study found that Professional Development remains an area of focus, while the inclusion of DRR in the curriculum, and School Safety plans are not implemented in accordance with Policy recommendations.

Keywords: Education in Emergencies, Disaster Risk Reduction, Disaster, Educational Policy.

Article History:

Received: 20th Feb. 2023

Accepted: 18th Mar. 2023

Published: 15th Apr. 2023

1. Introduction:

Around the world, there have been more disasters and emergencies (Torani et al., 2019). Natural disasters, which include floods, tsunamis, earthquakes, hurricanes, and other weather-related events, are manifestations of climate change that affect both the environment and people (Yusoff & Yusoff, 2021). Human modification in the natural environment exposed it more vulnerable to risks. These risks can be human-made, natural or an amalgamation of both these hazards has strong implications on socio culture, political, financial, and natural setting (Apronti et al., 2015). Asia and the Pacific are vulnerable to all major natural hazards and dominate disaster impact categories globally. Natural disasters claimed the lives of 426,991 people in the region from 2005 to 2014, accounting for 52% of the global total. Natural disasters affected an estimated 1.4 billion people, accounting for 85% of the global total. The data report physical losses exceeded \$0.7 trillion, equating to a daily loss of \$198 million. During the same period, the region accounted for 49% of total global losses, which was far greater than the region's share of global GDP (Benson, 2016). On the other hand, as a result of persecution and conflict, 45.2 million people have been displaced worldwide in addition to these, natural disasters, desertification, and droughts result in the displacement of millions of people (Mahmoud et al., 2019).

The interagency network for Education in Emergencies (EiE) launched the concept of EiE in

2000. Working with groups such as the Mental Health Psychosocial Support and the International Strategy for Disaster Reduction, INEE was able to advance the field of education in emergencies and provide its members with diverse perspectives on the issue in its 2008-2010 Strategic Plan. In 2008-2009, INEE issued additional guidance notes on safer school construction. INEE worked with a new partner, the World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR), to facilitate a consultative process to develop guidance notes for the construction of safe school buildings in this initiative. INEE drew on its collaboration with Sphere, as well as its connections with partner networks such as the International Strategy for Disaster Reduction's (ISDR) Knowledge and Education Platform, the Coalition for Global School Safety and Disaster Prevention Education, and the IASC Education and Shelter Clusters, to accomplish this. This collaboration advocates for disaster risk reduction integration into the education sector and has been accepted as an EiE component Mendizabal (2011). The idea of education in emergencies is intended for children whose lives are in danger or who are impacted by crises around the globe. Even though the field of education in emergencies has only recently been developed, it has suffered from underfunding, inconsistent coverage, and poor quality. Since its founding in 2000, the Inter-Agency Network for Education in Emergencies (INEE) has coordinated efforts to raise awareness of the significance of Education in Emergencies (EiE) with the justification, despite race, children have the fundamental right of access to education (Machel, 2001). EiE deals with all rounding themes including Disaster Risk Reduction (DRR), Gender, Protection, Inclusive Education, Conflict Mitigation, Early Childhood Development, and HIV&AIDS. Around the world, DRR is more emphasized on the bases of when providing the right education, the individual can overcome the vulnerability of his self, family, and the community through mutual efforts (Apronti et al., 2015). Education creates an atmosphere of readiness and enhances security and versatility by making attention to disasters. Moreover, education empowers an awareness of hazards and choices for decreasing the consequence by providing practical knowledge for disaster anticipation, administration, and rehabilitation. Instead of the above, education for DRR has been critiqued due to its potential to move the burden of DRR from the government towards the community and individuals (Benadusi, 2014).

Government and community members share the responsibility for disaster management in terms of readiness, response and recovery (Terpstra & Gutteling, 2008). As a result of international legislations, National Education Policy Pakistan (2009) allude the idea of EiE in the education sector of Pakistan. In integration EiE concept, the idea of DRR was solitary included as policy preference of EiE in context of Pakistan. The inclusion of DRR in Pakistan's educational policy was propelled through curriculum implementation, professional development of teachers, research and safety plans at the school level. By setting up an efficient response system, Pakistan's educational system recognizes the value of preparing both individuals and the community to meet the demands of emergencies.

2. Problem Statement

Pakistan remains one of the disaster-hit regions in Asia and, despite the strength and resilience of its individuals, a series of natural disasters have struck in different regions of Pakistan. 2005 earthquake of Azad Jammu and Kashmir, 2007 Cyclone in the coastal area of Sindh and Balochistan, 2008 Earthquake of Maskhail and Washuk districts of Balochistan, 2010 to 2014 flood in Sindh and Balochistan provinces where different districts of Balochistan and Sindh remained under flooded situation continuously for 4 years, COVID-19 and the recent flood of 2022 that hit half of the geographical area of Pakistan and considered as the worst situation in the history of Pakistan. The effects of these disasters are exacerbated by inadequate early warning systems, a lack Disaster Risk Reduction education, moderate response components, poorly planned infrastructure and a high level of poverty. Further during these events the educational activities were badly interrupted and a lot of students are not able to resume back their schools.

