

The role of Acehese women in enhancing community preparedness through the inter-generational transmission of local and indigenous knowledge

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Abstract. Intergenerational transmission of traditional knowledge plays an important role. The involvement of women shows a significant impact on building family and community preparedness. However, limited attention paid to the unique contributions of Acehese women has identified an erosion of traditional knowledge systems in the local context. This study explores the role and involvement of Acehese women in the intergenerational transmission of knowledge about disaster preparedness based on local wisdom. A qualitative study in Banda Aceh and Aceh Besar involving interviews with key informants namely where they live, victims or non-victims of the 2004 Aceh tsunami, and career women or housewives. Acehese ethnic women living in coastal areas were sampled randomly and purposively. Ten agreed to participate and were interviewed. The face-to-face interviews were recorded, transcribed, and analyzed using an analytical framework. The interviews revealed that the role and involvement of women in the transmission of local knowledge and practices was hampered by cultural and political factors which caused the erosion of this knowledge.

1 Introduction

The empirical data from the 2022 World Risk Report conspicuously ranks Indonesia third among 193 countries [1]. This vulnerability is intricately interwoven with a complex web of geological and geographical determinants. Indonesia's geographical position along the Pacific Ring of Fire and the intersection at the confluence of tectonic plates and oceanic domains are paramount contributing factors. Notably, Aceh, a province within Indonesia's confines, is exposed to a heightened predisposition to a diverse spectrum of natural hazards-caused disasters [2].

The susceptibility of Aceh to natural hazards-caused disasters is a confluence of multiple factors, most notably the pervasive conversion of land for various purposes and the substantial concentration of active fault junction zones [3]. Consequently, the region predominantly grapples with hydrometeorological and geological calamities, including seismic events, tsunamigenic processes, and inundations [3]. This sobering reality is vividly underscored by the tragic episode of the colossal earthquake and ensuing tsunami that convulsed the Indian Ocean in 2004, resulting in the

lamentable loss of over 200,000 lives among the residents of Aceh [4].

Aceh's historical record as an area vulnerable to earthquakes and tsunamis can be traced back 7,400 years. This condition is based on discovering layers of guano sediment and beach sand at the bottom of *Guha Ek Leuntie* (Bat Stool Cave), Meunasah Lhok Village, Lhoong District, Aceh Besar Regency. Furthermore, the identification process shows that in the last 7,400 years, Aceh has been hit by large tsunamis 14 times, with up to three in one event [3]. The phenomenon of the large earthquake and tsunami in Aceh also gave birth to various traditions practiced by the Acehese people, such as the culture of telling stories about '*ie beuna*' and the practice of '*tulak bala*' [5]. In Acehese society, '*ie beuna*' is understood as water as high as a coconut tree from the middle of the sea [6]. This water destroys everything in its path.

These various traditions are forms of knowledge and cultural heritage that contribute to increasing community resilience [7]. This traditional knowledge and practice are conveyed through intergenerational knowledge transmission. In addition, transmitting this knowledge involves both men and women. However, in

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reality, women are still often marginalized and discriminated against. In Aceh, existing literature generally highlights the role of women in leadership and resistance. Still, it pays only limited attention to the role of Acehnese women in knowledge transmission practices, thereby identifying the erosion of traditional knowledge systems in the local context [8].

This research explores Acehnese women's role and involvement in transmitting intergenerational knowledge about disaster preparedness based on local wisdom. Furthermore, local wisdom referred to here includes various aspects of knowledge and practices that have gone through an intergenerational transmission process in Aceh.

This research aspires to introduce a transformative paradigm, promoting the active inclusion of Acehnese women within local disaster risk reduction initiatives. The underlying objective is to advance the fulfilment of Sustainable Development Goals (SDGs), particularly those linked to gender parity, the enhancement of community resilience, and the mitigation of disaster risks, all while preserving cultural resilience.

