Abstract
Disaster has impacted the education sector in Nepal. It has disrupted the teaching and learning system with an increased dropout rate of students. Furthermore, it has shaken the resilience of the local communities. Due to this situation, children are exposed to a vulnerable situation and lack a safe learning environment. To mitigate this risk, most of the countries have adopted the comprehensive safe school framework. It is expected to be effective measures in Disaster Risk Reduction in education. In the context of Nepal, Comprehensive School Safety (CSS) legal provisions have been formulated in principle but lack its implementation at school and local level. This article explores the existing guiding provisions contributing to safe schools. The desk study was conducted on the basis of published literature and analyzed. The findings revealed that education is seriously impacted by disaster each year, and there is an inadequate implementation of the existing legal provisions at the local and school level. In addition to that, after disasters situation, school dropouts has been increased, and equal access to education has been challenged and more importantly, teaching and learning process are not continued. This has questioned the effective implementation of CSS and challenged the existing legal provision.

Keywords: Comprehensive school safety framework, Disaster Risk Reduction, School, Education, Government

Introduction
Millions of people get affected each year with disaster in Nepal. There is an inadequate capacity of the government as well as people to cope with such a situation, which is contributing more to poverty disrupting the economic, social, and cultural dimensions of the country. It has affected the education sector, which has adverse impacts on children and youths. Each year disaster killed the people and impacted the economic, social, cultural, education, and other aspects in developing country like Nepal (MoHA, 2019). In the education sector, the events of natural hazards and disasters have a significant impact on children, and youths, education. A disaster is an event that triggers the loss of lives and affects the physical, economic, and environment negatively. We are impacted each year by disaster, and disasters can have a significantly negative impact on human development (Conteh, 2015). Disasters can be human-made and natural. Many natural geological and physical processes are responsible for different types of natural disasters as earthquakes, floods, landslides, volcanic eruptions, tsunamis, hurricanes, tornados and so on.

The impact of disasters in the education sector will last for a long time, which will affect the quality of education as well as the development of human resources required for the future. A study conducted by Blaikie, Cannon, Davis, & Wisner, (2005) shows that around 1.2 billion students enter basic and high school worldwide. Out of those, 875 million students live in high seismic risk zones, and many millions of them are facade the common hazards like floods, landslides, hurricanes, fire hazards, etc. Children spend more than half the time of their waking hours in school facilities, yet almost schools are not constructed or maintained to be disaster resilient (GFDRR, 2009). The death of children and adults in...
schools have caused irreparable losses to families, communities, and countries and significant numbers of children are suffering from lifelong injuries and disabilities by disasters.

Data of UNISDR (2007) showed that in 1988, the Spitak Earthquake (Armenia) killed more than 17,000 students in their schools, and it is 2/3 of total earthquake deaths. Likewise, in 2001, 971 students and 31 teachers were killed by the Bhuj Earthquake (India). A fire calamity, the explosion of a cooking gas cylinder in the Tamil Nadu (India) killed 93 school children in 2004. The most terrible disaster in school was recorded in 2005 after the Kashmir Earthquake (northern Pakistan). This earthquake killed 17,000 students at school, and 50,000 were seriously injured. In 2006, an elementary school in the Philippines was buried in a landslide and killed 245 children and their teachers. Additionally, in 2008, more than 10,000 children were killed by the Sichuan Earthquake in China. The Convention on the Rights of the Child (UNHCR, 1989) and the Constitution of Nepal (2015) has clearly stated that every child has a right to quality education. Still, significant numbers of children are incapable of getting this right due to the impact of disasters.

Nepal is known as a disaster-prone country due to having fragile geological structure. It has experienced several earthquakes and other natural disasters over the past decades. The April and May 2015 earthquakes caused extensive human losses and damage to livelihoods and infrastructure. According to School Sector Development Plan (SSDP) of Ministry of Education (MOE) (2016), disasters caused a significant impact on the education sector, for example, an increase in the number of injuries and deaths of children, damage of school buildings, the use of school buildings as shelters in emergencies, an increase in school dropout rates, and a decline in the quality of education. Such disasters deprive the fundamental right to education of children. In order to reduce such impact of the disaster in the education sector and make children safer, schools can play a vital role by developing as a place of promoting knowledge of school safety and DRR (MOE, 2016).