Education plays a vital role to provide knowledge about prevention and response, therefore the concept of EIE was introduced so the knowledge from the individual to the community can be transferred. The behavior, awareness, and preparedness of a child during an emergency are equally important. When we teach students about disaster preparedness and recovery efforts, there is a higher possibility to be open about how to safeguard their families and how to seek support in their communities that are in need. COVID-19 pandemics declaration as a Disaster and educational activities alteration from physical classrooms to the online system, and dependency on technology during national lockdown validate the importance of EiE (Landa et al., 2021).

A policy helps people to know where to go with DRR issues because DRR is crucial and requires a

document that outlines how to incorporate it into the curriculum; to raise disaster awareness, there is a need for stakeholders to advocate for a policy that places more emphasis on schools to teach students about minimizing the impact of disasters (Mutasa & Munsaka, 2019). There has been a long history of innovation in school systems all over the world, in developing understanding and reducing existing risks, preventing the emergence of new risks and to build resilience in societies. According to research, Disaster planning can save lives, reduce risks, protect property, and speedy community recovery (Peek & Mileti, 2002; Ronan & Johnston, 2005; Tierney et al., 2002).

Schools must incorporate interdisciplinary approaches when it comes to DRR in education (Vaughter, 2016). Educating about DRR, mitigation, and preparedness measures is a successful method of reducing the negative effects of disasters (Mishra & Suar, 2012; Smith, 2013). Disaster preparedness education for children should be about awareness of the dangers and precautions they can take to keep themselves safe at school and home. This would necessitate the revision of school curricula, the creation of textbooks and teaching aids and the training of teachers (UNESCAP, 2016). Hence, the study focus to explore the National Educational Policy related to EIE responsiveness towards DRR and how the concept is infused with the element of education in the implementation process, The support provided by the international laws, specifically human rights law, international humanitarian law, the UN Convention on the Rights of the Child, and the UN Core Commitments to Children on origins of emergency education was proven, hence the analysis of National Education Policy was helpful to have insight on how the policy integrate the EiE, what thematic areas of EiE were incorporated and how these were implemented. It was also imperative that, providing education ensures children's safety and resilience in emergency situations, which remain the leading causes of disruptions to children's education that draw a link of EiE and DRR. Further development of DRR frameworks and the INEE Minimum Standards for DRR Integration into Emergency Education increases the credibility of emergency preparedness education and children's ability to prepare for and respond to disaster situations. The policy analysis provided an insight to the policy makers, Curriculum developers, researchers and School leadership on implementation status a loopholes in implementation and way forward.

Research Objectives

1. To provide analysis and insight into the educational policy 2009 of Pakistan related to education in emergencies.

Research Question

1. How does the education policy 2009 of Education in Emergencies respond to DRR?

3. Literature Review

People have the fundamental right to education, which should always be upheld in all circumstances, even the most trying ones like war or emergencies. This serves as a crucial mechanism for protecting children from abuse and is not just an ideological stance that is upheld in the face of conflict (Smith, 2004). In recognition of the importance of disaster education, the implementation of DRR in education has gained worldwide attention. Governments and international organizations all over the world have recognized the importance of DRR integration into the school curriculum. Indonesia, as one of the most disaster-prone countries has experienced numerous natural disasters in the last decade. The research discovered that, in addition to education, disaster experience can increase disaster knowledge. The introduction of DRR education in Indonesia was marked by the passage of Act Number 24 Year 2007, which addressed disaster education in the school curriculum and was supported by Government Circular which addressed DRR mainstreaming in education (CDE, 2011, p. 6). In response to these regulations, stakeholders and educational institutions have developed a variety of activities and initiatives. The Consortium for Disaster Education developed a school-based disaster preparedness program to improve community disaster resilience while reducing disaster impacts and risks. Disaster experience improves knowledge of DRR (Astuti et al., 2021).

The INEE facilitated a consultative process in which the Minimum Standards for EIE, Early Reconstruction and Chronic Crises were created. They include summaries of best practices and key takeaways. These Standards offer a structure for high-quality instruction that is focused on peacebuilding and protection under even the most trying conditions (Kirk & Winthrop, 2007). The five main facets of education were accepted as guidelines for EiE which, include coordination, educational personnel, access to the learning environment, education policy, and teaching and learning. As a means of guiding future development, situational analysis assessment tools and checklists for major items were also provided (Bromley & Andina, 2010). It's needed to be distinct between education in stable and peaceful environments and during violent conflict; between education as a component of reconstruction and as longer-term peacebuilding. The administrative system, structural elements and various facets of educational practice are additional important parameters (Smith, 2005).