The practical ramifications of this research are substantial. It can fortify the resilience of individual families and entire communities in the face of disasters. Additionally, it facilitates valuable opportunities for collaboration and exchanging knowledge and experiences among pertinent stakeholders. Such interactions are pivotal in creating effective and enduring solutions, focusing on establishing resilient communities with an explicit emphasis on the indispensable nature of an inclusive, gender-sensitive approach.

2 Research Method

2.1 Problem Identification

Women's involvement in intergenerational knowledge transmission and disaster risk reduction efforts is still limited. This condition indirectly fades the local wisdom practices of the Acehnese people in disaster risk reduction. Therefore, further studies are needed so that women's involvement in disaster risk reduction efforts can be maximized which will then have an impact on the fading local wisdom of the Acehnese people.

2.2 Selection of Study Area

Aceh Province is one of the provinces that is very vulnerable to experiencing various forms of disaster. In 2022, the National Disaster Management Agency (BNPB) in the Indonesian Disaster Risk Index (IRBI), designated Aceh Province as a red zone which means an area with high multi-hazard risk. Aceh's IRBI score in 2022 was 149.10 which makes it the region with the ninth highest disaster risk out of all provinces in Indonesia.

More specifically, we chose Banda Aceh City and Aceh Besar District as locations to carry out the data collection process. Aceh Besar District received an IRBI score of 207.78 which makes it the area with the highest

risk of multiple disasters, the highest risk level in Aceh and 9th in Indonesia. Banda Aceh City and Aceh Besar District were also the two most vital areas when the 2004 tsunami occurred. This certainly caused a lot of losses, ranging from loss of property, damage to infrastructure and ecosystems, to causing more than 230.000 fatalities.

According to IRBI 2022 statistics on the types of disasters in Aceh Besar, as well as their related risk scores and classifications, the flood disaster ranks first with a score of 34.62, placing it in the high-risk category. Landslides and severe waves are tied for second place with the same score of 34.62. Tsunamis and forest fires are similarly classified as high risk, with a score of 23.08. Earthquakes receive a score of 20.77, putting them in the high-risk category. Extreme weather, on the other hand, received a score of 13.08 with the same risk classification, namely high. Drought has a score of 11.54 which places it in the moderate risk class, while volcanic eruptions, with a score of 7.69, are also in the medium risk class.

With these experiences, the people of Banda Aceh and Aceh Besar continue to develop methods to increase disaster resilience. Women as managers of family resources certainly also play a role in this matter. This is what also made the research team interested in studying it. Therefore, in choosing the location for the case study, we chose informants who live in the coastal areas of Banda Aceh and Aceh Besar.

2.3 Data Collection

This study uses a qualitative approach. The data collection process will involve interviews with 10 women living in the coastal areas of Banda Aceh City and Aceh Besar District. The resource persons will be selected purposively based on their expertise, knowledge and experience in the field of disaster. Participation of resource persons is completely voluntary and unpaid. To maintain the confidentiality of the source, the identity of the source will be anonymized. Interviews were conducted in Indonesian by the research team.

Table 1. Key Informant Demographic Characteristics

Key Informant	Age (year)	Area of living		Tsunami 2004		Working Mom	House wife
		Aceh Besar	Banda Aceh	Victim	Non Victim		
1	38	✓		✓		✓	
2	42	✓			✓	✓	
3	42	✓		✓		✓	
4	47	✓		✓			✓
5	40	✓			✓		✓
6	62		✓	✓			✓
7	55	✓		✓			✓
8	45	✓		✓			✓
9	41	✓		✓			✓
10	65	✓		✓			✓

Interviews were conducted during the month of August 2022. A series of interview questions were pre-tested to ensure clarity. The questions that will be explored are as follows: 1) In your opinion, is it important for Acehnese women to be involved in transmitting knowledge about disaster preparedness; 2) What is the form of Acehnese

women's knowledge that is passed down and is still being maintained regarding disaster preparedness; 3) How was local knowledge related to disaster preparedness passed on to you?; 4) How do you transmit local knowledge and practices to your family?; 5) What are the constraints and obstacles in the contribution of Acehnese women to transmitting their local wisdom knowledge related to disaster preparedness?

