

# A Study on Potential Leadership Approaches to Address Gender-Based Constraints Effective Preparedness for Disasters in Nepal

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ARTICLE INFO	ABSTRACT
<p><b>QUALITATIVE ARTICLE</b></p> <p><b>Article history:</b> Received: 14 Dec. 2019 Revised: 20 March. 2020 Accepted: 22 March. 2020</p> <p><b>*Corresponding author:</b> Uma Nepal</p> <p><b>Address:</b> Research commissioned with support of Department of Arts &amp; Education, Deakin University, Australia</p> <p><b>Email:</b> umanepal4@gmail.com</p> <p><b>Tel:</b> +977-9841353323</p>	<p><b>Introduction:</b> Nepal is known for its cultural diversity and ethnicity. Despite its unique characteristics, Nepalese society has marked visible social and gender divisions that constrain the overall growth of the nation. Low decision-making power, poor control over assets, long working hours, inadequate membership to community institutions, poor access to credit services, and lack of access to appropriate information are some key indicators. However, it was also worth mentioning that places where there is effective leadership to address the gender-based constraints, the outcomes are more promising in attaining growth, dignity, self-confidence, and respect, answering to some of the common constraints.</p> <p><b>Methods:</b> This research relies on literature review, expert interviews, Focus Group Discussions (FGD), simulations, and Key Informant Interviews. The expert interviews were conducted in-person to get detailed information on some of the organization-based interventions.</p> <p><b>Results:</b> The study showed that since the 2015 earthquake in Nepal, the workload pressure has increased especially for women. It also increased the exposure to some of the common risks such as gender-based violence, women &amp; child trafficking, abuses, stress, family tension, health care issues, fear, and other challenges. However, leaderships shown by organizations, communities, and individuals have positive impact on reducing gender-based violence. Also, reduction of other constraints such as long walking to fetch water, long working hours, restricted movements, decision making for self-improvement, lack of recognition, and seeking permission to attend social events has been addressed by community level and individual leaderships. The places where such constraints of the women have been addressed, their engagement in disaster preparedness activities are more promising.</p> <p><b>Conclusion:</b> The research study concluded that there is potential leadership among women groups, family members, and community-based organizations to ensure the reduction of gender-based constraints, and it is helping women for productive engagement.</p> <p><b>Keywords:</b> Humanitarian Leadership, Gender, Gender constraints, Disaster preparedness</p>

## Introduction

Nepal is home to a diverse and rich set of cultures, ethnicities, languages, and religions. The Nepalese people are united by principles of

toleration, liberality, and open-mindedness(1). Yet, Nepal is also a society characterized by social and gender divisions that constrain growth and limits the

ability to realize its full potential. The opportunities, expectations, and experiences available to women and men are very different, not only in professional life but in social roles, relationships, and individual freedoms. Despite being home to multiple cultures and ethnicities, family relationships are led by the patriarchal system of inheritance predominantly through the male line/father and of marriage in which the couple settles in the husband's home or community that results in gender disparities, where women enjoy far fewer opportunities than men. Access to fundamental services is unequally distributed (2). Also, in some of the regions, women in a family possess fewer assets than men, despite their bearing responsibility managing the day to day activities of the family, including feeding family members, taking care of elders, livestock, provision of clothes, lighting, and relational obligations.

Prior studies have revealed that women's participation in decision making and asset control is low on a routine basis (3). Various studies demonstrate that women work longer hours compared to men, affecting their decisions to adopt time and labor (3). Cultural norms promote discrepancies in accessing information and support services. Due to poor control over assets, their access to credit services is also deficient (3). Engagement and membership to community-based institutions are inadequate, which limits their willingness to learn, share, and resolve their pressing issues. Nepali history recalled by Frick, Niraula and Morgan reflected that women in Nepal have also experienced restricted autonomy and poor decision making power in all sectors includes livelihood, education, health care, household decision and marriage. Despite progressive legislation, constitutional reform, and recent local elections, real change has yet to take root. Adding to their menace, disasters increase disparity index to many folds.

Due to its geographical position, Nepal is one of the most vulnerable countries to the effects of natural disasters. Natural hazards such as annual floods, earthquakes, landslides, and avalanches impact the lives of people, their livelihoods, housing, and domestic assets. The April 2015 Nepal

earthquake has had a lasting impact on human life, shelter, infrastructure, livestock, household assets, livelihood, and health. Women being the most vulnerable to its impact, challenges are more critical than ever in managing day to day life. The earthquake has exposed the gaps in different VDCs heavily with increased challenges, especially for women to manage their household chores.

However, it is also worth mentioning that places where there is effective leadership to address the gender-based constraints, the outcomes are more promising in attaining growth, dignity, self-confidence, and respect, answering to some of the common constraints. These episodic examples explore new opportunities to study leadership dynamics and approaches that could address the gender-based constraints and bring dignified life for women. This research intends to understand the potential leadership approaches that address the gender-based constraints, which in turn, help in disaster preparedness. The specific objectives are:

- To Identify the gender-based constraints to lead a dignified quality life in Nepal.
- To appreciate and recognize the significance of leadership approaches that have the potential to address the gender-based constraints for the wider population.
- To provide field, management, processes, and documentation perspectives for the evidence collected during the research, including the strengths, learning, and challenges.
- To create content on "way forward" for different stakeholders to adopt the learning

### **Materials and Methods**

This research relied on literature review, expert interviews, Focus Group Discussions (FGD), simulations, and Key Informant Interviews. The expert interviews were conducted in-person to get detailed information on some of the organization-based interventions. Communities were engaged throughout the process and, more specifically, during simulation, Focus Group Discussions (FGDs), and Key Informant Interviews (KII). The research findings point to several leadership opportunities and support the need for a nationwide

study. INGOs/NGOs would benefit from making strategic steps to incorporate women’s leadership in their program design. Moreover academics should take note of the opportunity to develop case studies on existing barriers and opportunities for women’s leadership to inspire the next generation of women leaders. This research further highlights the need to create a gender-sensitive disaster-ready society.

The exercises used during the study were primarily explorative, interactive, participative, and qualitative. Along with interviews with national experts, field observation, and focus group discussions with affected gender groups have played a more significant role. Real-time data and experiential learning were captured throughout the process. Secondary data were collected through literature review and through trending the progress indicators with different stakeholders.

**Details of interview with experts and subject matter specialist**

In-person interviews were conducted with subject-matter specialists to capture experiential learning on five major themes in Nepal. However,

the questions were directed only on those issues which intersect leadership, gender constraints, and disaster preparedness. The themes are as follows: *Gender, Community based approaches, Humanitarian leadership, Capacity building, Disaster preparedness.*

**Literature Review**

The research used previous studies on gender, community approaches, gender constraints, indigenous knowledge, and risk management measures. Along with research papers, publications from a different organization, government orders, need assessment reports, and case studies were referred. Altogether the research has reviewed 23 documents and extracted the key findings.