Education has typically been the focus of long-term development interventions rather than humanitarian efforts. The concept of "Education in emergencies" came from work on refugee education in the 1970s and 1980s, when agencies in South Africa switched from emphasizing individual scholarships for students as the main source of educational support to distance learning models in the region. This concept was to improve the educational systems in refugee camps located in Pakistan, southern Africa, Sudan, or somewhere else. To present a thematic idea on Education in Situations of Crisis that would underpin the theme presented in the World (Mendizabal et al., 2011). To reduce risk and vulnerability, the New Way of Work (NWOW) in emergencies starts by defining shared results, or collective outcomes. It is a significant issue given that the humanitarian development sector is divided based on how it views EiE and that it reflects and reacts to the ambiguous nature of data collection, process implementation, diffuse structure and infuse with other themes. During crises, NWOW takes lead. Humanitarian organizations, governments and local populations can all benefit from this focus on capacity-building and training by increasing the effectiveness and standard of their educational assistance, which will significantly improve the lives of disaster victims (UNOCHA, 2018).

4. Methodology

To analyze the responsiveness of Educational Policy, Document analysis and interviews were used as research methods. Since the objective of the study was to analyze the responsiveness of policy related to Education in Emergency (EiE) towards DRR, therefore on the bases of relevancy and convenience the National Education policy 2009 was identified relevant document to the objective. The National Education policy 2009 was the only educational policy which emphasis the concept of EiE by centering DRR as core theme. Alwasilah (2000) verified that we can use the document analysis method to analyze specific documents in the qualitative paradigm such as letters, autobiographies, journals, textbooks, government publications and so forth. Consequently, it is deemed appropriate to carry out this research using a qualitative design via document analysis and interviews.

Base on relevancy on role of actors involved in policy implementation, interviews were done to collect additional information on policy implementation on action points related to Professional development, inclusion in Curriculum and implementation at school level because it emphasizes the systematic description of an activity or situation, the interview technique is very beneficial and valuable in qualitative research studies. Investigating the quality of interactions, pursuits, circumstances or resources is what is meant by qualitative research (Fraenkel et al., 2012). It enables discourse observation at the actor, concept and combined levels (including rules), bridging the gap between concepts and actors or concepts to concepts (Borgatti et al., 2002). The Informants of the Provincial Institute of Teacher Education (PITE) includes Two Subject Specialists, Two Education District Officer AEDOs (representative of Education department Government of Balochistan) Two PITE Master Trainers and Two Head Teachers (School Administration) were selected through Purposive sampling. These key informants were involved in capacity-building sessions of Teachers and Educational Leaders, Education District Officer AEDOs who closely engaged in training at the school level and the head teachers who implement at ground. This combine actor-focused and content-focused approaches (Leifeld & Haunss, 2010). Purposive sampling emphasizes matching the sample with the research's goals and objectives, to study rigor and the trustworthiness of the data and results (Campbell et al., 2020). The researcher has taken various steps to provide an objective and transparent analysis of the data found in the document as emphasized by Bowen (2009) which suggest the Document analysis as a logical, additional triangulation technique for reviewing and assessing documents, therefore document analysis as well as Interview from Informants were done to have triangulation in findings. Rapley and Jenkins (2010) &

Corbin and Strauss (2014) suggest that like other analytical research methods, document analysis requires the data to be analyzed and constructed for meaningful results and advance theoretical and applied knowledge without a researcher's input, images, or text that have been added to a document for analysis.

5. The Findings

In context of 2005 Kashmir Earthquake Pakistan and international legislation on No Child left behind act, human rights law and UN Core Commitments to children on origins of emergency education, the theme of EiE was first time introduced in National Education Policies of Pakistan. The Educational Policy Document under the broader theme of "BROADENING THE BASE AND ACHIEVING ACCESS." Considered a central strategic priority of Education. (Chapter 06, Subtheme 6.5, page number 35). The section on EiE includes rationale as an experience of a disastrous situation in Pakistan and was related to inadequate planning for (EiE). The recent example of Covid-19 Pandemics was an attempt to justify the importance of EiE, where millions of students were remain out of school. Tarricone et al. (2021) confirms that Millions of children were absent from school due to emergencies prior to the effects of COVID-19. Further Plans for the national and local education sectors frequently recognized emergencies as a significant reason for absences from school. The concept of EIE stated in the policy that,

‘Education has suffered due to poor planning,’ The need for preparing individuals and groups to meet the demands of emergencies through planned and efficient responses has not been acknowledged by Pakistan's educational system. To ensure that education services are quickly restored, solid recovery and disaster management plans must be put in place. Students must be prepared in schools for planned, constructive responses’’

The policy document identifies the insufficient planning to meet the needs of EiE. It was also identified and recognized that in history, individuals and groups were not prepared to meet the demands of emergency response. Policy recommends reliable restoration and disaster management strategies to be implemented for the timely reinstatement of educational activities. Essentially School education must prepare students for structured responses during a disaster. The rationale of the study in national education policy 2009 was limited to the Planning and the action points includes key border concepts of teaching and learning these elements involve Capacity Building of teachers, inclusion in curriculum, Minimum Standards, research and disaster management plans. Key indicators for Monitoring was not included in Plan though evidence based policy monitoring tools for organizing educational reforms and tracking the state of the education system was important to promote resilience. Tarricone et al. (2021) support the monitoring framework, which assists decision-makers in developing strategies to manage and create resilient educational systems in the context of emergencies by assisting them in understanding how emergencies are likely to affect education. To address the need of implementing EiE in Pakistan, a few action points were also designed which were analyzed and discussed as follows:

The Action Plan of Teachers' Professional Development

The Action point against the EiE policy points was as below.