In Nepal, most schools are in vulnerable locations; close to the landslide-prone area, riverbank, near to the highway and jungle, and far from the community, and more crowded areas; which may cause possible exposure to hazards. Such a condition of schools is the major challenge of quality education. Education should be freed from such a vulnerable situation to increase the access of children to quality education by creating a conducive environment. A report of the Ministry of Home Affairs (2019) states that a comprehensive School Safety (CSS) is a precondition to achieve quality education (MoHA, 2019). According to Paudyal&Panthi (2010), Nepal is an earthquake-prone country located at the border of the colliding Indian and Eurasian plates (Paudyal&Panthi, 2010).

In Nepal, disasters are regularly impacting in the education sector by damaging school infrastructure, disrupting teaching and learning, forcing children to drop out of school, and shaking the resilience of local communities. Most children in Nepal are exposed to disasters frequently due to the lack of safe learning environments.

Due to the disaster in Nepal, the education sector is one of the significant affected sectors like many other sectors. During 40 years 1971-2011 “… a total of 2,881 numbers educational facilities, primarily school buildings have been lost … (Baruwal, 2014)”, “… 2017 flood with a total damage of 1,945 schools in 37 districts, severely impacted 18 communities with 1,866 schools, where 238,900 students were affected (MoHA, 2019).
According to the Post Disaster Need Assessment Report (NPC, 2015), the Gorkha Earthquake April 25, 2015, affected the school structures badly where 334,000 students were studying. Among them, 137,000 students lost their classrooms, and 260,000 students got minor damaged in their classrooms. In total, 337 students were killed, with counting still to be completed with some school-age deaths not accounted for in the dying statistics. Due to natural disasters, per day at least two people lose their life in Nepal on an average. The record of lost lives due to various types of disasters in Nepal in the last 25 years (MoHA, 2018). The data show how severely the country has suffered in the last two and half decades. Upreti (2006) states that over the last 25 years on an average every year, 861 people lost their lives in Nepal. Due to landslides and floods alone, the number of loss of lives reached 288 per year. The data recommend that in South Asia, Nepal stands third in having the highest number of average annual human casualties per million living population, behind Sri Lanka and Bangladesh (Upreti, 2006).

In the current context of poor school safety at the school level, this study intends to analyze existing school safety policies and legal provisions in Nepal based on a review of available documents, literature, and a broader global school safety framework. The study found that the implementation of safe schools at the local and school levels is very poor and stakeholders in the education sector lack knowledge of school safety. Apart from this, there is less knowledge about the existing school safety policies and legal provisions.

Methodology

I have analyzed the secondary data released by different agencies like Ministry of Home Affairs, United Nations and International agencies working in Nepal on DRR theme. Both the electronic search and collection of hard copy reports/documents were done. For electronic search, keywords like comprehensive school safety, DRR in Nepal, School Safety and DRR policies are searched on Google. The search items were set to policy. Hard copies of documents were received visiting the Ministry of Home Affairs, UN office, ICIMOD, Plan International, Care Nepal, World Vision Nepal and, etc.

The inclusion criteria for this article is that all the policy documents published related to CSS and School safety considering DRR. Further, disasters and its implication to educations were considered. I analyzed relations between disasters and education and critically reviewed the existing policy and legal provision of school safety of Nepal, with potential recommendations. Based on available data and literature, I have analyzed the damage caused by the disaster to the education sector in Nepal and the contribution of existing policies and legal provisions to reduce it. In addition to that, I have critically analyzed the existing policy and legal provisions of school safety in Nepal.

I analyzed the existing school safety policy and legal provisions of Nepal based on the three pillars mentioned in the Global CSSF. I further explored how it has been implemented in schools based on available documents and literature. In the process of preparing the article, the relevant information was first collected in a folder and then processed and analyzed through review. Then, the relevant information was presented in written form.

Results and Discussions

The ideas that are found on disaster, school safety, learning environment and policy document, and policy and legal provision of school safety in Nepal have been discussed here after.
Disaster, school safety and learnings: Review insights from the policy documents

As Nepal is most vulnerable to disaster, the regular education interrupts during and after the disaster occurred. According to PDNA report 2015, immediately after the 2015 Gorkha Earthquake, the Government of Nepal declared the emergency and closed the schools and education hubs for one and half months which impacted the education sector, and students could not acquire the quality education.