The resource persons were asked to reflect on possible knowledge gaps and research priorities in the field of disaster and the research team will explore local wisdom, deficiencies, difficulties, and the minimal role of women in the transmission of knowledge in the field of disaster.

To strengthen the primary data obtained from the interview results, the research team will conduct a literature review which is accessed through various scientific works in order to obtain secondary data which is then processed together with the primary data. The data from the interviews were then analysed using standard qualitative methods using framework analysis.

3 Result

The themes and sub-themes of the interviews were condensed into two categories: the degree of women's role in knowledge transmission, the context of local knowledge and practices. Women's-level barriers to knowledge transmission include sub-categories of cultural and political factors. Barriers to the context of local knowledge and practices: the erosion of knowledge and its consequences.

3.1 The role of women in knowledge transmission

Women play an important role in transmitting disaster knowledge across generations. This is because they have the privilege of being the first educators for children. Therefore, the knowledge that is transmitted will have a long-term effect on the next generation. The form of knowledge includes anticipatory steps before a disaster and actions during a disaster. In the transmission process there is one method used so that children are trained to be alert, namely through the habituation method.

Respondents described the importance of getting used to telling stories about disaster mitigation, because generally during a disaster people will feel panicked and unable to think rationally.

"Knowledge is important to be transmitted to today's children, for example I tell my children now that if there is an earthquake, run away. So the knowledge actually exists, but usually during an earthquake we panic more, therefore to minimize the occurrence of panic.. habituation or training is needed from an early age.. Knowledge of disasters must be passed on otherwise our generations will not know" – RF (42.3)

"When there was an earthquake, for example, I was one of those people who didn't panic, I didn't immediately run, but I saw the conditions. Second, panic

needs to be trained. When we don't panic, we can think rationally about what to do." – Rb (38)

"When I was sleeping, my mother and grandfather told me about the story of Noah's ship that sank, my parents said the old story would repeat itself. Some people don't tell it, so they don't know." – FR (45.4)

Furthermore, women's involvement was not only within the scope of the family, during the tsunami women also played a role in transmitting knowledge and being involved in disaster management.

"During the 2004 tsunami, we all played a role, coincidentally Mrs. Sis Ru had just finished surgery, but with her condition that was not yet healthy, she still conveyed her knowledge in the tents"– Rb (38)

"So at that time my friends and I worked at the Jenggala post, where we helped collect data on victims" – RF (42.3)

On the other hand, not all women transmit their knowledge related to disaster. This weakness is caused by several factors, namely lack of information, education, awareness, or only relying on education in formal schools.

3.2 Cultural/ political barriers

Along with the development of the era, the influence of globalization has increased the process of information, communication, and social media. By utilizing technology, various information and knowledge are now easily obtained. Related to local knowledge on disaster mitigation, it is important to be inherited and cultivated. But compared to now, this knowledge is slowly eroding. This is reviewed from several aspects including knowledge that is not inherited, is not cultivated, or does not return to society in any form of media. As a result, knowledge is not considered and seen as belonging to women.

"That's why local knowledge actually appears a lot in women's knowledge, but again local knowledge that women have is often not considered, so it often appears in men. Usually women's knowledge is more complete, just like before because we are not a culture of writing not a culture of documenting in previous generations, so the knowledge that is in women is not visible.. Orally it is in each of us but we don't pass it down in writing which is not we can pass it on as knowledge...Safe knowledge is documentation in the form of photos or videos or in written form. The transmission of knowledge is more often hampered to occur to the current generation because knowledge is not transferred and the ball of knowledge is not picked up by young people to previous generations." – Rb (38)

Women's involvement in knowledge transmission is sometimes neglected. In fact, their role can build community resilience and can make a significant contribution to disaster mitigation and response efforts.

In the social environment, the community still strongly maintains traditional gender roles, in which women's duties are often focused on taking care of the house and raising children. As a result, every decision or initiative taken by women is often not considered by the community.