Focus group discussions were conducted in 2 locations. The first one in the Pariyar neighborhood of Changuarayan of Bhaktapur district and the second one in the Banjaraha neighborhood of Rautahat District. Being sensitive towards the issues at the community level, the study involved women, men, elderly, and people living with disabilities to get a holistic idea.

**Table 1.** Details of focus group discussions

Place	Number of participants
Pariyar hamlet, Changuarayan, Lalitpur district	Male participants: 07 Female participants-12
Rautahat District	Male participants: 10 Female participants:14 (separate discussion with men and women)

**Table 2** Key informant interview

Place	Number of male respondents	Number of Female respondents	Total
Lalitpur	10	15	25
Suryabinayak	12	13	25
Thangpaldhap	04	09	13
Changuarayan	04	09	13
Rautahat	10	15	25
Total	40	61	101

Key Informant Interviews (KIIs) were carried out in 5 locations and encapsulate perspective from 101 respondents from the community.

**Results**

Nepal is one of the best-loved tourist destinations for the travelers as the country ruminates opportunities to see the beauty of Himalaya, cultural diversity, trekking, wildlife, forest, and rich flora

and fauna. The country can be characterized by three distinct regions- Himalaya, Mid hill region, and plain. Himalayan region is the least populated due to extreme cold weather and covers approximately 16% of the total land area. Sherpa is one of the major ethnic groups residing in this region. Mid hill region covers around 67% of the land and mostly Gurung, Magar, Newar, Brahmin, and Chhetri populate this region. The plain land and

forest cover 17% of the land and home to most of the industries and wildlife reserves. However, Nepal is one of the most vulnerable countries to the effects of natural disasters. Natural hazards such as annual floods, earthquakes, landslide, and avalanche impact the lives of people, livelihoods, housing, and domestic assets. April 2015 Nepal earthquake has left a strong impression with widespread impact on human life, shelter, infrastructure, livestock, household assets, livelihood, and health.

As a means to look for more specificities on the type of disasters and its associated impediments that community people face on an annual basis, focus group discussion has been carried out with the residents of Changanarayan. The illustration given by the community on their daily life might resemble with other areas of the country as this hamlet is also located in steep hilly terrain where landslide happens even with the small rainfall. There are people still living under tents or CGI, increasing their vulnerability to many scales, especially for elderly, sick, children, people living with disabilities and women. The majority of the population resides on Maiyani land (The land that people are using since the ancestral time but it is not in their name, it is basically the government land), highlighting land ownership being a concern for them. While discussing with the residents of Changanarayan, it gets clued up that the population encounters many

disasters such as floods, landslides, earthquakes, and wildfires. In recent years, storms are also quite frequent. Rainfall is not timely that can support their agricultural activities. Each disaster leaves its footprints in terms of damages, loss, and fear. Lack of earning opportunities increases the vulnerability of people to many folds. Damage to their shelters & infrastructure with loss of food grains, household assets, personal belongings, books, poor access to transport, electricity, and lack of health care facilities are common phenomenon after any disaster. However, the level of impact and scale varies with each incident. Many times community faces safety & security issues mainly through rape, theft, burglary, and breaking.

Recollecting Nepal earthquake 2015 as one of the deadliest incidents of recent times, memories are still fresh in their mind when they were making every attempt to save lives. In just a few moments, the beautiful hamlet turned into ruins left with no option except to live in an open sky. Initial days after the earthquake were furious, encountering frequent aftershocks, confusions, and intense spar to keep self and family alive. In an attempt to understand more on specific challenges of women and men during pre and post-disaster, workload analysis has given useful information. The information shared by people has been grouped in Table 3.

**Table 3.** Specific challenges of women

Pre-disaster	Post-disaster
<ul style="list-style-type: none"> <li>• In normal circumstances, women's workload is greater than their male counterparts. Women are engaged in labor from sunrise to sunset.</li> <li>• Men enjoy opportunities to earn enough money to support their families.</li> <li>• Children's access to schools is limited in some areas.</li> <li>• Older people contribute to an extent in household chores, livestock rearing and sometimes caring young ones of the family.</li> <li>• People living with disabilities manage their day-to-day needs with the support of family members /relatives.</li> </ul>	<ul style="list-style-type: none"> <li>• With damaged houses, women felt that they have less work cleaning the house, cooking, etc. However, overall workload increases in the wake of new challenges such as searching for family members, sensitivity about protection issues, identifying opportunities to feed family, and managing psychological issues.</li> <li>• Men are looking for a job as their earning get stopped.</li> <li>• Education facilities are limited to children.</li> <li>• Older people are now less able to contribute and dependent on others.</li> <li>• People living with disabilities experience greater stress and dependency.</li> </ul>

However, during these difficult times of disasters on an annual basis, the community witnessed

leadership that brings their yearning sentient. These community leaders give credence to people to

bounce back and take treads to save lives, minimize loss, meet basic survival needs, and direct do's and don'ts to the community. Leaders acknowledge the views of others and help in decision making on mutual grounds. The community expects from leaders to take the risk at a reasonable scale that benefits the whole surviving population. One of the most striking contributions from such leadership qualities is to guide the process of meeting basic survival needs that include the availability of food, water, protection from water & vector-borne diseases, temporary shelter, thwart violence, and ethnic clashes. The impetus is to bring

"togetherness" during the crisis that expatiates each other's issues. Depending upon the crisis, leadership also supplemented in the removal of debris and paved ways for external service providers. The time span of such community-led individual leadership continues till there is the arrival of systematic support from the government or non-government organizations. Local Community Based Organizations (CBO) plays a key role in extending hands to the community for accessing the basic services. In the case of major disasters, managing the logistical supply chain promptly is a significant stumbling block.

**Table 4.** Case study-1: Leadership Approaches at individual, community and organizational level

<b>Individual Level</b>	<b>Community-led initiative</b>	<b>Local Organization</b>
<p><u>Mr. Navaraj Pariya</u>                      ,During the earthquake day, a tailor, and a resident of Changunarayan was in his shop making dresses when he observed the earthquake. He not only saved himself, his family but also saved many people from his neighborhood. He says, " <i>I was safe, my family was safe, so I felt that it's my responsibility to save others as well because we are just ONE. We all need each other during crises.</i></p>	<p><u>Sakar Mahila bikas Bahuudhashya Sahari sanastha</u>                      This is a woman-led organization constituted after the earthquake to address the issues of women. Now It's a 500-member based community organization that conducts gender training, vocational training, and women empowerment sessions. Along with training, the organization also supports women in the cases preventing multi marriage, Gender-based Violence (GBV). Since its inception, it has received 5 cases of GBV, and all cases have been successfully responded with confidentiality.</p>	<p><u>Friends Service Council Nepal (FSCN)</u>                      FSCN is a local organization and a member of the DPNet. FSCN conducts training at the community on various thematic areas that includes gender, women empowerment, agriculture, risk reduction. They also took the initiative to distribute relief materials after the earthquake. Community people have realized that these training are quite useful and evince interest to join such training even if they have to leave their day to day work</p>

**Some Positive Moves in the Community: (Contributions of Individual, community and organizational leadership)**

- Gradually people at the community are talking about equality.
- To reduce the workload of women, male members of the family helps in fetching water.
- Since earthquake 2015, many community people are striving their level best to recover the loss, especially their shelter.
- Community-led women's organization is now planning to cover the issues of single women.
- During the training programs, men are invited to reduce the bottlenecks of gender-based constraints and women empowerment.
- Females are getting equipped with knowledge and skills to raise their voices on their development
- Community is now running a library where during morning and evening time, children have the opportunity to learn more.
- A special drive for females took place in the community where they are called once in a week at the library to learn mass speaking and elocution skills.