As the government of Nepal took policy initiatives for DRR and school safety since 2008, the MoE formulated the School Sector Reform Plan (SSRP) 2009 (MoE, 2009), and a separate section for Disaster Management (DM) under the Department of Education (DoE) established in 2011. In 2016, the SSDP identified school safety and resilience education as one of the five dimensions for strengthening school education in Nepal. The Sendai Framework for DRR (UNISDR, 2015) and the Nepal DRR National Strategic Plan of Action (MoHA, 2018) both explicitly identify the development and delivery of quality disaster resilience education as a key priority for action.

Nepal has established fundamental rights by making basic education compulsory and free. Similarly, the five elements of quality education mentioned in the UNICEF report prepared by Colby, Witt, & Associates, (2000) have been adopted in Nepal to make schools and education resilient and safe in disasters, but this is not enough. UNICEF (2000) defined five elements of quality education are;

i. The learner’s outside experiences, learning environment, the content of education, learning processes, and education outcomes, ii. Learners must be healthy, well-nourished and supported by their families and communities, iii. The learning environment should be safe, healthy and stimulating, iv. Appropriate education content is relevant to the learner and presented in a well-managed classroom, and v. Learning outcomes should meet promote participation in society(Colby, Witt, & Associates, 2000).

Due to inadequate preparedness for disaster in Nepal, it was challenging to manage the Gorkha earthquake, 2015 on time by which more than one-third of the school was affected, and schools were closed for a long time. Similarly, tornadoes in Bara and Parsa districts in 2017 forced schools to close for a long time, and the national level SEE exams were also postponed. Disaster resilience is the capability of a system, individuals, families, community, or society exposed to hazards to resist, engross, accommodate to, and recover from the effects of a hazard on time and efficiently preserving and restoring by essential basic structures (UNISDR, 2011).

According to the SSDP (MoE, 2016), Nepal’s formal public education system was established in the 1950s. A rapid expansion followed the promulgation of the National Education System Plan in 1971 in the number of schools. The active involvement of local communities facilitated the rapid growth of Nepal’s education system. The major earthquakes of 25 April and 12 May 2015, which partially or completely damaged 35,000 classrooms leaving more than one million children without safe, permanent learning places (NPC, 2015). CSS Master Plan, 2017 (MoE, 2017) has focused that the 2015 earthquakes reiterated the urgent need to make school buildings safe and earthquake resistant and to make School Management Committee (SMC) and communities more resilient to the impacts of natural disasters.
The Joint Evaluation Report of Nepal’s SSRP 2009-16 focused on the importance of school safety policy and practical implementation. The SSRP evaluation report (2016) stated, the earthquake demonstrated that there is a robust and serious need for safe and disaster-resilient school building construction and retrofitting of the old and poor school building, combined with DRR measures (Poyck, Koirala, Aryal, & Sharma, 2016). The earthquake in 2015 had destroyed many community-managed ECED centers and primary schools.

Disasters, on the one hand, have a negative impact on the overall economic and social sector, including education, while on the other hand, it also provides opportunities for resilient development. That’s why I argue that there are positive and negative relationships between disaster and education with each other. In developing countries like Nepal, it isn’t possible to ensure resilience in reconstruction due to poor technology and limited human resources. As per the above-mentioned data and argument, resilience can be promoted through enhancing the knowledge and skill of individuals and ensuring it by mainstreaming disaster in the education sector.

**Policy and Legal provision of School Safety in Nepal**

The policy and its practical implementation play the crucial role to make school safer from different types of disasters which were clearly stated in the study on ‘Disaster Awareness and Preparedness of Secondary Schools in Homa Bay County, Kenya’ by Akumu (2013) sought to establish levels of disaster awareness and preparedness in secondary schools in Homa Bay County and the results have shown that the secondary schools, to a lesser extent, taken into account the importance of disaster awareness and preparedness (Akumu, 2013).

In Nepal, there are several policies and legal documents to ensure school safety and education resilience. The Constitution of Nepal (2015), the Education Act (2018), the SSDP (2016-2030), CSS Master Plan (2017), and others encapsulate the mission, goals, and strategies are promoting a culture of safety and national desire of the education reform.

In order to make the local government responsible for the effective operation, regulation, and safety of school-level education, the Constitution of Nepal 2015 has made the administrative responsibility of school education from elementary child development to class 12 to remain at the local level (MoLJPA, 2017). The Act has provided for the formation and management of SMC’s, construction and maintenance of the educational infrastructure of community schools, mapping of schools, including permission, approval, adjustment, and regulation.