"So Gampong Nusa is one of the tourist destinations that is also led by women. Nusa has proven that there are many that are led by women but the community actually gives more recognition to policies taken by men" – Rb (38)

Likewise, with policy making, women's knowledge and needs are often side-lined. For example, during the 2004 tsunami disaster, the victims received staple food assistance in the form of food, clothing, and even house construction. However, in the refugee barracks, the women and children who most often experience injustice are women and children.

"Talking about disasters, try to reduce disaster response. The most important thing is preparedness is usually before pre-disaster but post-disaster is also important. And knowledge related to disaster adaptation and mitigation also exists in women. Women cannot be side-lined both domestically and publicly. Domestically, what happened when the earthquake or tsunami disaster was very close to injustice was that women included, for example, when they filled basic necessities, there were no staple foods, people could not live without being able to eat. But what happened was only instant noodles, will our children be nutritious? And when it is not nutritious, who is to blame? Again girls. Women are an important object when the government, policy makers or practitioners are compiling programs. Because now what is happening is that all knowledge is in the women's group." – Rb (38)

"The context of the disaster was more vulnerable to women and children because in the evacuation barracks...The wells were crowded, cleaning equipment, at that time we needed sanitary napkins...but at that time there weren't any. During a disaster such assistance should be considered. Women use more water, especially during menstruation...Then in the evacuation barracks there must be lights, water and bathrooms must be separated for women and men. That should be considered, not making a policy of issuing a budget to buy negligence for women". – RF (42.3)

3.3 Context of Local Knowledge and Practice

3.3.1 Forms of local knowledge and practices

Tsunami is an unfamiliar term for the people of Aceh to know when this phenomenon hit in 2004. This incident reveals the unique knowledge possessed by Acehese families and passed down from generation to generation. One respondent stated that there was local knowledge of the tsunami disaster in his family which was sourced from previous records. This knowledge helps them to

carry out appropriate evacuation measures when an earthquake occurs.

"In the past, there might have been the name Ie Beuna, coincidentally, Kak Ru's late father was one of those people who read old books in which the Jawi Arabic book contained content about Ie Beuna. So that when the earthquake occurred, with knowledge, he gave instructions... so he was a priest figure whose instructions would have been heard. So when the earthquake happened, he instructed me to run, speaking in Acehese... nyoe Ie Beuna (This is Ie Beuna)" – Rb (38)

The knowledge passed on from generation to generation is clearly seen when there is a transmission process from the families of the respondents, who instruct them to run towards the highlands when the sea water starts to rise or when an earthquake occurs. This was clearly seen during the earthquake, a group of fishing families living in coastal areas started to flee to the mountains carrying clothes. This means that local knowledge has been around for a long time so when an earthquake occurred, they had already made preparations.

"In the past, my parents, if they were still alive, maybe around the age of 83, had a story and passed it on to their children that when the sea water had risen they would run up the mountain, but there is no such thing as a tsunami. Some of the fishermen's families know the story of running to the mountains, because some of them ran in front of our house with packages of clothes and thank God they were all safe even though they live in Lampuuk". – RF (42.3)

"If for example there was an earthquake, the children would definitely take it out... all of their children would be taken out so they would not fall into any ruins, the main thing is to save yourself first, leave your assets at home. Look for a plateau, descending is taught like that ". – YM (41.1)

"As for the tsunami, it has already happened, so we already understand a little about prevention, we have started teaching children about evacuation. Say for example a tsunami runs to a higher place". – MA (47.2)

"If there is an earthquake run towards the high". – NR (65.4)

Apart from running towards the plateau, there is also knowledge that during an earthquake it is advisable to sit on the ground to maintain body balance.