In pursuance of conceding more meaningful leadership approaches, the research study analyzed the response from the community and subject matter

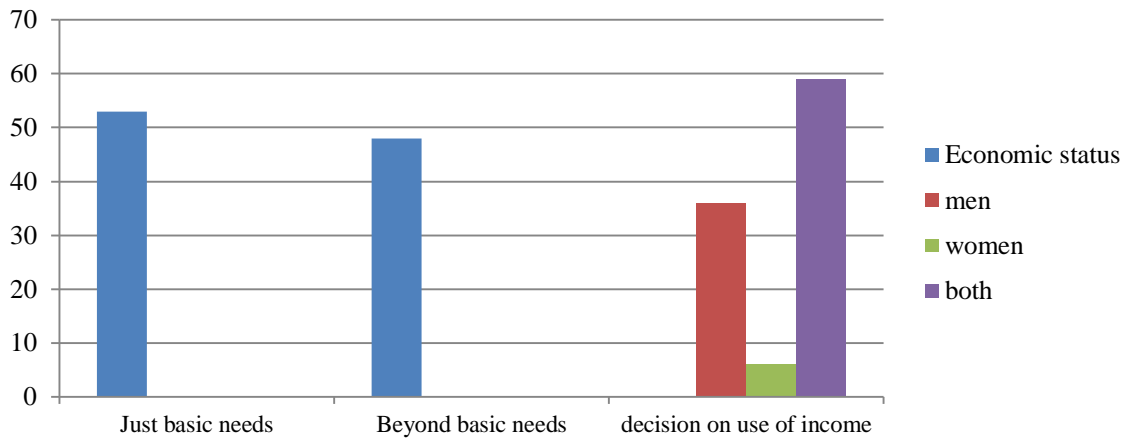
specialists. Efforts have been made to explore leadership contributions in significant segments of disaster preparedness.



**Discussion**

One hundred one informants provided information on key areas of research spread across five different locations (Changunarayan-8 of Bhaktapur, Lalitpur-3, Suryabinayak-6, Thanpaldhap 3 and 4 of Sindhupaslchowk and Rautahat-1) of Nepal. Among the total sample size, 40 males and 61 females were selected with stratified random sampling. The research sample includes 25 single women and five widows to understand the different dimensions of their life. The average family size was reported as 5. In terms of decision making for schooling, 25% exclusively by men, 7 % exclusively by women, and 68 % cases

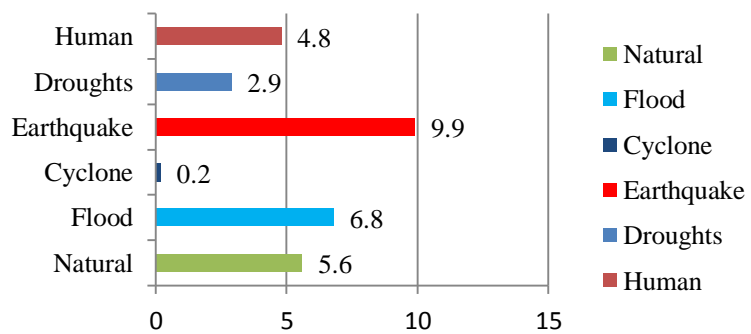
where decisions were taken jointly by men and women. The majority of the families mentioned that earning of the family comes from both men and women as it represents 54% of total respondents, whereas 41% of families where *only* men earn and 5 % families *only* women earn. The economic status of the selected sample belongs majorly to " Just meeting basic needs that contribute 53% whereas 48% can manage beyond their basic needs. In most of the cases, both men and women take the decision on the use of income, which contributes to 59% of responses followed by decisions exclusively taken by men are 36% and just 5 % exclusively by women.



**Chart 1.** Distribution of respondents as per their Economic status

**3.2. Hazards, Risks, and Vulnerability**

	Value	Rank
INFORM Risk	5	46
Hazard & Exposure	5.2	44
Vulnerability	4.3	74
Lack of Coping Capacity	5.7	57



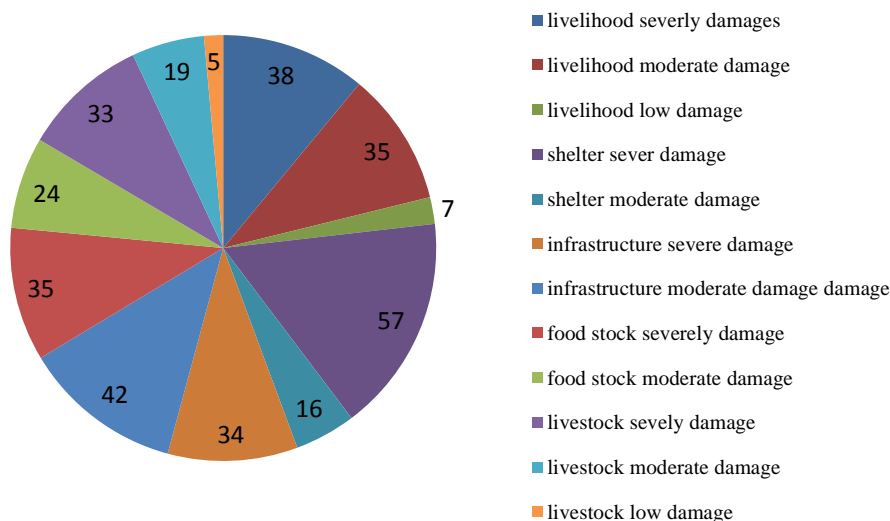
**Chart 2.** Hazard and exposure rank (At a scale of 10)

According to INFORM (7), the country risk profile for Nepal positions the country within the top 50 countries at risk for natural disasters is HIGH. On a scale of 10, Nepal stands at five, which is high and showcases multiple hazards. Some of the potential

hazards identified by INFORM are flood, Earthquake, Cyclone, drought, and human-induced. INFORM also highlights the deprivation index quite high (6.9 out of 10) in Nepal that supplements in aggravating the vulnerability of people.