According to the National Policy for DRR 2018, it has envisioned its mission, vision, goal, and objectives to contribute to sustainable development by making the nation safer, climate-adaptive, and resilient from disaster risk. These legal provisions provide legal and mandatory guidance to all levels of quality education and disaster-resilient schools. The global CSS framework has incorporated in the SSDP (DoE, 2016) in line with the objectives; i) to ensure all children can access safe enabling learning environments, and ii) to incorporate CSS and DRR in education. But the practical implementation of these policies at schools is very poor.

The Government of Nepal has adopted the elements of global CSSF; Safe School Facilities, School DM, and DRR and Resilience Education to promote the culture of safety.
As well as the Ministry of Education Science and Technology (MoEST) has formulated the SSDP for providing quality education and ensuring school safety in line with national, provincial, and local level plans in line with CSSF elements.

According to the SSDP 2016, the MoEST has taken the initiative to run a safe school campaign from the federal to the local level and school to school. The MoE has formulated the CSS Master Plan under the SSDP in 2017, which recognized the global CSS framework for school safety and safety culture in the future. There are three associated components of CSS: Minimum Package, Implementation Guidelines, and a Communication and Dissemination Strategy, in the CSS Master Plan.

Education Policy 2019 (MoEST, 2019) encourage schools to include local DRR and climate change adaptation issues in school curricula. During the study and review of legal and policy efforts made by the government to disasters risk reduction and safe schools, it is found that the government has initiated legal and policy efforts to ensure the fundamental right of children to have easy access to quality education. The SSDP 2016 and the National DRR and Strategic Action Plan 2018 (MoHA and MoEST, 2018&2016) stress the need for including resilience education in local curricula.

As per the SSDP 2016-2023, the School Improvement Plan (SIP) has been developed as a tool to make the commitment to implement safe and quality education in a practical way meaningful at the school level. The Government of Nepal is committed to fulfilling international commitments such as the Universal Declaration of Education for All 1990, the Incheon Declaration 2015, and Goal 4 of the Sustainable Development Goal (SDG) 2016-2030 “ensuring equitable and inclusive quality education for all and promoting lifelong learning opportunities”. The SSDP 2016-2023 has been launched as the main means to achieve SDG by 2030. The plan states that “the use of SIP as a means of quality improvement at the school level will be strengthened (MoEST, 2016).”

The SIP emphasizes on prioritizing the following aspects during preparation: “structural and nonstructural improvement, education quality management and quality improvement, equality and inclusion, teacher management, capacity building, school health and nutrition, DRR, resource management, monitoring, and supervision (DoE, 2018).”

Similarly, the CSS Master Plan 2017 aims to ensure the fundamental right of every child to have access to quality education in a safe and secure environment (MoEST, 2018). The associated CSS Minimum Package presented a set of minimum conditions needed in schools for them to be deemed safe, including the facilitating arrangements that need to be in place at local, provincial, and federal levels of government (CEHERD, 2018).

The CSS master plan 2017 has been provided with the roadmap for DM in the education sector, and necessary arrangements have been made enabling an environment where children can acquire education in a clean and safe manner. The minimum package of CSS with broader indicators is a major achievement of this plan which gives the assessment tool for the achievement measurement of an adequate level of safety to transmute schools into safe learning environments (MoEST, 2019). The packages comprise a total of sixteen activity-wise indicators; four activity areas for safe learning facilities, eight activity areas for school DM, and four activity areas for risk reduction and resilience education (MoEST, 2018).

The minimum package of CSS has been rolled-out at the provincial level. However, a phased roll-out plan of the minimum package has been formulated to achieve minimum
school safety standards in all schools of Nepal by 2030. This package must be reached at the local and school level, so the MoEST must make it a part of educational activities by making it mandatory for early childhood development centers, community, and private schools.

Although safe schools and resilient education have been introduced in Nepal for a long time, it has been launched formally only through a tenth periodic plan. Since then, it has been included in every periodical plan but has given priority to its implementation only after the 2015 earthquake. The Fifteen Periodic Plan has focused on the implementation of safe school initiatives through establishing the disaster resilience mechanism and system in the school level to minimize the disasters and its losses in the education sector.

