

## Evaluating the Implementation of BNPB's Srikandi Bencana Program in Dharma Wanita Persatuan UNNES



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### ABSTRACT

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One of the vulnerable-to-disasters parties is women. In fact, women have great potential to take part in creating a disaster-resilient society. Dharma Wanita Persatuan (Women's Association) as an organization consisting of the wives of civil servants or female civil servants in government agencies has so far only played an informal role as a supporter of their husbands and has not been empowered. If members of Dharma Wanita are empowered through the Srikandi Bencana (Disaster Heroine) program, they have the potential to become a driving actor in increasing preparedness in the community where they live. This quantitative study aims to analyze the level of knowledge of members of the Dharma Wanita Persatuan UNNES about the Srikandi Bencana program of National Agency for Disaster Countermeasure (BNPB) and analyze the level of preparedness of members of the Dharma Wanita Persatuan UNNES. This study involved 50 members of the Dharma Wanita Persatuan UNNES. Data was collected by using a questionnaire method using google forms. The data analysis techniques used in this study include quantitative descriptive analysis techniques. The results point out that the average knowledge of members of the Dharma Wanita UNNES regarding the Srikandi Bencana is still relatively low at 33.33%. Then, the average level of their preparedness is in the medium category, namely at 68.13%. These numbers indicate that the Srikandi Bencana program must be campaigned more massively and realized among the Dharma Wanita. If the members are equipped with adequate disaster preparedness, they will play as notable actors to establish alertness in their families and society. This way, disaster risk reduction will also be more gender-friendly that everyone can participate.

## 1. INTRODUCTION

Geographical, geological, and climatological conditions of Indonesian territory, as well as people's socio-economic conditions, make Indonesia experience an extreme potential for disasters [1, 2]. Located at the confluence of the Eurasian Plate, Indo-Australian Plate, and the Pacific Plate, this country is vulnerable to geological disasters such as earthquakes, tsunamis, and landslides [3, 4]. As a tropical country, Indonesia is also very prone to floods [5, 6]. The number of disasters is increasing every year.

Indonesia ranked 23 as a country with high disaster potentials in 2021. In Southeast Asia, it ranked 4<sup>th</sup> for the same category under Philippines, Brunei Darussalam, and Timor Leste [7]. Data published by Szmigiera [8] explained that Indonesia has massively experienced various disasters, naming it as the 2<sup>nd</sup> country with highest disaster country after United States in 2021, followed by India, China and the Philippines. Its extreme rate of mortality risk due to multiple hazards placed Indonesia in 6<sup>th</sup> under Bangladesh, Nepal, Philippines, Vietnam and Bhutan (Asia). The same rank goes for economy risk due to multiple hazards under Vietnam, Bangladesh, Philippines, Thailand and Uzbekistan [9].

For this reason, disaster risk reduction should be taken to minimize the negative impacts of disasters [10, 11]. It is necessary as the paradigm has shifted from responsive to preventive [12]. This is because disasters are unavoidable

events, so developing an adequate disaster risk reduction approach will greatly help in reducing threats and risks [13].

Basically, disaster risk reduction is an effort to reduce threats and vulnerabilities and increase community capacity [14]. It should be carried out from the smallest level of society such as creating a disaster-resilient awareness among the people [15-17]. Local communities can be involved in recognizing their own vulnerabilities and capacities by giving them important roles from the planning, implementation, and evaluation stages of disaster management to minimize the negative impacts of disasters and accelerate the post-disaster recovery process [18, 19]. Community involvement can be established through disaster education to the formation of disaster-aware communities or disaster-resilient villages [20]. This is because there are still many people, both groups and individuals, who are very vulnerable to disasters. Their knowledge, economy, social structure, and environment are fragile. Also, more severe conditions will usually occur even in people who have not experienced a disaster [21].

One of the vulnerable-to-disasters parties is women [22]. They are more vulnerable than men [23]. According to Bradshaw & Fordham [24], women are estimated to have a seven times higher risk of dying in a disaster event and receive less assistance. According to a study from Plan International, women and children have a 14 times greater risk of dying in a disaster due to a patriarchal culture [25]. The patriarchal culture causes women to be perceived as weak and thus often

discriminated against in various precaution programs [26-29].

