

CHAPTER I

INTRODUCTION

The introduction describes the background, problem formulation, objectives, research scopes and outline of report.

1.1 Background

West Sumatra is a region that has a high potential for disaster. The extreme weather factor and its geographical position are located in the hills and surrounded by active mountains. Potential disasters in West Sumatra include volcanic eruptions, landslides, floods, flash floods, tidal waves, earthquakes, fires, land fires, coastal abrasion, river abrasions, tornadoes (storms / strong winds / rainstorms), drifting / drowning disaster. West Sumatra's readiness to face these various threats has been pursued in various ways, from the formation of Disaster Management Agencies in 19 Regencies / Cities, the formation of Disaster Alert Communities in each Regency / City to holding outreach and education for the community (BPBD, 2017).

The BPBD annual report for West Sumatra in 2017 states that the number of disasters in West Sumatra in 2017 was 725 occurrence. The highest percentage of disaster occurrences was in Padang with 155 occurrence as shown in **Figure 1.1**. Because the of Padang has the largest and most significant number of disasters, disaster management requires active involvement and cooperation from various parties, from the government, the community, the private sector, academia to the media.

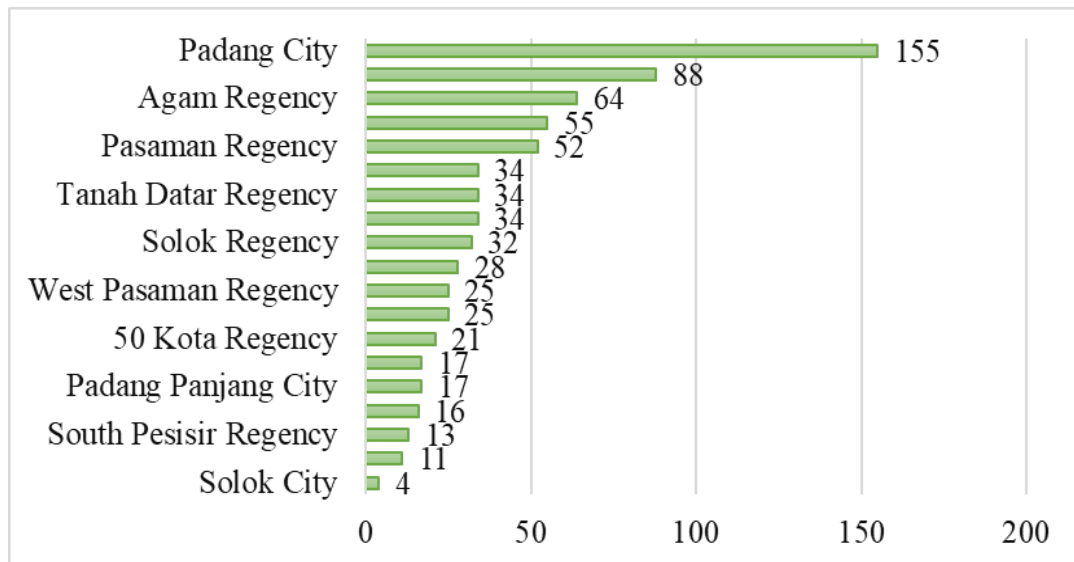


Figure 1.1 Disaster Occurrence in 2017 in West Sumatra.

Source: BPBD

Padang, geographically does have a high potential for disaster, one of the potential disasters that has a significant impact on physical damage and casualties is the earthquake that occurred on September 30, 2009 (BNPB, 2018). The high potential for disaster in Padang causes the resulting impact of the disaster to be high. This can be seen in **Table 1.1** regarding the history of disaster events in Padang in 1815-2012.

Table 1.1 The History of the Disaster at Padang in 1815-2012

Disaster	Occurrence	Died	Injuries	Lost	Evacuate	Heavily Damaged Building	Lightly Damaged Building
Flood	38	62	40	4	980	65	0
Extreme Waves and Abrasion	8	2	6	0	7656	760	1232
Earthquake	11	774	2462	4	0	79016	167232
Forest and land fires	1	0	0	0	0	0	0
Technology Failure	4	12	8	6	0	0	0

Disaster	Occurrence	Died	Injuries	Lost	Evacuate	Heavily Damaged Building	Lightly Damaged Building
Drought	1	0	0	0	0	0	0
Extreme weather	5	0	5	0	100	11	11
Landslide	10	48	9	4	0	18	2
total	78	898	2530	18	8736	79870	168477

Source: Indonesian Disaster Data & Information (DIBI) 1815-2012.