"When the earthquake hit us, we ran outside, the shaking was strange...Told the grandmother beside the house just sitting on the ground. So, we had to sit on the ground, not on the terrace, on the ground the earthquake could not be felt and the sound of gedham-gedham thought there was a bomb because it was a time of conflict. And it turns out that my parents used to say that after several earthquakes, 'Taga Laot', the name is a

sound sign and turns under the sea, in seconds the water comes out. So, if we hear a sound like that but don't run straight away, we'll be finished." – RF (42.3)

Some respondents when the earthquake had the knowledge to get out of the house, on the other hand if the strength of the earthquake was getting stronger, they chose to run to a field far from the building. And to maintain body balance, the respondent did a special practice in which the prone position held the grass in the field. On the other hand, there were respondents who put wooden planks in front of the house to serve as a foothold and safeguard in case of liquidity during an earthquake.

"My mother said if there was an earthquake we were told to go out, don't sit in the house, go out into the field, why? I'm afraid the house will collapse on top."- NW (55.1)

"When there is an earthquake, look at the situation. For example, when the earthquake is strong, we run to the field, sometimes we run to the mosque field. But if it's not strong, sometimes it just comes out." – MA (47.2)

"When there was an earthquake, we ran to a large field and if there was strong grass on the field, we were told to hold on it and lie down, not to get too close to the road or pillars. If an earthquake runs the same everywhere, you don't need to run." – FR (45.4)

"My parents taught me that if there is an earthquake, leave the house, put boards in front of the house so that the slab does not split into the ground, so there is a safety net. Get used to there being a shift in the ground so we don't go in right away, so we step on the board." – YM (41.1)

Aceh is one of the provinces with a Muslim majority and has beliefs that are still strong and attached to religious values. In fact, from any aspect, it is always associated with this norm. This can be seen from the existence of people who believe that places of worship are safe places and will not be destroyed during a disaster.

"People prefer to run to the mosque, why go there? Because people think it's one single factor because God saved the mosque as a place of worship. But from science, the mosque is an open place. Water is liquid, it can run in any direction. In the past, mosques only had pillars and no barriers or doors. Now there is glass as an obstacle, if water enters it doesn't immediately come out. If the mosque was hit from the front, it immediately came out backwards, from side to side, because there were no obstacles, many mosques were left behind. Well, that's research first." - RF (42.3)

"Now all the children can swim, when there was an earthquake they went straight to the mosque, when there was an earthquake the children did not look for Mom and Dad anymore. Come home see Mother, don't! So?

When the earthquake ran straight to the mosque because it was not destroyed." - FR (45.4)

"At least if our mother had time to bring Yasin, don't forget yesterday to calm your mind after that, it can be far from catastrophe and disaster too." - UK (30)

Respondents also have local knowledge and practices regarding the storage of important files and documents.

"Actually, people in ancient times kept good documents, then in the ground, then wrapped in plastic and then stored.. so after the disaster it was dug up again." - RB (38)

"I have lost my diploma. When there is a disaster there is nothing that can be saved, the important thing is to save yourself. We remember to save diplomas or important items but when there is a disaster we don't remember and are usually afraid." - NW (55.1)

"It doesn't need a diploma; you can make a new one. Those are the people who died because they went home to get gold, went home to get land certificates. I remember the certificate my mother kept in my bag, but I don't want to take it and don't return it, the important thing is life." - FR (45.4)

"...the main thing is to save yourself first, leave your assets at home." - YM (41.1)

"We are ready, everything is packed. House papers, children's certificates are placed in the suitcase if there is anything that's all we bring. Keep it not in the cupboard. Keep it in an easy-to-see place so if you're panicking, don't look for it anymore." NR - (65.4)

3.3.2 Knowledge Degradation and Its Consequences

The degradation of local knowledge and practices is a crucial issue for building preparedness and resilience in families and communities. Factors causing this erosion are often caused by the tendency to convey local knowledge and practices orally without leaving written documents as an inheritance for the next generation.

"But then because our local knowledge is not cared for and not well maintained by us. Orally it is in each of us but we don't pass it down in writing which then we can't pass it on as knowledge. It will be eroded because today, one ownership of local knowledge does not return or becomes local ownership, for example when researchers, academics in villages carry out research, their knowledge does not return to the village, returns to whom? according to the researcher earlier or later book documents in video form are sometimes only stored on campus, NGOs but do not return to village ownership. So, it eroded over time and the name that later emerged was still a researcher. Second, there is eroding of community pride and minimal local knowledge. Actually, reciprocity on the one hand erodes the knowledge of the current generation because of

ignorance of that knowledge and the knowledge is not transferred to the younger generation."- Rb (38)

Furthermore, women tend not to be given attention to their involvement and are given capital to contribute in transmitting and preserving their local knowledge and practices.