This is such an irony since women, with their role in the family, bear an extreme burden when a disaster occurs as protectors of children and elderly at home [30]. In various disaster events, due to the lack of women's participation in disaster management, women are marginalized, which is reflected in the provision of assistance that is not friendly to women and minimal access to information for women [31-33]. Discrimination against women, for example, can be seen from the unequal distribution of human development. Women often experience limited access to productive resources, social services, and civil affairs. Their vulnerability to disasters is finally increasing [24]. Their access to critical resources such as land and labor is also massively restricted. When there is a flood, for instance, women find it difficult to access shelter.

In the pre-disaster context, women experience discrimination in access to economic, social and political resources, which will then affect assistance and compensation for post-disaster losses. For example, in Pakistan massive floods in 2010, countless women experienced difficulties in mobility due to financial constraints. Their access to disaster assistance, namely for food, health services, and use of toilets were badly limited [34].

In fact, women have great potential to be empowered in creating a disaster-resilient society [35-37]. Their roles as family protector in the household, as well as their communication networks in the community, are greatly essential in disaster education [38-40]. Women have a big role in reducing emotional disorders and stress in children [41]. It is effective to be used for motivating and mobilizing communities, particularly other women, to reduce disaster risk, this way, resilience might be established as well [42].

Women are actually predominant actors before, during, and after disasters. Many cases proved this thesis, one of them was Hurricane incident that exceedingly destroyed Honduras and Nicaragua in 1998. At that time, women organized multiple recovery actions including carrying cement to build shelters and latrines, igniting government, and working for family livelihoods. In the 2015 Nepal earthquake, women were trained as masons to help repairing and reconstructing earthquake-resistant houses, infrastructure, and cultural sites. Their groups also succeeded in advocating for gender equality and women's empowerment integration. This effort was done as recovery and reconstruction efforts in Nepal [34].

National Agency for Disaster Countermeasure (BNPB) launched the *Srikandi Bencana* (Disaster Heroine) program as a means to eliminate negative stigma against women and increase women's capacity in dealing with disasters. The program was realized in 2019 as an effort to empower women in disaster risk reduction. The Srikandi Bencana program has the potential to be implemented in various communities or women's associations wherein they communicate and share any information as well as use it as a forum for women to move together. The Srikandi Bencana program is also relevant to the Head Regulation of BNPB Number 13 of 2014 on Gender Mainstreaming in the Disaster Management Sector. However, until now, the Srikandi Bencana program is still not widely known and implemented in the community, both the general public and the women's community. This condition shows the lack of socialization from BNPB and the lack of literacy in the community.

Dharma Wanita Persatuan UNNES (Women's Association of Universitas Negeri Semarang), an organization consisting of the wives of civil servants or female civil servants in Universitas Negeri Semarang (UNNES), has only been considered informally as a supporter of their husbands and less empowered. Members of the Dharma Wanita Persatuan UNNES consist of women from various regions in the Semarang City. If the members are empowered through the Srikandi Bencana program, they have the potential to become a driving actor in increasing preparedness in the community where they live. Preparedness includes activities designed to minimize loss of life and damage, regulate the temporary transfer of people and property, and facilitate timely and effective rescue, relief, and rehabilitation [43]. For this reason, efforts are needed to assess community preparedness so that the strengths and weaknesses of the community can be identified in adapting to the threat of disaster [44]. For this reason, researchers are interested in conducting research on knowledge related to the Srikandi Bencana program and disaster preparedness among members of Dharma Wanita Persatuan UNNES.

## 2. METHODS

### 2.1 Research design

**Table 1.** Variables and indicators

No	Variables	Indicators
1	Disaster Knowledge	<ul style="list-style-type: none"> <li>a. Knowledge related to concepts and characteristics of various disasters</li> <li>b. Knowledge related to symptoms or signs of disaster</li> <li>c. Knowledge related to potential disaster threats</li> <li>d. Knowledge related to disaster history</li> <li>e. Knowledge related to emergency responses</li> <li>f. Knowledge related to disaster prevention</li> </ul>
2	Disaster Awareness	<ul style="list-style-type: none"> <li>a. Awareness regarding potentials and threats of disasters</li> <li>b. Awareness regarding disaster risk reduction</li> <li>c. Awareness regarding participation in disaster education programs</li> <li>d. Awareness regarding disaster emergency responses</li> </ul>
3	Perception of Disasters	<ul style="list-style-type: none"> <li>a. Perceptions of disaster potentials and threats</li> <li>b. Perceptions of disaster risk management</li> <li>c. Perceptions of disaster preparedness</li> <li>d. Perceptions of participation in disaster risk reduction</li> </ul>
4	Information and Communication	<ul style="list-style-type: none"> <li>a. Sources and access to information</li> <li>b. Communication with various stakeholders</li> <li>c. Communication and socialization with family and community</li> </ul>