‘To guide their behavior during such crises, students' awareness of emergencies, natural disasters, and school safety must be increased.’

(Action point 01, page 36, Sub-theme 6.5 and chapter 06)

This action point professes the preparation of students through developing their behaviors during disasters, by providing awareness on emergency situations, Natural disasters and on school safety plans. The Hyogo Framework for Action 2005-2015 acknowledge the importance of disaster education by promoting a culture of safety and resilience at all levels. (United Nations, 2005). Research recommends to Enhance students' resilience. Kankaraš and Suarez-Alvarez (2019) recommend that, the curriculum might also be modified to incorporate social and emotional learning (SEL) initiatives . SEL learning is important to develop the behavior of Student about Disaster. According to a study on SEL for emergencies, these programmes can raise students' academic achievement by an average of 11%, encourage pro-social behavior and attitudes towards oneself and others and lessen negative behavior (such as emotional distress, aggressive behavior, and student conduct issues. While it cannot be assumed that children will survive emergencies unscathed, it is evident that education can help children to deal with trauma (Reimers & Schleicher, 2020).The action point

was followed by others with different strategies. Some of the strategies include learning material in the curriculum, textbooks, teacher training modules, teacher education curriculum and school safety plans. In priority 03 of the HFA was about to foster a culture of safety and resilience at all levels through the use of knowledge, innovation and education. (UNISDR, 2005).

International Organization along with the Provincial Institute of Teacher Education (PITE) focused on the area of professional development of teachers and educational leaders on DRR and school safety plans. The need for advocacy regarding emergency and school safety measures as well as developing informed behaviors was mentioned as an action point. The reflections and implementation of this action point were observed in curriculum documents, teacher professional development forums and school programs. The Provincial Institute of Teacher Education (PITE) Balochistan was functional since 1996, The reflection of above mention action point was taken from a Senior Subject Specialist PITE(SSSP1), As per discussion, A Training module was developed regarding Disaster Risk Management (DRM),

“A Module was developed for Training Senior Managers on DRM, by a UNESCO consultant and the Bureau of curriculum and extension center to assist the consultant in conducting the training of EDOs, Total Participants were 25-30. This program was of 4 Days The technical and Financial Support was provided by UNESCO Islamabad” another module was also developed in extension to the above training on cascade model supplementary material for training of Master Trainers on DRM”(SSSP1)

As per the discussion with one of the PITE representatives (SSSP2), efforts were made to provide knowledge to school management regarding managing disasters. same training was extended to districts through Training of Trainers (TOT) for Sharing knowledge and prevention from the disasters.

“Another training was conducted in 2010, The content of the training includes knowledge about Fire Fighting, natural disasters, and their prevention, the participants of the training were school teachers. The context of the training was flood emergency of Balochistan”(SSSP2)

As a result of a discussion with a representative of PITE(SSSP2), it was found that training was arranged for School teachers regarding awareness about natural disasters and fire fighting in the context of the 2010 flood. Triangulating the action point with interview and the training module observation, it was proved that efforts have been made to provide knowledge about the disaster to school management and school teachers. However, no evidence finds to cascade the training in school for the students. Another Training Manual for 12 days TOT for District Master trainers (CPD) was developed by PITE that manual includes a complete unit about the School Safety plan.

“The content of the Manual includes different activities to develop a school safety plan. Another session about Natural disasters was included in the same manual. The focus of this session was the context of disaster in Balochistan, First Aid, prevention from disaster, response mechanism, rehabilitation phase, the role of Schools in disasters, and the responsibilities of the Provincial Disaster Management Authority. Emotion regulation during Disaster. Initially, 40 Master trainers were trained to further cascade the training in all districts of Balochistan for teachers. This training was held in 2019”(PMT-02)

From the analysis of above training events it was find that few efforts have been made to incorporate DRR and DRM together. The example of training content related to rehabilitation Role of School and Emotion regulation, First Aid and Firefighting are part of Disaster Response management while the content related to natural disaster and prevention is regarding DRR. However, there were no evidences provided on cascading the sessions till grassroots level. Another capacity building program was launched in 2018 by PITE for teachers through Master Trainers, In a discussion with PITE Master trainer (PMT-01) regarding the said training, It was reported that:

“A Resource book for capacity building of elementary teachers training project Balochistan, (sponsored by CIDA) was developed by PITE: that training manual contains a complete chapter, DRM (Pages 61-65). That unit includes DRR Plans, Early Warning Systems, Emergency Management, Emergency Services, Forecasting, Geological Hazards, and the National Platform for Disaster Risk Reduction. This training program was held in 2018 and 116 elementary teachers were trained in that session”

The content in aforesaid training programs equally focused the contents related to DRR and DRM, since this session was arranged for elementary grade teachers, therefore the content might support subject knowledge as well as disaster related knowledge simultaneously. From the finding of the interview of informants, it was also identified that PITE yearly planned a few training sessions related to DRR/DRM knowledge with a period of gap. Might be the gap period was for cascading the knowledge to District level but no such evidences made through the record or in discussion that provide the delivery of content at ground level. Further in another Action point it was emphasized that;

“Teacher Education/Capacity building content shall include knowledge to enable the teacher to address education in emergencies”

(Action point 04, page number 36, Subtheme 6.5, Chapter 06).