Based on **Table 1.1** Flood was the most frequent occurrence was 38 times. This is because many settlements are in low-lying areas and along streams. An earthquake was 11 times happen but caused biggest impact. It known by the number of victims and the damage it caused. The percentage of disaster occurrences in Padang can be seen in **Figure 1.2**.

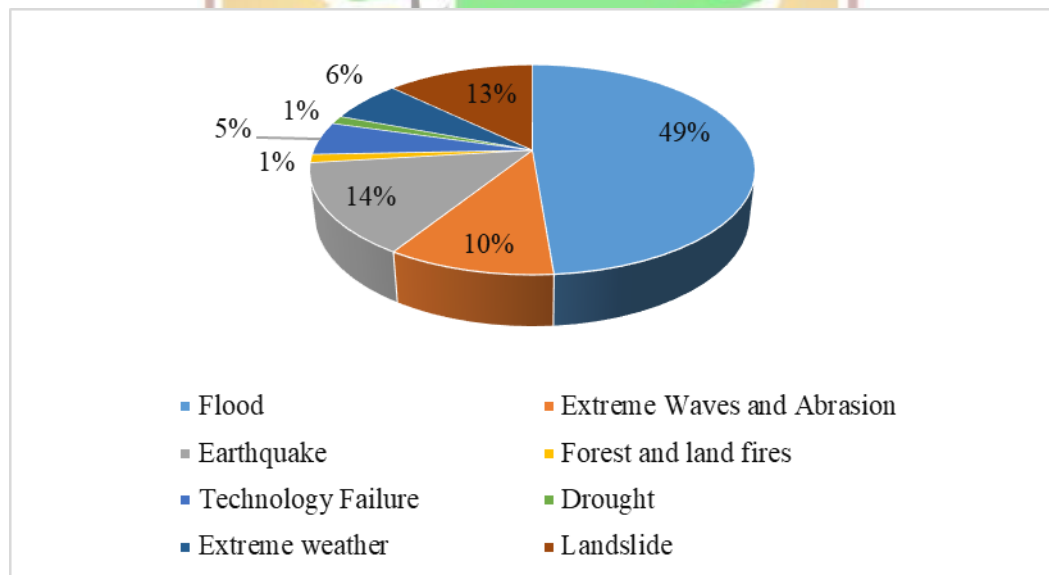


Figure 1.2 Percentage of Disaster Events in Padang

The high potential for disaster in Padang requires everyone to be prepared for disasters. One of the stakeholders for disaster preparedness is school. Schools have the potential to disseminate knowledge about natural phenomena to motivate the community to increase preparedness. In addition, the school is a place for

teaching and learning that also has risks in the event of a disaster. According to Act No. 21 of 2008, one of the groups most at risk of being affected by a disaster is children. The vulnerability of children to disasters is triggered by a limited understanding of the risks around them, which results in a lack of preparedness in facing disasters. Schools in Padang can be seen in **Table 1.2**

Table 1.2 Schools in Padang

	State	Private	Total
Elementary School	341	74	415
Junior High School	43	54	97
Senior High School	17	40	57
Vocational High School	14	28	42
Special School	2	36	38
Total			645

(Source: Kemendikbud)

Padang still has a few schools that have the capacity and ability to anticipate disasters (BPBD, 2019). The more the number of schools, the greater the number of students and the higher of disaster risk if the students are not prepared for disaster. Therefore, the Mayor of Padang has a mission including creating a community aware, caring and resilient to disasters. One of the actions taken to realize this mission was to create a program, namely *Sekolah Cerdas Bencana* (SCB) in 2018. SCB program for schools in the red zone. The red zone is located in place that has the potential for a tsunami to occur. Meanwhile, tsunami safe areas are often referred to as green zones. SCB is aimed at schools in the red zone because until now the red zone is a priority. Therefore, the green zone has not received the implementation of SCB as has been obtained by schools in the red zone.

The SCB program is useful for increasing the preparedness of school residents in the face of disasters, protecting school residents from the risk of death and injury in schools and strengthening disaster resilience through education (BPBD, 2019). In 2018 to 2019 BPBD has provided assistance to the SCB program to 105 schools, consisting of 88 elementary and 17 junior high schools.