"Knowledge is also important, and if you can capitalize on women... being given this kind of knowledge, a kind of organization for women from the government must also pay attention to these women so that they can be more advanced. Such as culture or skills that need to be preserved, but for the tradition of rejecting reinforcements it is no longer there"- Rh (40.2)

The dominance of formal institutions is one of the factors that causes the erosion of knowledge to occur. Respondents no longer transmit their inherited knowledge to their families and children because they have previously obtained formal knowledge from related institutions.

"It's not taught, if the team is there, say, for example, what's wrong, run to this path here and there. I have a big child so I don't teach it anymore"- NW (55.1)

Respondents expressed the age and experience of the child as a perception not to transmit the inherited knowledge they have because they believe the child already has his own knowledge and understanding obtained from his environment.

"No need to tell and teach it to children, even children who are big already know how to run if there is an earthquake" - HL (62.4)

"Now, even though they are not taught, children already know that if there is an earthquake or a flood, they still go to the mosque" - FR (45.4)

The degradation of knowledge has a real impact on people who live not far from the coast. Right after the earthquake occurred and followed by low tide before rising into the sea, there were lots of stranded fish. Respondents said that many of them approached the beach to collect the fish without knowing that the sea level would rise as a major disaster. In addition, there were also respondents who returned home to save their children.

"Now people when an earthquake doesn't just sit still, they all run. It's just that when the tsunami happened in the past, people didn't run away but were busy picking fish that had been lying down and didn't expect the water to return. Just try not to choose fish that day, many survivors. People don't even think because it never existed." - HL (62.4)

"Many did not survive because when the earthquake occurred, they returned to their homes to see their families" - NW (55.1)

4 Discussion

The earthquake and tsunami in the Indian Ocean on 26 December 2004 were one of the deadliest and deadliest disasters in recorded human history [8]. Indonesia was the country that received the worst impacts, the disaster killed around 165,000 people in Aceh and Nias Indonesia [9]. Several studies show that women have a higher vulnerability to disasters than men [10]. This vulnerability is not due to biological differences, but because unequal power relations limit (mainly) women. However, at the time of the 2004 tsunami, there was little credible gender-disaggregated data showing the number of women in the aftermath of the tsunami, such as the number of women who died, disappeared or were displaced [11].

Mother is the first school for children [12]. A mother is the main figure who plays an important role in the family, both in shaping character or in transmitting knowledge, including in the field of disaster [13,14]. However, currently, the transmission of local disaster knowledge in Aceh tends to be carried out oral. One of the most common local practices is the practice of telling children stories about disasters. Local knowledge and practices are rarely passed down in manuscript form, so that the transmission of this knowledge is hampered, spread unevenly and slowly fades away. One of the concrete evidences of the transmission of disaster knowledge in written form is the story of *Ie Beuna* in an earlier book written in Arabic Jawi letters. This is in line with previous research that some Acehnese people each have knowledge about the earthquake and tsunami in their local terms, such as the terms "*Geloro*" in Singkil, "*Smong*" in Simeulue, and "*Ie Beuna*" in Acehnese. This knowledge about *Ie Beuna* was then studied by Islamic religious leaders in Aceh which they would then disseminate during religious traditions/rituals that involved many people, such as festivities, the birthday of the Prophet, and religious studies. Thus, this ancient knowledge can survive until now because it is stored in written form (manuscripts) and passed on orally.