The need for teachers’ training was identified to facilitate the teachers to teach about EiE. The training material related to EiE was reviewed and the informants from PITE were contacted to validate the training material given on EiE. Teachers’ knowledge and access to DRR material, the capacity to implement DRR in schools and a platform must be provided for teachers to share experiences, successes and challenges (Amri et al., 2017).

About the reflection of action point 01, In 2010, two training were arranged one for Managers and the other for school teachers regarding firefighting, knowledge, and prevention from Natural disasters. The content of the training for Managers and school teachers has included a SWOT analysis based on identified problems of access and quality of education in disaster, contractual analysis of the effect of the disaster on education, a right-based approach, and influencing other stakeholders. This training program was also replicated as TOT for further cascading. The information about the content of the training was taken from training modules and informant interviews. UNICEF and European Union Implemented an education Project in 11 districts of Balochistan, the project includes developing monitoring skills, infrastructure development, WASH facilities and professional Development. The aspect of professional development of Primary and Elementary school teachers was jointly implemented through PITE, as per the Manual there was a unit in the training module regarding Prevention from natural Disasters, module contained the contents about Human-made disasters, identification of Hazards, and its prevention. The information regarding the Professional Development of Teachers regarding DRR was taken from the modules of Provincial Institute Teachers training and triangulated through interviews with teachers, Senior Subject Specialists, PITE Master Trainers and AEDOs.

The Inclusion in the Curriculum

According to a Global Assessment Report of 2013, 72% of countries have DRR-integrated curricula (Ronan, 2014).The point related to DRM incorporation in curriculum documents has been advised in the following lines of the policy document.

‘Each educational level’s curriculum shall include lessons on emergencies, natural disasters, and trauma management.’

(Action point 02, page number 36, Subtheme 6.5, Chapter 06).

The importance of knowledge about Emergencies, disasters, and emotional regulation was given importance further it recommended to include emergencies, Natural Disaster and trauma management related content at each educational level. Nurdin et al. (2017) recommends that one strategy for increasing knowledge and understanding of disaster risks has been suggested: incorporating DRR into formal education and curricula. Similarly, UNICEF (2012) verified that, the most prevalent approach is infusion or saturation, which involves integrating DRR themes and topics into the curricula of particular subjects. Therefore, the implementation of the above point was observed for the current curriculum document and the targeted level includes holistic development through all levels of the curriculum. After Analysis the curriculum inclusion it was identified that, afterwards developing the educational policy in 2009, no curriculum revisions were made therefore the information regarding natural disasters and especially the aspect of trauma management was not completely reflected in the curriculum. However, the knowledge and prevention of disaster are reflected in

elementary level and secondary-level textbooks but to a lesser extent. The aspect of Trauma management was highly recommended in policy action point but the emotion regulation aspects were not reflected in the curriculum.

“Based on the most recent international best practices, the secondary and higher secondary civics curriculum (Grades 9 to 12) shall formally address how a disaster or emergency is handled”

(Action point 03, page number 36, Subtheme 6.5, Chapter 06).

As per policy, the curriculum of Civics was focused to formally address disaster response based on international practices. The notion of Education for Sustainable Development (ESD) also includes the DRR and DRM in the objectives and materials for each subject at each grade level. NIER (2012) also recommend that the schools must allot time for these activities through teachers to spread the opportunity to advance ESD in all subjects and integrate studies based on a national course of study. Civics is an elective course in secondary and higher education that covers topics including government, fundamental principles of citizenship, political movements, international relations, the Pakistan Movement and more. The Pakistan Studies textbooks (IX and X) were chosen for study based on relevance and convenience. Currently, the implemented textbooks of grades IX-XI were designed in 2006, therefore the policy guideline was not properly addressed in the test books of grade XI to XII. The textbook of XI had direct and indirect inclusion of DRR but to a lesser extent. However, in the textbook of grade X, no content related to DRR was reflected at all. Since another action point of the policy recommends the inclusion of DRR related content in each level. Therefore, the sample size of textbooks was extended and the geography textbook of grades VI-VIII was also included in the study to explore DRR inclusion as UNICEF (2012) also investigated that the type of examination ranges from the direct infusion for instance a discussion of earthquakes in the geography curriculum offers an opportunity to include DRR that identifying opportunities for DRR that are not necessarily based on overtly disaster-related topics in a syllabus but rather in the inherent potential of the subject itself. The textbooks of Grades VI-VIII geography were found more reflective in context to DRR than the suggested textbooks of Civics and Pakistan studies in Policy.

Emergency related Material

“All emergency-related materials, manuals, guidelines, minimum standards, and education-related research shall be kept in a repository by the respective departments of education, teacher programs, and universities.”

(Action point 05, page number 36, Subtheme 6.5, Chapter 06).