Although programs in the safe school and resilient education have been included in the periodic plan with priority, most of the policies and laws have been formulated only after the Gorkha earthquake 2015. CSS related policies, master plans, minimum packages, implementation guidelines, and communication and dissemination strategies have been formulated at the federal level, which is yet to be implemented at the local and school levels.

Based on the facts as mentioned earlier and arguments, the existing policy and legal provisions on school safety and resilient education have to effectively implement at the school through local government to reduce the loss of the education sector and protecting children and schools. In addition, capacity building training to the local government, SMC, teachers, students, and parents helps them to mainstream DM in the education sector.

**Conclusion**

The number of disasters and its’ impact on the school and education sector is gradually increasing day by day, which makes the school and the children there insecure. The efforts at global and country-level are made to reduce the risk of disasters in the school and education sector, which helps to reduce the risk of disasters in schools and children. The legal and policy provision has made at the global and country-level to reduce the risk of disasters and to promote school safety culture. These legal provisions and initiatives, help to increase the involvement of stakeholders in all sectors to make the school safer in the future.

Most of the children in Nepal are feeling unsafe as disasters are regularly affecting the education sector, damaging the school infrastructure, disrupting teaching and learning, forcing children to drop out of school, and reducing the resilience of the local community and closing schools for a long time. The education sector is one of the major affected areas in Nepal due to disasters. Regular disasters; floods, landslides, fires, hurricanes, lightning, and sudden disasters; earthquakes, and other epidemics such as COVID-19 are affecting the education sector. Whether it is the floods of 1993 or 2001 or the 2015 earthquakes or the floods of 2017 and 2018 or the recent COVID-19 pandemic, schools are closed for a long time, and children are affected. Many efforts are made at the global and national levels to make the education sector safe from such a dire situation. In this context, the United Nations has developed a comprehensive safe school framework as part of its efforts in the field of school safety, which is adopted by most countries in the world, including Nepal.

According to the flash report I (2017-2018), there is 35,601 number of schools (community 29035 and private 6566) in Nepal. Among them, two-third of the schools are vulnerable to disasters. Most schools in Nepal are located in unsafe places which compels them to a higher risk of possible outbreaks. The safe schools initiative plays a vital role to
ensure quality education in schools ensuring the safety of schools and children, and the promotion of safe culture as well.

Although all these policies and legal provisions have been formulated to make safer the education sector, the schools and the education sector are unsafe due to lack of effective implementation of safe school policies and legal provisions at the school and local levels. Based on these findings and gaps I have reviewed, I considered that the following steps support making schools and the education sector safer.

- Institutionalize CSS in schools for ensuring resilience education.
- Mainstream the DRR and CSS in school governance through SIP and execute.
- Roll out and execute the national-level policies and legal provisions of CSS in the context of the local level.
- Develop the capacity of schools on CSS for school structural and nonstructural assessments.
- Enhance the capacity of teachers, students, SMC, PTA and local government on DRR and CSS.
- Identify school structural and nonstructural vulnerability, plan and implement nonstructural, mitigation, and preparedness activities.
- Interactions sessions on CSS between school families and communities to raise the awareness of CSS.
- Coordinate and collaborate with local stakeholders and relevant authorities to promote safety culture.
- Include DRR and climate change education through the school curriculum starting from pre-schooling based on scope and sequence of needed skills and competencies.
- Enhance the capacity of teachers, students, SMC, PTA, and local government on DRR and CSS.
- Identify school structural and nonstructural vulnerability, plan and implement nonstructural, mitigation, and preparedness activities.
- Include DRR and climate change education through the school curriculum starting from pre-schooling based on scope and sequence of needed skills and competencies.
- Make DRR instructional materials and educational resources available to all students and teachers.
- Include DRR and climate change education through the school curriculum starting from pre-schooling based on scope and sequence of needed skills and competencies.
- Promote local curricula for school safety and DRR at ward and local government level.

References


Baruwal, A. (2014). Disaster Profile of Nepal. Emergency and Disaster Reports, 1, 3-49. doi:ISSN 2340-9932


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**About the Author**

Krishna Prasad Ghimire is a Disaster Risk Reduction and Management (DRRM) Specialist at NDRC Nepal, Kathmandu. He has completed Master’s Degree in Sociology from Tribhuvan University, HSOM Hetauda. He is currently an MPhil scholar in Sociology at Nepal Open University. He is interested in social researcher identity, DRR activist and engaging with community to promote resilient development.