This quantitative study aims to analyze the level of knowledge of members of the Dharma Wanita Persatuan UNNES (Women’s Association of Universitas Negeri Semarang) about the Srikandi Bencana program and analyze the level of its members’ preparedness. This research is survey research focused on revealing the extent to which members of the Dharma Wanita Persatuan UNNES know about the BNPB Srikandi Bencana program and its implementation among the members. This study also attempts to analyze the extent of disaster preparedness of the members.

The findings of this study will be useful as a reference for stakeholders to determine evaluation policies for the *Srikandi Bencana* program and strengthen preparedness among women. The measurement of preparedness uses variables and indicators adopted from the theory of Patrisina et al. [45] combined with the theory of Barua et al. [46] and Tuladhar et al. [47]. Measured preparedness includes aspects of disaster knowledge, disaster awareness, perception of disasters, and disaster information and communication. By combining the indicators from the existing theories, the researcher formulates the following variables and indicators that can be seen in the Table 1.

## 2.2 Research locations and subjects

This research was conducted at Universitas Negeri Semarang. The research population consisted of members of the Dharma Wanita Persatuan Universitas Negeri Semarang in each work unit. Currently, there are 10 work units where each work unit has approximately 24 members of Dharma Wanita. The research sample was determined by random sampling by taking 20% of Dharma Wanita members for each work unit so that a total sample of approximately 50 Dharma Wanita members was obtained.

## 2.3 Sources, techniques, and data collection tools

Sources of data in this study consisted of primary data and secondary data. Primary data in the form of data obtained directly from the field, namely data regarding the knowledge of members of the Dharma Wanita Persatuan UNNES about the BNPB Srikandi Bencana program and disaster preparedness for members of the Dharma Wanita Persatuan UNNES. Primary data were collected using a questionnaire technique. The data collection tool is in the form of a closed questionnaire compiled based on the Gutman scale for knowledge variables related to the Srikandi Bencana program and disaster knowledge, as well as a Likert scale for the variables of disaster awareness, disaster perception, and disaster communication information. In this questionnaire, the researcher uses Google Forms so that respondents only have to choose one answer option that is considered the most suitable to their condition.

Secondary data was obtained through searching written documents, policies, or regulations of the central or regional government, the National Agency for Disaster Countermeasure (BNPB), or from UNNES related to disaster management. In addition, secondary data can be in the form of data obtained from previous journal articles. In addition, secondary data was also extracted through online data searches by conducting data searches through online media such as the internet or other network media that provide online facilities.

## 2.4 Tool validity and reliability

In this study, validity was measured using the Product Moment correlation. In the measurement process, the correlation coefficient value will be compared with the table correlation coefficient value with a significance level of 10%. The reliability of the instrument was assessed from the statistical results of Cronbach Alpha ( $\alpha$ ). The closer the alpha value is to one, the more reliable the reliability value is [48].

## 2.5 Data analysis technique

Data analysis techniques used in this study were quantitative descriptive analysis techniques. A quantitative descriptive analysis technique was used to explain the level of knowledge related to the Srikandi Bencana program and the level of disaster preparedness of members of the Dharma Wanita Persatuan UNNES. In the percentage description analysis, an important step that should be carried out is calculating the value of respondents, respective aspects (sub-variable), mean, and percentage. The percentage calculation process is carried out by the following formula:

$$DP = \frac{n}{N} \times 100\%$$

Description:

DP = Percentage Description.

n = Obtained value.

N = total of all values.

The next step is deciding the criteria levels, both the lowest and highest points. The class interval is used as a reference to determine the criteria for the results obtained by the respondents. The method taken is by consulting the obtained value (in %) with the interval class table [49]. The calculated interval class table can be seen in the following Table 2.