In another action point, the research material related to emergency situation in context of Pakistan, The Minimum Standards of EiE implementation during Emergencies and the training material related to emergencies were advised to be placed in Teacher Training institutes, Education department and Universities as source. International emergency education standards emerge as a result of defining education as a human right and rationalizing social problem-solving strategies (Bromley & Andina, 2010). The training material related to DRR was available in the PITE. The document was placed in the shape of training manuals and reports but the material placed was not sufficient to meet the need for education in emergency prevention and response. From the analysis and findings, it was found that, less number of researches on context of EiE was placed in repository. Similarly, fewer number of training manual and reports were found in training institutes. The lack of published studies shows the challenges involved in the implementation of DRR (Amri et al., 2017). The Minimum Standards (MS) which are regarded as the standard by which education services should be supported, provided in emergency and post-emergency situations, were first published by INEE in 2004 (Shah et al., 2020). These MS for EiE were utilized in the 2005 Pakistan earthquake and were translated into Urdu, Pushto, English, and Dari. Since MS were modified and translated for context of Pakistan, it was a ready reference document for use during disaster after 2005, Like, 2010-2013 Flood, Washuk Earth quake 2013, Awaran Earthquake 2013, Ziarat earthquake 2008 and recent flood of Pakistan 2022. However, no evidence was found on use of these Minimum Standards nor these standards were not placed in training institutes for inclusion in Professional Development and research. Shah et al. (2020) verified that, currently the

trend of EiE is shifted to Resilience building. Education in emergencies (EiE) responses now place a strong emphasis on resilience. Shah et al. (2020) emphasize the importance of MS, In 2010, when the standards were updated, the concept of resilience grew significantly. The INEE Minimum Standards offer a crystal-clear case study of the rising prominence and attention paid to resilience in this comparatively brief time period. The goal was to create a tool that would be used globally to improve educational preparedness, response and recovery quality as well as guarantee accountability and close partnership in the delivery of education during emergencies and throughout recovery. There is a dare need to incorporate internationally recommended Standers and trends to incorporate EiE policy implementation successfully. The evidence and efforts that find from the discussion and analysis, do not fulfill the need to implement international standards and placement of MS in professional development of educators.

School Disaster Management plan

In continuation of professional development inclusion in teacher education plan and curriculum having DRR/DRM content, the school level disaster management plan was also identified as important component of EiE segment in national Education policy 2009. Hosseini and Izadkhah (2006) suggest that for achieving sustainable development requires taking preventative measures and mitigating disasters before they happen. From schools to homes to communities, this should be extended to all tiers. The policy document includes action points for each school disaster management plane. This management plan includes pre assessment of risks and threats with in school building or nearby area that can cause harm for the school children or society and recovery options. Stough et al. (2018) verified that scholars have thoroughly recorded the significance of school safety for disaster-affected children. The earthquake 2005 of Kashmir recognized the importance of DRM plan and standing of customary Infrastructure development for school. Regrettably, 18,000 students and 1,800 teachers passed away in classrooms during Kashmir earthquake in 2005 (Bothara & Hiçyılmaz, 2008). The Segment of EiE in national education policy 2009 was also added results of huge loses of earthquake 2005. As per the Policy Guidelines;

“Disaster Management Plans (DRM) shall include methods for delivering education for recovery”.

(Action point 06, page number 36, Subtheme 6.5, Chapter 06).

DRM plan needs to include the delivery of education with a mechanism to reinstate the former capacity or state of education. Exploring, that how schools implement school safety plans and disaster education is very imperative (Smawfield, 2013). The focus of the action plan was the response and rehabilitation from the state of emergency, the reflection of the action point was explored through discussion with the Head teachers (H1, H2) and one of the ADO(ADO-01) regarding the implementation of the School Safety plan. Suharwoto (2014) recommend that, A particular focus on school safety and a disaster plan needs to be followed up on. The recommendation of National Disaster Management Authority (NDMA) further explain the School safety plan not only limited to the teaching and learning process of learner regarding Disaster but it also includes a risk assessment of school from all hazards and threats developed response plan. Based on the results of the school risk assessment each school must create a School Safety Plan. Schools should have comprehensive response plans in place to deal with potential threats from various hazards as well as standard operating procedures (NDMA, 2017, p. 19).On discussion about school safety plans with Master Trainer PITE (PMT-01) it was confirmed that:

“Yes, we always focus on further cascading the training which we received from PITE related to Disaster management plans /School safety plans for Head teachers at the district level. but it is not properly implemented at the school level”

The finding from the discussion possess that School safety plan was added in teacher education and professional development plans. However, the development and implementation of DRM Plan is not successfully implemented at district level. The discussion was further extended up to Head teachers for confirmation of implementation. During discussion with a Head Teacher about school safety plan (HT-01).