Earthquake poses the highest risk to the country. Nepal is among the top 5 countries, where the risk is very high. It is interesting to note that the community also rated such disasters high as 51% of families rated earthquake as the major disaster, 10 % for floods, and 39% contribute to other multiple disasters. The impact of these disasters in

sample communities is mostly on livelihood, shelter, infrastructure, food stock, and livestock. It appears from the analysis that 93 out of 101 sample families have experienced livelihood loss, which is quite a striking figure. It shows the extent the families have to plan for their livelihood recovery.



**Chart 3.** Distribution of familes experienced damage & loss in 2015 earthquake

Managing household needs increased as 60 % of sample respondents lost their food stocks. 76% of the families confirmed that there were moderate to severe infrastructure losses, 57% of families experienced severe to moderate damages in a shelter, and 58% of families lost their livestock. It is commonly understood that when there are losses in more than one segment, the recovery process takes a longer time than anticipated and requires a systematic plan. Recognizing the risks existing at the community level and adopting measures to risk reduction can minimize the loss significantly. Leadership at different levels have visible footprints in identifying risks and facilitating risk reduction measures in various forms.

**Risk Reduction Measures**

Communities in Nepal own and practice indigenous ways of disaster risk reduction and management. Indigenous knowledge is highly localized, and culturally specific. Referring to a study conducted in 2008 in Nepal " Indigenous Knowledge for Disaster Risk Reduction" by UNISDR(2) with the support from Kyoto university highlights community-led initiatives to reduce the risk from natural calamities. This research also acknowledges the wisdom already existing in Nepalese communities to lead risk reduction measures for ages (8). A couple of such community originated methods and practices developed by a group of people marked by UNISR(9)study and reflected strongly during this research as well are presented to render appreciation to notable efforts.

**Table 5.** Measures to mitigate landslide (Information source: "Indigenous Knowledge for Disaster Risk Reduction" by UNISDR): Examples from Bardiya, Chitwan, Syangja and Tanahu Districts, Nepal

Argo forestry	Improving terrace riser	Fencing	Mixed and intercropping
Grown shrubs, bushes, and grasses in and around the villages instead of heavy trees to protect their farms from soil erosion and reduce the risk of falling. Also planted bamboo in gullies to create an interlocking system	Terrace development on steep to reduce water runoff and topsoil losses and to make crop cultivation easy	Drywall fencing to divert the flow of the stream or river from the cultivated lands. Bio fencing: Using Sajiwan, neem tree, khirro, and simali. badhar, dabdabe, gindari, koiralo, kutmiro, phaledo, siris, and tanki for fencing purposes. These plants lose their leaves during winter, thus providing sunlight for seasonal crops. The dead leaves also serve as organic matter that enriches the soil.	Increase and diversify harvest and reducing topsoil loss as bare fields are prone to soil erosion due to wind, water, and landslides.
<b>Flood preparedness: Eastern Terrain, Nepal Information source: " Indigenous Knowledge for Disaster Risk Reduction" by UNISDR)</b>			
⊕ Past experience and understanding of floods based on daily observation of their local surrounding			
⊕ Identify safe places for human and cattle and time thresholds (i.e., time to store firewood and food in advance, remove important belongings and leave the house)			
⊕ Landscape, and thereby to make interpretations on where to build houses and homesteads			
⊕ Anticipate floods -observing and interpreting the color of the water, color of the clouds.			
⊕ Increasing the house plinths, consolidating and protecting walls with piled-up mud, bamboo fence and mud, etc.)			
⊕ Constructing elevated food stores and platforms to keep small items, food, small livestock, and people themselves away from water.			
⊕ Circular mud repository 'chakka,' with unusual "pigeon hole" design to keep valuable belongings during floods in Katarait VDC.			
⊕ Local early warning systems (e.g., whistling, shouting, running downhill).			
⊕ Fisherman community - Because of their close relation with water, they can often notice any changes in water availability and quality			
⊕ Carpentry and bamboo weaving, a useful skill for the construction of the elevated platform against floods found in the Terai of Nepal.			
⊕ People's trust in informal leaders: They speak in public and convey warning messages about time thresholds (e.g., "it is time to leave your houses!"), which people trust and follow.			

One common factor that was observed during the study is that the leadership for indigenous knowledge exists at the community level. This leadership approach holds the capacity to make measures to reduce the risk for all the members of the community. However, it has also been observed that replicating one indigenous practice to another place is sometimes challenging. While discussing with the community members, it revealed that the replication approach needs creativity to transfer the knowledge from one place to another place. The historicity of scientific approach to disaster risk management in Nepal has started since 1990s after the Udaypur earthquake. Major milestones that were recorded are, {**1988:** Udaypur Earthquake make country realise to have some level of risk reduction interventions; **1992:** Start of National Building Code Development

Project (BCDP). Also observed the International Decade for Natural Disaster Reduction (IDNDR) Day for the first time.; **1995:** first attempt was done to get the media involved by conducting the first training course for the journalists in disaster journalism; **1998:** His Majesty's Government of Nepal declared 16 January as the National Earthquake Safety Day (ESD)}

Post-earthquake 2015, the government and NGO world united the program objectives with DRR centered approaches. Several INGO/NGO started strong disaster risk management programs in their areas of operations. Hyogo and Sendai framework (10) contributed to construct the thought process of DRR think tanks resulted in very good quality program interventions. At the National level, some Non-government organizations have modeled their organizational expertise on risk management and



preparedness intercession, and the National Society for Earthquake Technology- Nepal (NSET) is one of them. Another national level network DPNet with the membership of more than 30 NGOs is active in the field of disaster risk management and

preparedness. Leadership approaches at the national level have presented several encouraging instruments that support disaster management and preparation in the country.