**Table 2.** Criteria of percentage description analysis

No.	Percentage	Criteria
1.	81.25% - 100%	High
2.	62.5% - 81.25%	Moderate
3.	43.75% - 62.5%	Low
4.	25% - 43.75%	Very Low

## 3. RESULTS

### 3.1 Knowledge of members of the Dharma Wanita Persatuan UNNES related to the *Srikandi Bencana* Program

A series of research questionnaires were distributed to analyze the knowledge of members of the Dharma Wanita Persatuan UNNES (Women’s Association of Universitas Negeri Semarang) regarding the Srikandi Bencana (Disaster Heroine) program and to analyze the disaster preparedness level of members of the Dharma Wanita Persatuan UNNES. The collected data was then analyzed using quantitative descriptive statistics. The results of data analysis show that there are still many respondents who do not know about the Srikandi Bencana program. The average level of respondents related to the program is 33.33% or the low category. The scores obtained by the respondents vary from the range of

8.3% to 83.3%. In more detail, out of a total of 50 respondents, 3 (6%) people have knowledge related to the Srikandi Bencana program in the high category. Then, a total of 9 (18%) people have knowledge related to the program in the medium category. Meanwhile, the majority of respondents (13 or 26%) have an average knowledge related to the Srikandi Bencana program in the low category. Then, 25 (50%) people are in the very low category. The analysis results can be seen in more detail in Table 3 below.

**Table 3.** The results of the analysis of the knowledge level of Dharma Wanita members regarding the BNPB Srikandi Bencana Program

Interval Class	Frequency	Percentage	Cumulative Percentage
High	3	6	6
Moderate	9	18	24
Low	13	26	50
Very low	25	50	100

Source: Data Analysis Result (2021)

### 3.2 Disaster preparedness level of members of the Dharma Wanita Persatuan UNNES

Analysis of the level of disaster preparedness is carried out with four main aspects, namely disaster knowledge, disaster awareness, disaster perception, and disaster information and communication. Based on the results of data analysis, the average disaster knowledge of members of the Dharma Wanita Persatuan UNNES is in the medium category, which is 67.92%. Of the 50 respondents, a total of 24 (48%) have disaster knowledge in the high category. Then, 12 (24%) respondents have disaster knowledge in the medium category. Meanwhile, the remaining 8 (16%) respondents have knowledge of disaster in the low category and 6 (12%) respondents have knowledge of disaster in the very low category. The results can be seen in Table 2.

In the aspect of disaster awareness, on average, respondents are in the medium category, which is 65.01%. This result is slightly lower than the level of disaster knowledge. The aspect of disaster awareness obtained an average score in the medium category—close to the low. Of the total 50 respondents, 5 (10%) have disaster awareness in the high category. Then, 22 (44%) respondents have disaster awareness in the medium category. 20 (40%) respondents have disaster awareness in the low category. The remaining 3 (6%) respondents have disaster awareness in the very low category. The results can be seen in Table 4.

**Table 4.** The level of disaster knowledge and disaster awareness among members of the Dharma Wanita Persatuan UNNES

Interval Class	Disaster Knowledge		Disaster Awareness	
	F	%	F	%
High	24	48%	5	10%
Moderate	12	24%	22	44%
Low	8	16%	20	40%
Very low	6	12%	3	6%

Source: Data Analysis Result (2021)

The aspect of disaster perception has the highest average score among the other three aspects, which is 74.68%, but the score is still in the moderate category. In the aspect of disaster perception, from a total of 50 respondents, 6 (12%) have a

disaster perception in the high category. In the aspect of disaster perception, the majority of respondents have a perception of disaster in the moderate category with a total of 39 (78%). Then, 4 (8%) respondents have a perception of disaster in the low category. As for the rest, only 1 (2%) respondents have a perception of disaster in the very low category. The results of the analysis of the level of disaster perception of members of the Dharma Wanita Persatuan UNNES can be seen in more detail in Table 3.

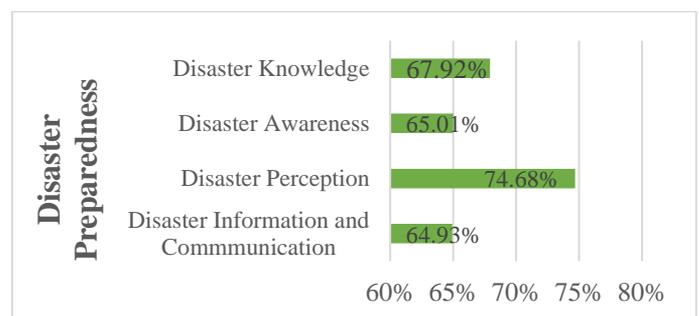
The information and communication aspect of disaster also has a score that is not much different from the other three aspects. In this aspect, the average respondent has a score in the medium category, namely 64.93%. Of the 50 respondents, 2 (4%) score in the high category. 28 (56%) respondents score in the medium category. Then, 19 (38%) other respondents score in the low category. The remaining 1 (2%) respondents scores in the very low category. The analysis results can be seen in Table 5.