“There is a schools Committee, who visit school maintenance and assessments we were not asked to develop any school Disaster Safety plan”

From the discussion with informants, it was found, that the school management visit to survey school maintenance, however school head is not asked to develop any school safety plan. To further explore about School Safety plan discussion was extended and another Head teacher was contacted to record the response on School Safety Plan, Head teacher shared in response to School safety plan that (HT-02);

“ Pakistan Red Crescent Society Arranged First Aid sessions and Drill exercises for teachers and students, in written we didn't make any disaster safety plan”

It was further explored through discussion with Head teachers that schools at the district level are not implementing school safety plans or DRM Plans for Schools. However, with the help of the Pakistan Red Crescent Society few drill exercises are reported in the ruler areas of Balochistan. From the discussion with Head teachers it was concluded that teachers gain school safety plan/DRM idea from the training but the plan is not implemented at grounds.

6. Discussion:

1. Based on previous research, the international actors were increasingly advocating for education in emergencies (EiE) partnerships to address the dare educational opportunities for school-aged children in disasters, armed conflict, forced migration and other humanitarian crises (Menashy & Zakharia, 2022). Conferring to the geographical need of Pakistan and international standers, the Education in Emergency was included as a policy matter in National Education Policy 2009 in the context of the Pakistan 2005 Earthquake. During disasters the affected populations have extensive humanitarian concerns, including protection, and access to clean water, food, and shelter. More people are aware to recognize the value of education in preventing psychological trauma, disseminating knowledge about urgent health and safety issues, and promoting long-term stability, reconstruction and development. International standards in emergency education have emerged as a result of the formalization of education as a fundamental right and the rationalization of approaches to social problem-solving (Sinclair & Unesco, 2002).Emergency education has emerged as a practical response to crises carrying on from two significant global cultural shifts.

The right to education has first been conceptualized as a fundamental right. The ability to take into account unique categories outside of routine circumstances such as emergencies depends on our acceptance of education as a fundamental human right for everyone. Second, international standardization develops in an increasingly interconnected and rationalized world as a response to a variety of social issues (Brunsson & Jacobsson, 2002; Mendel, 2006). International standards in emergency education were not an inevitable development, even with the expansion of education as a human right. The creation of formal policies specific to each nation-state with extensive government involvement could have been one possibility (Bromley & Andina, 2010).The concept of DRR is internationally recognized as the core theme of EiE, The National Education policy 2009 focused on DRR as a major theme of the policy, research shows that the DRR has gained widespread acceptance as a result of the increased loss and damage to human life and economic assets caused by natural disasters as well as the evolution of the international debate on DRR (Shaw, 2014).This policy was an existent need in context to EiE and resilience building. Action points were covering all areas of Teaching Learning and Curriculum, however there was a need to include monitoring framework with all action points. Tarricone et al. (2022) explain that reviewing current policies and strategies allows for improvement of existing ones as well as the identification of new policies and strategies that need to be created. Researcher further extend that, by elaborating on policy considerations and issues for the systems. A flexible monitoring tool was created using this hierarchy of factors, considerations and issues that policymakers could use for various EiE events and the Preparedness, Response and Recovery phases.

2. To raise awareness of the emergency the professional development of school teachers and education

leadership was highly focused, according to research preparing teachers to deliver DRR curriculum successfully requires instruction in both active learning facilitation techniques and content related to hazards and disasters (Selby & Kagawa, 2012). The PITE along with different donor agencies, UNESCO, UNICEF, CIDA, and BRSP were found active to develop the capacity of staff in Emergencies. In a few trainings, Cascade models were suggested under the specific theme of DRR. However, the evidence on the element of cascading these pieces of training at the district level and school level was not proven at all. Iftikhar et al. (2022) suggest that the cascading of training through Master training is a crucial component for diffusion of knowledge. The evidence proved that different training sessions were arranged regarding DRR, school safety plans, and prevention during natural disasters. The policy implementation of professional development of teachers and education leadership according to policy guidelines was successfully implemented. Additionally, in some case studies, a website or a widely read professional journal is recommended that serves as the primary medium for providing professional development for teachers (UNICEF, 2012).