**Table 6.** Government Initiatives:

<b>Government Initiatives:</b>	
<ul style="list-style-type: none"> <li>• The gender approach was incorporated. 33 % ward level representation is of women</li> <li>• Disaster management act in Nepal</li> <li>• Since 2015, inclusive DRR was adopted into the strategies of NGOs and INGOs, and now is the agenda of the government as well, especially after the federal change.</li> <li>• One of the 22 mandates from the government is disaster management (makes preparedness plans through local governance)</li> <li>• Local government was institutionalized. It is a new concept in Nepal, so it is yet to take deep root.</li> </ul>	
<b>Initiatives from NGO/INGO/Networks</b>	
<p>1) Local government officials and community leaders to fully involve women and men, in disaster management activities and decision-making.</p>	<ul style="list-style-type: none"> <li>• From 2014, government and civil society organizations have started to develop master trainers and 5 days TOT on Disaster management, including gender and disability. However, due to changes in the political scenario, the efforts were not beneficial at a large scale. Now the discussions are ongoing to include it in the Municipality plan.</li> <li>• Advocacy efforts made by DPnet with the government for Intra organizational coordination, networking to reduce duplication</li> <li>• Advocacy work carried for the Mason training, carpenter training, search and rescue, first aid training.</li> </ul>
<p>2) Gender analysis includes a focus on diversity issues,</p>	<ul style="list-style-type: none"> <li>• Most of the organizations working on disaster management in Nepal have a gender component included in their approach. It will be helpful if these organizations could make the utilization and sharing of information available within organizations and with other like-minded organizations.</li> </ul>
<p>3) Strengthen both male and female capacity in activities such as risk mapping</p>	<ul style="list-style-type: none"> <li>• Mercy Corps model in Kailali district has included these components nicely.</li> <li>• EU &amp; ECHO models in Ramechhap (3-4 VDCs) where people are leading the mitigational work.</li> <li>• In Dang district, for CARE Nepal and Handicap International supported projects, people have made their plans and early warning systems.</li> <li>• In CBDM training at the community level, with technical support of DPnet worked with people to make the emergency plan, VCA training to the community, awareness at the community level around safe drinking water, earthquake-resilient buildings, psychosocial support. E.g., Changunarayan municipality, Lakuri Bhangyang.</li> </ul>
<p>4) Promote proportional representation of women and men from diverse groups in the decision-making process</p>	<ul style="list-style-type: none"> <li>• There are 2 different models in the country. Some models are direct at the field level and some through community leaderships.</li> <li>• Women took lead in Changunarayan to develop a trail with support of DPnet, and now their workload to carry fodder from long distance has been reduced significantly.</li> </ul>
<p>5) Involve men and women from diverse groups actively in the planning, design, construction, and maintenance of mitigation works</p>	<ul style="list-style-type: none"> <li>• UN programs in Sindhupalchowk have set good examples where men and women have been involved in each stage of the project cycle.</li> <li>• The community provide ideas to the organization at the designing stage.</li> </ul>
<p>6) Work with and strengthen existing local organizations that</p>	<ul style="list-style-type: none"> <li>• Looking at the response history of the 2015 earthquake, youth groups were very active. Some good examples are visible with Mission east- Kalikot, Jumla,</li> </ul>

represent women	Humla, Ramechhap, Dolakha, Dhading, Gorkha. <ul style="list-style-type: none"> <li>The training was conducted by DPnet to its member organization (local agencies) on disaster management, WASH, Livelihood. NECOSERA youth club is one example.</li> <li>The organization also conducts training for women on group formation, saving and credit, gender, and developing it into a cooperative. Finally, when the group matures, it gets handed over to the government for institutional support.</li> </ul>
8) Women also taking a lead role in designing early warning system	<ul style="list-style-type: none"> <li>Leadership example in Karnali river basin where majorly women's contribution and leadership has been appreciated by all. Women from Tharu community are executing the same.</li> <li>Practical Action is leading with community-based organizations on an early warning.</li> </ul>
9) Women are also taking a lead role in community-based task force-search & rescue, first aid, early evacuation.	<ul style="list-style-type: none"> <li>In most of the places, it was observed that women taking a lead role in search and rescue operations as they know the place and circumstances very well.</li> <li>IFRC- research in 9 minimum characters of the resilient community also reflects the women's leadership initiatives in a few places.</li> <li>In Sankhu – NDRC has given training to the women for the search and rescue</li> </ul>

The efforts of government, NGOs, INGOs, and community-led organizations have started showing results in many communities. Interviews with community people on risk management

measures have underscored the achievements as well as highlighted areas that need attention by service providers.

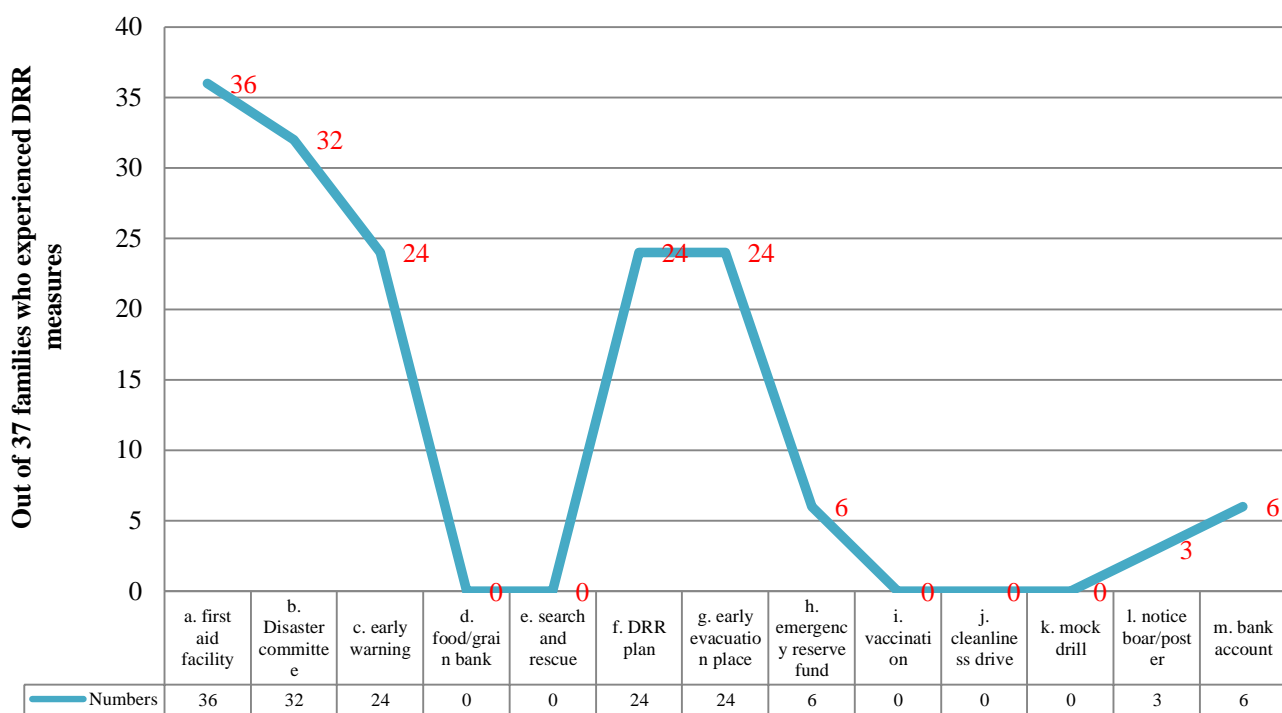


Chart 4. Distribution of families as they experienced disaster risk management measures in their village

Among the sample respondents, 53 did not experience any disaster risk management measures in their community; 11 families say that they did not have much information about the same. Thirty-seven families adopted risk management measures in their community. Among 37 responses with " YES," 97 % had the first aid facility, 86 % had a disaster management committee, 64% had some level of an early warning system, 64% had a DRR plan, 64% had an evacuation plan, 16% had an emergency fund and bank account. As a means of risk reduction measures, storage of food grains, search & rescue, vaccination, and mock drills are relatively non-existent. Further analysis reveals that in those places where people have started DRR measures, they have also created disaster management committees. It's interesting to note that communities prioritized first aid as a primary means of reducing the risk associated with injury and health care needs. 2nd area of leadership exhibited on installing early warning, DRR plan, and early evacuation. The organized bid of government, NGOs, INGOs, and community have kick-started the concept of risk reduction that needs momentum to act and strive further to progress indicators of preparedness.