**Table 5.** The results of the analysis of the disaster perception and disaster information and communication level of the Dharma Wanita Persatuan UNNES members

Interval Class	Disaster perception		Information and communication	
	F	%	F	%
High	6	12%	2	4%
Moderate	39	78%	28	56%
Low	4	8%	19	38%
Very low	1	2%	1	2%

Source: Data Analysis Result (2021)

Based on the results of the analysis of the four aspects of disaster preparedness, it can be seen that members of the Dharma Wanita Persatuan UNNES have a level of disaster preparedness in the medium category, namely 68.13%. Of the four existing aspects, the disaster perception aspect has the highest average score. The aspect with the lowest average score is the information and communication. Overall, the four aspects have scores that are not much different in the medium category. The results of the analysis of the average scores of all variables can be seen in Figure 1.



**Figure 1.** The results of the analysis of the average disaster preparedness score for members of the Dharma Wanita Persatuan UNNES

Source: Data Analysis Results (2021)

## 4. DISCUSSION AND CONCLUSION

The results point out that on average, the members of Dharma Wanita Persatuan UNNES do not know about the Srikandi Bencana Program from BNPB. If any, the knowledge

is still at the low level. This condition is motivated by the lack of socialization of the Srikandi Bencana in the community. It also implies that so far, the Srikandi Bencana program is still only an incidental program whose implementation is rarely carried out and is not sustainable.

The results of this study also contribute to facts that the issue of women in disasters is still very minimally discussed and paid attention to in Indonesia, including programs or policies related to empowering women in disaster risk reduction—followed by less realization so far. The results of a study conducted by Siahaan & Tambunan [50] exemplify that local governments still fail to integrate gender issues into various efforts and policies for disaster risk reduction due to lack of knowledge about gender and gender mainstreaming in disasters, as well as commitment and coordination with women's empowerment and gender equality in local institutions.

Zaidi & Fordham [51] even state that the Sendai framework, the main guideline in the preparation and implementation of various disaster risk reduction policies in the world, has not yet shown any exceptional success to formulate various concepts and indicators related to gender equality. The substance of the Sendai framework incorporating the inclusion of women in disaster reduction efforts is still experiencing a missed opportunity for addressing fundamental gender-based issues. For that, a better gender conceptualization is greatly needed to increase the inclusion of women and gender minority groups in the indicator documents and their implementation, as well as a more aligned policy framework with the indicator system.

Research from Oktari et al. [52] on efforts to integrate gender in the realization of disaster-resilient villages (Destana) in Aceh Province also shows similar results. The efforts to realize gender equality in building disaster-resilient villages in Aceh still fail to be as the patriarchal culture is still rooted in society. Thus, affirmative action in the Destana program is urgently needed to ensure equality that will encourage women's negotiating power and accommodate their voices to be heard by various stakeholders.

The low level of knowledge related to Srikandi Bencana program among members of the Dharma Wanita Persatuan UNNES is an evaluation for stakeholders who are responsible for efforts to reduce disaster risk and strengthen community capacity. Moreover, based on the results of data analysis, the average preparedness of the organization members cannot also be said well since it is in the medium category (66.7%). This condition depicts the need to escalate disaster preparedness for them so that they can have the knowledge, awareness, readiness, and capacity to deal with disasters at the pre-disaster, during the disaster, and post-disaster stages.

Strengthening their preparedness is urgently needed to be implemented. This is in line with the existence of two main factors, namely women are vulnerable parties who are vulnerable to disasters so that they need to get equal rights in disaster management efforts and women are parties who have a very important role so that they must be empowered in disaster management. Strengthening women's preparedness is very important considering that women and men will face different impacts when a disaster occurs and possess different adaptation strategies so that they have different priority needs. Women empowerment will guarantee the fulfillment of their needs, as well as increase their capacity in dealing with disasters and support more equal social relations [53].