3. In continuation to Professional development in National Education Policy 2009, Curriculum was accepted as a major component of EiE generally and DRR specifically. The research focuses on the integration of DRR into the curriculum as a means of fostering resilience. DRR ought to be systematically addressed at all grade levels and throughout the curriculum. The treatment must take into account prevention, mitigation, reducing vulnerability and enhancing resilience in addition to the fundamental science of risks and safety precautions (UNICEF, 2012). Currently, the implemented curriculum in Pakistan was developed in 2006, since no curriculum revisions were made after the development of the educational policy in 2009, information about natural disasters particularly the aspect of trauma management was not reflected in the curriculum. However, knowledge and disaster prevention are reflected in elementary and secondary level textbooks, but to a lesser extent. Research supports the textbook-driven approach. The approach is a revision of specific subject textbooks to add or to expand on existing coverage of topics related to hazards or disasters, In countries where there is already a "textbook-driven culture," teachers typically adopt the new hazards and disaster-related textual material with ease (UNICEF, 2012). Research shows that the Natural Science Cluster, Languages, Geography, Social Science, Citizenship Education/Civics, Physical Education and Civil Defense potentially address the DRR (Selby & Kagawa, 2012). However, the curriculum of Pakistan studies and geography was knowing disasters and prevention. No content related to Response and Trauma management was found in textbooks. Research recommends trauma informed pedagogies though the study was in context of Covid-19 pandemics, while the context of recent pandemics were recognized and accepted as context relevancy with Education in Emergencies. Bozkurt et al. (2022) and Imad (2020) suggest that, As a result of the increased anxiety and stress felt by different stakeholders (such as students, teachers, and parents) a growing body of research has shown the necessity of care-based and trauma-informed pedagogies as a response to the pandemic's effects.
4. The research documents, training manuals, and Minimum standards (MS) needed to place in universities and respective institutes for Research, Training, and Advocacy purpose. The MS has checklists and assessment tools for situation analysis and a code of conduct for service providers in emergencies. The MS was translated into Urdu, Dari, and Pushto and used in the 2005 earthquake crisis in Pakistan (Bromley & Andina, 2010). Additional sensitization and training efforts are needed in the context of Pakistan to ensure that the Standards are understood, applied and institutionalized throughout the government as well as within humanitarian and educational organizations (Zicherman, 2011). Karpinska (2008) already verified that, Despite the efforts were already made in 2005 the concept of EiE and MS was indeterminate to Policy Implementation. The study discovered that fewer people than anticipated were aware of the INEE-MS as measured by the number of training held in Pakistan and the INEE-MS. The Teacher Training institutes have EiE and DRR-related documents in form of training manuals and reports, but the content was insufficient to meet the need for EiE and response. No training manual or reports includes MS already utilized in context of 2005 or part of Professional development modules. There were no sufficient research articles or thesis published in institutes or universities. The evidence was not founded to place in and efforts were insufficient to meet international standards.
5. School safety was another action point of Education policy 2009, educational facilities should have plans in place for disasters to get students to safety (Muisyo, 2019). The school safety plans/DRM plans were intensively addressed in Professional development workshops for teachers and educational leadership. First Aid, firefighting and evacuation plans were the most prominent subjects in Teachers/Professional Development Plans. Unfortunately, the school Safety plan/DRM plan execution at the School level was unimplemented. Less monitoring and lack of resources made safety plans non-implemented. In 2008, KRCS verify that secondary schools are more vulnerable to disasters as a result of inadequate training measures, such as fire response exercises, inappropriate fire management

equipment, insufficient funding, and inadequate systematic disaster mitigation and response actions (GoK, 2011). The gap in implementation at the ground level was identified.

7. Conclusion

As Pakistan remains a disaster-prone country and is listed as one of the most disaster-hit regions of Asia, the contribution of this work is to identify the institutional policy and its implementation to reduce the nation's vulnerability against natural disasters. The idea of EiE places a strong emphasis on DRR and disaster response through the educational system. The stability of the educational sector and a reduced risk of expropriation have a clear impact on both the number of fatalities and the overall socio-economic losses from natural disasters, which also helps to increase community resilience.

The finding of the study indicates that the Education Policy 2009 holistically responds to the inclusion of DRR through Education, Awareness, Professional Development of Teachers, Inclusion in Curriculum and textbooks, Research material, International Standards, and School Level Safety plans. The Professional Development of Teachers and Educational Leadership were the most dominant area where the Government, International organizations, and the Provincial Institute of Teacher Education (PITE) Balochistan put efforts to develop the capacity of Human Recourse. Curriculum Inclusion was another action point of Policy that was lesser ignored, the suggested textbooks of Civics were not found relevant to the content related to DRR however, some material was placed in the Pakistan Studies and Geography curricula related to DRR, the material related to DRR was not up to marked standards of policy recommendations. The area of Research material, Minimum Standards and manuals were another action point, Training manuals related to DRR are placed in Teacher training institutes and research related to DRR was found in E-libraries. The Minimum Standards on Education in Emergencies were utilized in the 2005 Earthquake but were not used as a guiding document for policy and professional development. The output of teacher training and student awareness was to reflect in School Safety / DRM plans, which were not implemented at ground level.

Recommendation:

A designed syllabus related to DRR/DRM for Teacher Education/Professional Development with refresher plans is suggested. The Curriculum at school and higher secondary level must include DRR-related material in different textbooks, Science, Literature/Languages, Social Studies, and Geography are potential subjects to address DRR. Further, the DRR content is suggested to focus advance knowledge about Disaster Response and Trauma management related knowledge at the Secondary and Higher Secondary levels.

EiE minimum Standards are suggested to incorporate into professional development and Teacher education plans. More research is required on DRR and EiE in local and National contexts. EiE incorporated different thematic areas in which Gender, Protection and Early Childhood Education are currently focused to meet international standards; these areas need consideration for the near future. School safety/DRM plan implementation at the school level needs consideration to ensure Disaster Management.

Acknowledgment:

We would like to express our gratitude to the Director of the Curriculum Wing Dr. Gulab Khilji for his support in the Data Collection and validation of information, we also appreciate and acknowledge the contribution of the representatives of the Provincial Institute of Teacher Training (PITE) Balochistan to provide the data on Professional Development and teacher training related to DRR and its implementation.

Special Thanks to the Higher Education Commission (HEC) of Pakistan for its Financial support for my Research Study.

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