### **Reduction of gender-based constraints and women engagement in disaster preparedness**

Census Nepal 2011 accounted for 51.5% as the women segment to the total population. This figure itself designates healthy interpretations of gender dimensions in the country. Nepal Labour Market update 2017, ILO(11) reflects participation rate of 83.4 percent at the national level – 87.5 percent for men and 80.1 percent for women. Agriculture being the primary sector of engagement, women workers were more likely to be employed in agriculture than men – 84.3 percent compared to 62.2 percent. However, the 2015 earthquake has contributed significantly to reducing the economic growth of the country. Economic growth declined from 5.9 percent in 2013/14 to 2.7 percent in 2014/15 and 0.6 percent in 2015/16 (CBS: National Accounts of Nepal 2015/16). According

to the Post Disaster Needs Assessment (PDNA) (12) report, the earthquake destroyed 500000 houses completely and 270000 houses partially, which is 14% of total houses in Nepal. Declining economic growth is also reflective of enormous pressure on women labor force, which stands at 5.6 million as compared to men (4.7 million). To manage the economic requirements at the household level, now children are also engaged in the labor force. 58.7 percent of girls aged 10-14 are already in the labor force, which shows the increased workload of girls and women in their day to day life. Lack of required skills annexes to their drudgery to a great extent.

Given circumstances increases the exposure to some of the common risks such as gender-based violence, women & child trafficking, abuses, stress, family tension, health care issues, fear, and other challenges (7). Long working hours, long walking to fetch water & firewood, and restricted movements limit their full potential to contribute to productive activities of growth and preparation for future disasters. In such difficult circumstances, leadership roles played by institutions, community-based organizations, individuals, and the community itself in reducing the gender-based constraints and building capacity of women to accord effective results. This research has made a small attempt to recognize such meaningful leadership interventions.

### **In the districts Gorkha, Dhading, Sindhupalchowk: Lesson learned by CARE Nepal**

+ Interventions with women on WASH reduced their time to travel to collect water. The saved time is getting utilized to attend a meeting like mothers' group, cooperatives meeting. Thus, by reducing the women's constraints, it contributed to increasing the female's participation in the different meetings. Now the organization is advocating for women's meaningful participation. Also, the government provisions are useful instrument as it promotes 1 in 3 persons to be female. One of the concrete examples is 78%

leadership positions are filled by women in Water user committees.

+ Improved shelter helped to ensure protection issues for females. The shelter is also considered as a unit for the family to unite with members, having joyful moments with neighbors, arranging rituals, cultural events, and enjoying the leisure time.

+ Formation of cooperative and active engagement of women has helped in inculcating leadership qualities of women, speaking power, improved mobility, and decision making.

+ Income Generation: Cash based support to start small business, Mason work.

+ Women are raising their voices and even taking their issues at the government level (like where to build the tap while doing the shelter construction. Women are now more focused on the management part of the shelter, e.g., where to make the roads, house, tap).

+ Women talk about their requirements that ease their day to day life.

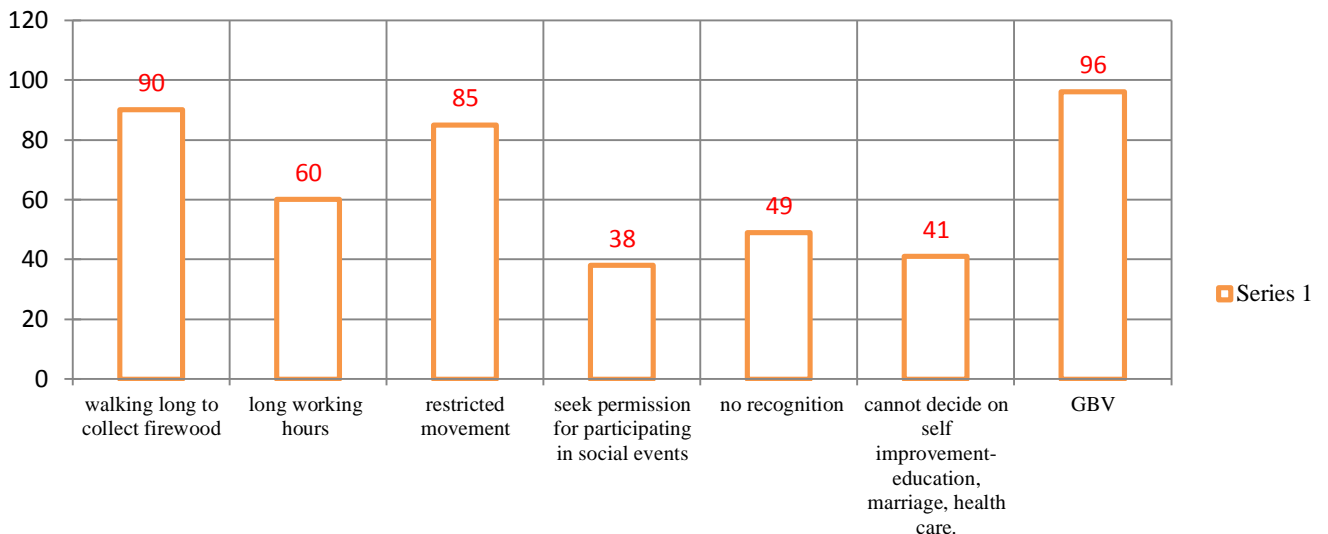
+ Worked with GBV survivors and increased their entrepreneurial capacity. Training is given on carpet weaving, which is a home-based work alternative and created an opportunity to earn a decent amount.

+ Equal wages have given a very different sense of ownership, confidence, and power.

+ Prioritizing needs of ,women-headed households, children, single women, and disability delivered much better outcomes.

+ Local bodies take the accountability to track the performance.

+ LDICRP (Local Disaster and Climate Resilience Planning Guidelines) has been institutionalized.



**Chart 5.** distribution of responses that experienced % improvement in gender based constraints

Women have shown leadership in fund management, handling the case of the GBV. Even police sometimes refer the cases back to women in the community (Example: Banskharka, Sindhupalchowk).