Studies conducted by Nakhaei, et al. [54] and Sohrabzadeh

et al. [55] denote that women have a higher disaster vulnerability than men. Their needs are often not properly met when disasters occur. They are also often marginalized in relation to efforts to strengthen capacity and disseminate disaster information and education. Women's vulnerability can become increasingly severe and will affect other aspects so that the existing problems get more complex. For this reason, strengthening the capacity of women must be carried out with a preventive rather than responsive approach [56].

Cvetkovic et al. [57] also says that Women cannot only be seen in terms of their limitations or vulnerabilities. They do have limitations or higher vulnerabilities as they are less prepared and less confident in dealing with disasters compared to men, yet they have a more realistic view of disaster preparedness and possess a higher concern for families and households and preparedness behavior in several fields. Women can manage supplies of essential resources and emergency facilities, keep important documents, and handle household finances—making them more motivated to focus on managing the household and family. This is notable as a form of their roles in family preparation management when a dangerous situation occurs.

Many studies denote that women can contribute to disaster management. Studies from Mulyasari & Shaw [58] show that women have great potential to be empowered in disaster risk reduction, especially related to risk communication through women's organizations or communities. Mulyasari & Shaw [58] held a study on Women Welfare Associations (WWAs) in Bandung, pointing out that they have great potential in disaster risk communication. WWAs is said to provide a valuable platform for women in Bandung to play a role outside of their usual household responsibilities, namely in disaster risk reduction by collaborating with various parties, especially local governments.

Clissold et al. [59] held research on the role of women in the post-disaster recovery phase in Vanuatu. The results demonstrate that women are able to contribute to various important efforts. They act as drivers of social capital through informal networks to support the inclusion of disaster response and recovery processes, especially concerning ensuring financial security and meeting needs. Women also play an important role in collectivizing and leading forces through lobbying for rights and needs during the disaster response and recovery process. They also become innovators who reduce potential agricultural losses through adaptive efforts in agricultural activities and seed collection. Women, in addition, play a notable role as entrepreneurs who independently maintain income after the disaster.

Drolet et al. [30] examined the role of women in efforts to rebuild post-disaster life with case studies on floods in Pakistan and Hurricane in Florida, USA. The results depict that women can play a prominent role in post-disaster reconstruction efforts. They are able to form groups that actively participate in disaster management and establish networks with various parties such as the Red Cross and the Ministry of Health.

Another study that denotes the role of women in disaster management is conducted by Yuliati & Hastuti [60]. This research examined the role of women in Kalianda Village who contribute a lot in realizing the Disaster Preparedness Group (KSB). They can maximize the existence of the PKK organization as a forum for sharing disaster information and knowledge and work together to strengthen each other when a disaster occurs. Besides, they are active in an organization

called Taruna Siaga Bencana (Tagana), a place in which social volunteers are engaged in disaster relief. A study from Hastuti [61] also suggests the role of women in efforts to reduce disaster risk.

Research from Alam & Rahman [32] also explains that women can make an important contribution to the Water, Sanitation, and Hygiene (WaSH) program in Koyra. Their roles have positive implications for solving the problem of water and sanitation needs and increasing ecosystem resilience in the Koyra area after the Cyclone Aila disaster. Women are the main actors in changing WaSH habits in family members so that the resilience and ability to maintain and improve WaSH habits after natural disasters could be established. Women help improve the socio-economic status of the family and assist in the reduction of the burden of costs, time, and effort to collect water. They also increase knowledge about hygiene practices and obtain various positive institutional impacts.

Hou & Wu [62] state that women can also make a big contribution to the post-disaster recovery process. This has been investigated and result in the fact that women who have dominant leadership in post-Wenchuan Earthquake, Sichuan, China. They play a prominent role in three post-disaster stages. In the emergency response stage, women act as quick rescuers who save and assist in the evacuation of disaster victims. In the short-term reconstruction stage, women act as important decision-makers for the family, and in the long-term recovery and mitigation stage, women act as breadwinners to meet the family's economic needs. This shows that empowering women's leadership will support better reconstruction and recovery—as well as to promote gender equality in development.