Unfortunately, the transmission of disaster knowledge is not enough just to rely on documentation in the form of manuscripts. But it also has to involve various aspects, one of which is gender roles. In Aceh, women have an important role in transmitting disaster knowledge. Unfortunately, this involvement encountered obstacles in the process. Some of these obstacles are: 1) Lack of access to information; 2) Lack of concern for disaster knowledge; 3) Limited pre-tsunami education due to the prolonged Aceh conflict; 4) Too much reliance on education in formal schools

These four obstacles should be faced and repaired. Now, the flow of globalization with a million technologies provides many changes to the world. Technology that is put to good use will make it easier for humans to access, store, and provide information. In the context of disaster knowledge transmission, local practices in Aceh which are still dominantly carried out orally can be upgraded by utilizing information technology. Dissemination of local knowledge and practices can be made more interesting, such as being

disseminated in the form of videos, films, games, and so on. That way, the four obstacles can be minimized.

Likewise, from a political perspective. The government, which in fact is a policy maker and regulator, should pay more attention to the issue of gender equality, including the role of women in the context of disaster. In fact, women's social role places them in a more vulnerable position to disasters [15]. The lack of women's involvement can indirectly hinder the development of a community. Bearing in mind that women also play an important role and are useful figures to strengthen community resilience, in which they have different knowledge and perspectives on disaster preparedness and response [16]. For this reason, every decision making should consider gender aspects.

One effort that can be done as a form of attention to gender issues is to provide disaster training to women, who will then transfer the knowledge from the training to their communities (families) [13]. The skills obtained from this training will continue to be passed on to their children and grandchildren. This effort contributes to preserving the local knowledge and practices of the Acehese people who are slowly fading. Not only that, women can also become active agents of change through their social networks [18]. This is also a form of their responsibility and domestic role in terms of increasing community resilience in a comprehensive manner [19].

As for the formal education sector, schools are one of the sectors responsible for developing disaster knowledge. The reason is because children are one of the most vulnerable groups to disasters [20]. Departing from this, schools must be able to build critical awareness regarding community preparedness in dealing with disasters [21]. On the other hand, schools are indeed designed as community centre locations, be it from meetings to group activities. Therefore, in this regard, schools should indeed be one of the locations for developing community resilience centres.

Furthermore, in implementing these efforts, technology also plays an important role. Transmission of knowledge is not only channelled through storytelling (oral), but can also be disseminated in the form of writing, sound recordings, videos, films, as well as the results of utilizing this technology. A child will be more interested in and care about local disaster knowledge and practices if the mother gives a touch of technology when teaching it to her child. This is proven because nowadays, children live side by side with technology, so that visuals and pictures can help convey knowledge more quickly and easily understood [22].

One of the limitations of this research is the lack of local knowledge possessed by the informants. During the interviews, the research team had to "lure" the informants with a number of additional questions, so that the informants recalled local knowledge and practices that were fading. Several informants also thought that local knowledge and practices were not too important to learn because they were no longer relevant. Another limitation that occurred was the small number of participants and the lack of diversity of resource persons' backgrounds. Of the 10 informants, 7 of them were housewives, while the other 3 were career women. This research will be better if it gets the

views/perspectives of women who occupy positions in the Aceh government.

This research is only focused on the coastal areas of Banda Aceh City and Aceh Besar District, further research will be invaluable in revealing other insights to find new findings. Indeed, currently the involvement of women is minimally considered. Therefore, the research team hopes that this research can be perfected so as to create new findings that are useful for the community.

5 Conclusion

Women have an important role in the process of transmitting disaster knowledge in Aceh. This transmission process generally emphasizes habituation/behaviouristic methods, particularly through storytelling (oral). This process of refraction produces many forms of disaster mitigation cultural practices, ranging from those that are structural and non-structural in nature. Unfortunately, the influence of globalization and strong belief in traditional gender roles have made the role of women in the transmission of disaster knowledge encounter many obstacles and obstacles, such as lack of recognition, lack of knowledge capital and community development, and manuscript documentation that is spread out but does not return to the initial community itself.

These various obstacles and obstacles directly affect the erosion of disaster knowledge which in the end has a fatal impact on the communities living in the coastal area. Therefore, the government's efforts to involve women and technology integration are urgently needed in increasing community resilience to disasters.

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