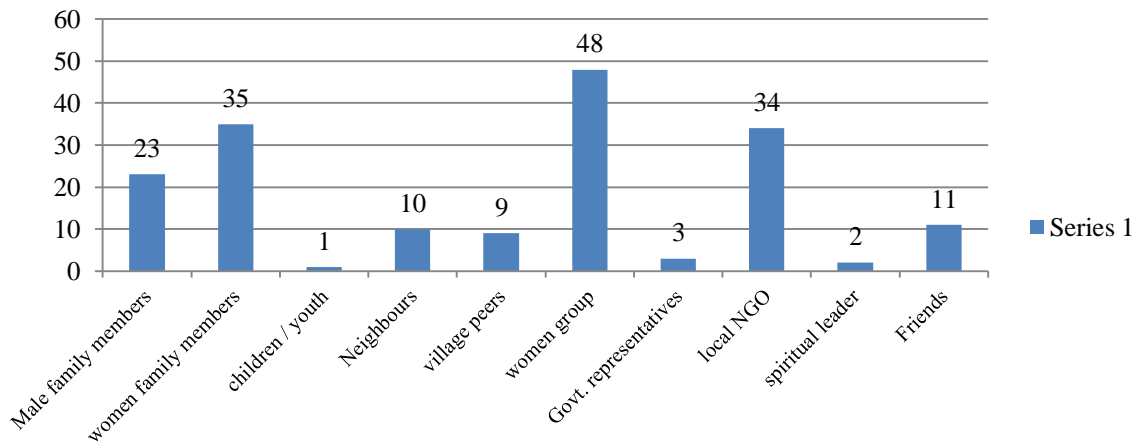
While collecting empirical data from the field, respondents accepted the fact that there are gender-based constraints for women such as walking long to collect firewood, long working hours, restricted movement, seeking permission for participating in

social events, lack of recognition of their work, low decision making power and gender-based Violence. However, they also sensed the reduction of such constraints with leadership interventions from the organization, community groups, and government though the process is slow, results are stimulating.

The research analysis of the primary data on the reduction of gender-based constraints revealed the fact that in all categories of constraints that women

face in day to day life has marked reduction. A most significant change occurred is the “reduction of gender-based violence.” Organizations took a lead role at the community level with organizing awareness campaigns, training workshops, legal support, and one to one discussion, which improved the understanding of GBV. Concerted

efforts have contributed to improved knowledge to identify GBV cases and ways to move referrals. The second remarkable reduction happened is " Long walks to fetch water and firewood" with the interventions of WASH in the community. Long hours have been saved and used for leisure and more productive works.



**Chart 6.** distribution of responses in terms of leadership role taken by different change agents

During the study, it appeared that many people and groups had taken leadership initiatives to reduce gender-based constraints. Among many women groups from the community, women's family members and local NGOs are the major change agents in the community. There are significant responses (23) that reflect the leadership role of male family members also to reduce the constraints followed by neighbors, village peers (teachers, health workers), friends, government representatives, spiritual leaders, and children/youth. The analysis shows a healthy trend of change to realize the value of women's engagement in different programs by reducing their workload.

The data also reveals a clear link between saved time and disaster preparedness. Now women are holding leadership positions in different committees at the community / ward level and lead planning and designing the preparedness process. Almost 84% of respondents answered " yes" with the inclusion of women in planning, and decision making will improve the disaster preparedness for the days to come. It was also evident from the

analysis that their voices are better heard today, and in the coming days, it will be much better.

**Attributes of leadership in different spheres of women engagement in disaster preparedness initiatives**

Many previous studies conducted by research fellows have already established links between women’s leadership and increased agricultural production, livelihood, shelter planning, and health care interventions. While conceding the positive outcomes with women engaged in different sectors, this research is instrumental in substantiating the relationship between women’s engagement and better disaster preparedness.

**District Rasuwa: Islamic Relief Nepal Interventions on women engagement**

- + Shelter recovery programs have engaged women through job training.
- + These women worked in the overall cycle, like how to do the planning and to take care of the equipment and the materials.
- + Women-led vulnerability assessment has given better results as it reflected the special needs that they need while arranging camps.



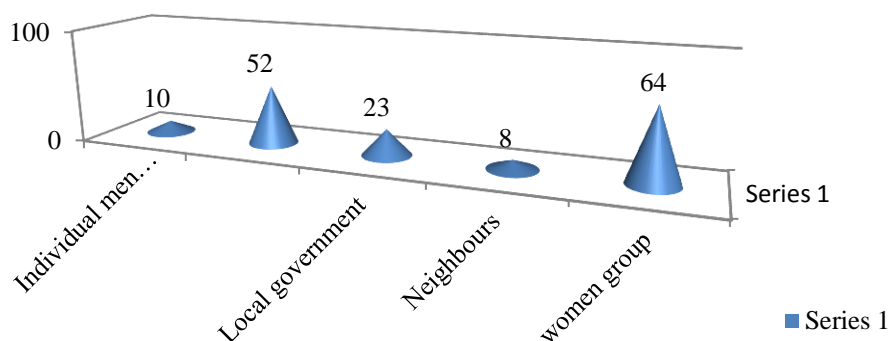
+ Separate bathing spaces were created as per the demand from the women (who identified the risk of not having a safe bathing space).

+ In livelihoods, mostly women run the whole process, such as women-run shops. Many women came forward with what they wanted / need like beauty parlor course, poultry, etc.

+ Active engagement of women in supporting

disaster preparedness plan especially developing first Aid kit. This area needs improvement as a preparedness plan does not showcase immediate tangible results.

+ Partnership with organizations working with and for people living with disabilities, women, youth, and children have given better outcomes in terms of identifying their specific needs.



**Chart 7.** Distribution of responded in terms of leadership role played to increased women participation

The meaningful involvement of women in all the activities of disaster preparedness is a significant determinant. Leadership roles played at individual, community, and organizational level to engage women has been realized in sample villages where the research was carried out. Among many, women groups and local NGOs have taken the lead role to motivate women and other peers of the villages to increase participation. The role of such leadership is important not only for reducing the gender-based constraints but also ensuring their meaningful participation in community-level programs on disaster preparedness.

#### **Tistung: Tearfund and guiding experience of UNOPs**

+ UNOPS mandate is focussed on gender parity, and programs are inclined as per the mandate.

+ For meaningful participation of women, it needs infrastructure and strategic involvement.

+ Leadership roles at the community level in identifying the needs of women is visible through need assessment exercises.

+ Household visits must be included along with other techniques of data collection. It gives more specificity.