A study from Moreno & Shaw [39] demonstrates that disasters can bring about changes in the power relations between women and men. Women's leadership organizations at the grassroots level have a very strategic position in driving long-term change, as well as enabling the transformation of women's empowerment reflected in the improvement of their social, political, and economic status. Various changes can be initiated from within to the outside by encouraging women's strengths, learning from each other, and collaborating. Building their resilience internally and externally can upgrade their adaptive capacity in dealing with disasters [63].

Ostadtaghizadeh & Ardalan [64] say that women are indeed more vulnerable to disasters. However, they have several capacities that support disaster resilience. They are seen as having high-risk perception so that they can carry out disaster risk reduction at the household level. Women can educate family members to manage risk. All forms of disaster risk reduction efforts from the planning to the evaluation stage, from local to national levels, must involve their role so that their capacity can be increased and empowered in disaster risk reduction efforts. Disaster risk reduction policies at the local community level should also be updated taking into account women's capacities.

A study conducted by Fujii & Kanbara [65] then explains that women's awareness of disaster risk reduction is actually not so low compared to men. Although their participation in disaster risk reduction programs is categorized as low, they actually have a high desire to take part. Thus, providing opportunities for women to participate in disaster risk reduction programs must be realized at various levels. These programs must pay attention to gender issues so that the whole community can improve disaster preparedness, mitigation, and

prevention [66]. Women's involvement will help reduce disaster risk in the long term so that policymakers, NGOs, and the academic community should pay more attention to this issue [67].

Women empowerment in disaster risk reduction must be carried out at the household and the community level to increase individual and collective awareness [42]. This effort can be pursued through the implementation of various programs that pay attention to gender at the smallest, regional, and national levels and discuss gender relations with an integrated approach, as well as involving various stakeholders so that they can promote gender equality and empower women. Women's participation in disaster risk reduction will increase stakeholders' attention to their needs and help realize the need fulfillment during disasters as women can influence decision-making in various programs and policies. Women also have a role in holding local knowledge which is crucial in disaster preparedness. They possess strong social networks as a forum for exchanging information and knowledge [68].

Based on the preceding description, it can be said that the improvement of Srikandi Bencana program at the smallest level in the community is greatly essential. The role of Dharma Wanita Persatuan UNNES is needed to realize that program. Its realization will help increase their capacity in dealing with disasters, reduce their vulnerabilities, and improve disaster preparedness.

This is because by escalating their capacity and understanding the risks they will face, women have the awareness to prepare for disasters through concrete actions related to disaster hazards and risks. They will have various plans for themselves and their families, as well as possessing the ability to move those plans quickly and effectively when a disaster occurs [45]. Currently, disaster emergency preparedness and response is an essential issue for all communities to be involved in as the number of disasters is increasing [69]. Disaster preparedness goes on to be pursued and is increasingly prominent in local, state, and national planning and management agendas as climate change increases the frequency and severity of disasters worldwide. Therefore, building a strong, healthy, and responsible community that is able to survive and recover from natural disasters is the most effective way to safeguard the community's future [44].

Even though the practice of disaster preparedness does not emphasize the purity of post-disaster community resilience, it must still be improved. This is because the community is always the first party to face and get affected by a disaster, and is the last to recover. However, if the community is facilitated, involved, and trained to handle disasters, its vulnerability will also be reduced [70]. The provision of the Srikandi Bencana can make Dharma Wanita Persatuan UNNES able to play a role as a motivator for women and other communities in disaster management efforts. These efforts can transform women's vulnerability into capacities possessing positive impacts on reducing disaster risk and increasing gender equality and women's status.

The low-level knowledge of Dharma Wanita members is motivated by the lack of socialization of the Srikandi Bencana program in the community. It is an evaluation for stakeholders who are responsible for efforts to reduce disaster risk and strengthen community capacity. This condition also depicts the need to escalate disaster preparedness for them so that they can have the knowledge, awareness, readiness, and capacity to deal with disasters at the pre-disaster, during the disaster, and

post-disaster stages.

Therefore, the realization of the Srikandi Bencana among the members of the Dharma Wanita Persatuan UNNES has an urgency to be carried out to improve the preparedness of women who have often been considered vulnerable in disasters. This program will support the role of women to get out of vulnerability and instead become parties with good capacities who can become motivators for others. Dharma Wanita should be a forum for sharing knowledge and information, establishing social networks, and strengthening the capacity and preparedness of its members—as well as for the surrounding community. Various activities here will also escalate women's social status and realize gender equality for women.

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