Meanwhile, in 2020 it is planned to assist the SCB program to 75 schools in Padang. The activities of the SCB program are carried out by BPBD by taking turns from one school to another. Every year the schools that receive this program assistance will be different. After the SCB program has implemented in schools, the government hopes that schools were understand about disaster preparedness and also prepared if disaster happen. Preparedness has several levels according to the preparedness index value according to LIPI UNESCO which can be seen in **Table 1.3**. The higher the preparedness index value, the more prepared the area is to face disasters that occur.

Table 1.3 School Preparedness Index

Index	Level
0.67-1	High
0.34-0.66	Medium
0-0.33	Low

Based on **Table 1.2**, elementary schools are the largest list of schools in Padang are 415 schools. Every school has the potential for disaster, especially with the large number of students studying at the school. Considering that children are a vulnerable group who are still growing both mentally and mentally, efforts are needed to reduce disaster risk through physical development or awareness and increased capacity to face disasters or commonly referred to as disaster mitigation (RI Law Number 24 of 2007 on Disaster Management) . Schools that are located in the red zone or the green zone has a risk of a disaster. Moreover, Padang has a high level of potential for disasters, requiring school components such as teachers and students to be prepared if a disaster occurs. Therefore, preparedness is needed in schools, especially for students. In **APPENDIX D** it can be seen that both the red zone and the green zone do not have a preparedness index at a low level, these two zones have a medium and high level of preparedness index. For now the SCB program has not been aimed at schools that are in the green zone. Whereas the green zone also has the potential impacts like in the red zone. Therefore, an analysis of school disaster preparedness is needed, because it used to know how school preparedness in accordance with the current situation and conditions of the school.

1.2 Problem Formulation

The formulation of the problem of this research is how the preparedness of schools on facing disasters.

1.3 Objective of Research

The purpose of this study was to analyze school preparedness on facing disasters and recommendation for school.

1.4 Scope of problem

The scopes of the problem in this research are as follow

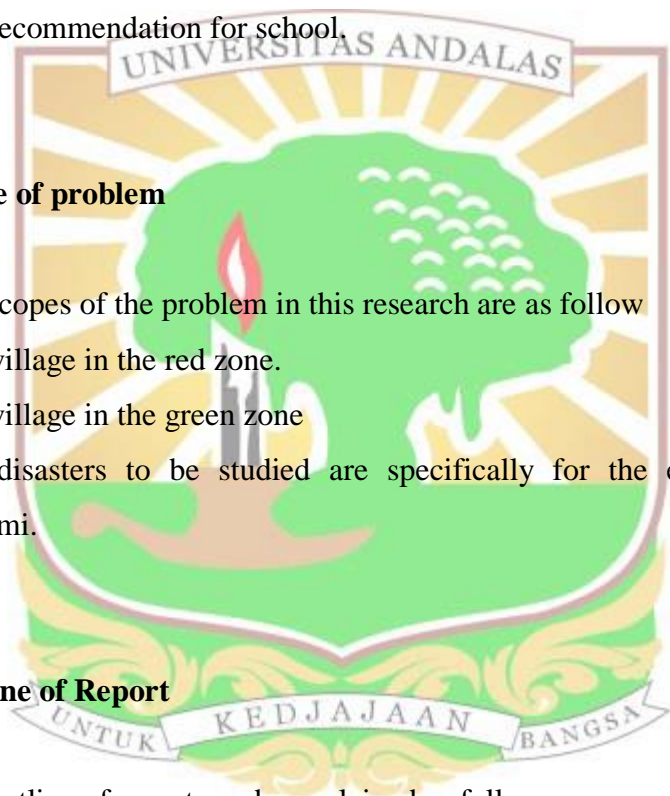
1. One village in the red zone.
2. One village in the green zone
3. The disasters to be studied are specifically for the earthquake and tsunami.

1.5 Outline of Report

The outline of report can be explained as follows.

CHAPTER I INTRODUCTION

This chapter describes the research background, problem formulation, research objectives, research scope and outline report.



CHAPTER II LITERATURE REVIEW

This chapter describes theories related to research conducted on disaster preparedness, statistics and indexes for disaster preparedness

CHAPTER III RESEARCH METHODOLOGY

This chapter describes systematically the steps involved in conducting the research.

CHAPTER IV RESULTS AND ANALYSIS

This chapter contains the process of data collection, data processing and analysis of the results that have been obtained

CHAPTER V CLOSING

This chapter contains the conclusions drawn based on the research objectives