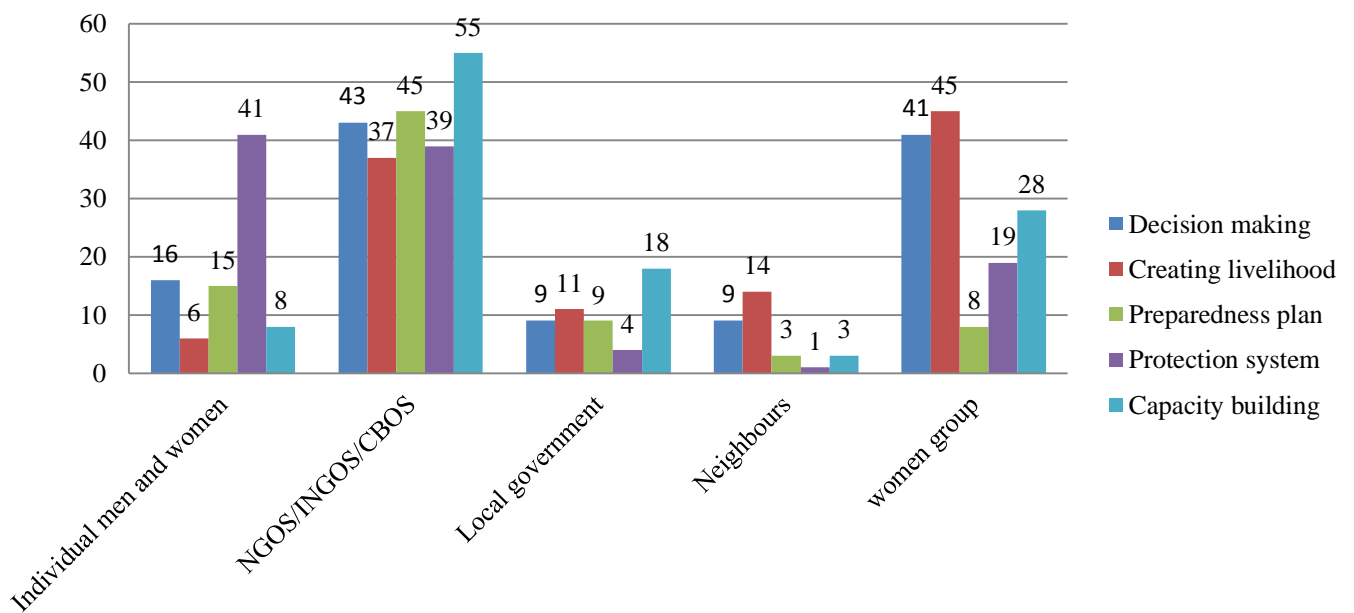
+ Now donors are also sensitive towards gender-based constraints and appreciate the gender integration approach.

+ The creation of gender-friendly bathing spaces has been identified as one of the best practices.

+ The organizations are consulting with the community, analyzing the central government priorities, and needs of the local people.

Capitalizing on the competencies of local experts rather than relying on foreign experts, specially on shelter designing.

The research also identified some other areas where leadership has made constructive efforts to change the practices in favor of women's involvement.



**Chart 8.** Distribution of responses on leadership initiatives for improved decision making, livelihood, preparedness, protection and capacity building

Although baseline data were not available prior to this research, anecdotal evidence collected five years before and after the Nepal earthquake point to changes in women’s leadership roles. The prime role played by CBOs/NGOs/INGOs and women groups. Chart-9 shows their contributions in decision making, livelihood creation, preparedness plan, establishing a protection system, and building capacity. Among many, women groups (13) made constructive contributions in creating livelihood. It would be worth counting upon their leadership abilities for any future interventions. Local governments are slowly gearing up the leadership role in Nepal, which may need some motivation and encouragement. Ample opportunities to adorn for individual men, women, and neighbors as they appeared as a natural shield to challenges. One of the most striking contributions of individual men and women are establishing protection systems in the community.

Overall, there are "leadership initiatives" that the research work has identified at individual, community, government, and organizational levels. These leadership initiatives may not exist in all regions, but their footprints are visible in different pockets of Nepal. A country to be explored further

to recognize and salute such leadership roles that involve everyone from the society in making a "Disaster ready community."

**Conclusion**

To know more about leadership roles in the country, individual model research was commissioned with the help of Deakin University, Melbourne, Australia. Within its limited scope, research work widened the wings of learning by literature review expert interviews, focus group discussions, observations, simulations, and in-depth community interviews and reported out some of the best leadership practices in the country. Some of the concluding remarks on research findings are as follows, 2015 Earthquake has made Nepal a very strategic learning ground for humanitarian professionals and risk management experts. Two distinct leadership areas of risk management have been observed in the country.

First and foremost, indigenous risk management approaches are age-old practices and transfer from one generation to next. Previous studies and this research acknowledged such indigenous knowledge of risk management approaches such as agroforestry, terrace riser, fencing, mixed

cropping, and food mitigation measures. The second area of leadership approach in risk management is modern scientific ways which are existing in the country for the last two decades. Several INGO/NGO started strong disaster risk management programs in their areas of operations aligning with Hyogo and Sendai (9) framework. Leadership approaches at the national level have presented a number of encouraging instruments that support disaster management and preparedness in the country. Among many such initiatives, engagement of women and men in preparedness plans including first aid, search-rescue, early warning, and early evacuation has started visibly at the community level. Management of emergency food stocks, emergency funds, financial inclusions, vaccinations, cleanliness drive and mock drills are the areas of further attention. There is a great scope to integrate indigenous practices with modern scientific approaches that have greater potential to own the preparedness concepts at the community level. Building capacity for local government and civil society on above-mentioned gaps and effective information management will require a good proposal to be considered.

In precedence to the impacts of the 2015 earthquake in Nepal, the workload pressure has increased especially for women as a significant number of families have male members working outside. It also increased the exposure to some of the common risks such as gender-based violence, women & child trafficking, abuses, stress, family tension, health care issues, fear, and other challenges. Long working hours, long walking to fetch water & firewood, and restricted movements limited their full potential to contribute to productive activities of growth and preparation for future disasters. However, the study also observed noticeable leadership roles played by institutions, community-based organizations, individuals and the community itself in reducing the gender-based constraints and building capacity of women to deliver promising results. The most significant change in the community is the reduction of gender-based violence. The community also experienced a

reduction of other constraints such as prolonged walking to fetch water, long working hours, restricted movements, decision making for self-improvement, lack of recognition, and seeking permission to attend social events. Cash-based support acted as a catalyst to surface out their entrepreneurial skills and many such small income generation activities have been initiated. Improvement in addressing gender-based violence, saving time, better recognition, participation in cooperatives, and protection from the improved shelter are good indicators to showcase the leadership role of individuals, CBOs, organizations and others. These leadership roles in the community often considered as " Change agents." Among many such change agents, women groups from the community, women's family members, and local NGOs are the major leaders in the community in reducing the gender-based constraints whom any future program can rely upon. Also, research felt the need to develop the next layer of leadership/change agents comprising individual male members of the family, neighbors, health workers, teachers, spiritual leaders, local government representatives, and friends. The community has appreciated cBOs/NGOs/INGOs and women group's leadership role. Improved decision making, livelihood creation, preparedness plan, establishing a protection system, and building capacity are the major highlighted outcomes. Local governments are gradually coming forward to support the changes in the community. Individual male members of the family contributed to establishing a protection system.

Overall to conclude the findings, it is quite evident that there are potential leadership approaches that are effective and efficient in reducing the gender-based constraints and encouraging women to lead the preparedness approach. The research would like to recognize, respect, and salute such leadership initiatives at individual, community, and organizational levels with a hope to support similar research work in the larger domain and coverage area on integrating indigenous risk management approaches, modern scientific processes, and local governance.

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### Authors' contribution

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