PARTICIPATORY DISASTER RISK ASSESSMENT (KRB) DOCUMENT




CANTI VILLAGE, RAJABASA DISTRICT, SOUTH LAMPUNG DISTRICT

LAMPUNG PROVINCE

2024

APPROVAL SHEET

Disaster risk assessment document in Canti Village, Rajabasa District, South Lampung Regency, Lampung Province. The aim is to guide village development planning to be more focused.

Canti, March 28 2024

Approve BPD Canti,	Drafting team FPRB Canti Village,
HA Rahman Yusuf	**A. RIFA'I**

Confirm
Head of Canti Village,

JAHIDIN

Know BPBD South Lampung Regency,	Know Paluma Nusantara,
ARISWANDI, SH, MH	**NANANG PRIYANA**

FOREWORD

Thank and gratitude to Allah SWT, the Almighty God, for all His grace and guidance.

Together with this, the Canti Disaster Risk Reduction/Disaster Resilient Village Forum (FPRB-Destana) with full support from Paluma Nusantara and South Lampung Regency BPBD has carried out a participatory disaster risk assessment in Canti Village, Rajabasa District, South Lampung Regency in 2024.

Some of the outputs that have been achieved are the results of community participatory studies and discussions which were then compiled into several documents, including the Village Disaster Risk Assessment document. This document was prepared as a lesson for all parties involved, both the Canti Village Government and the Canti Village community in general.

We realize that this document is still far from perfect. For this reason, we really hope for constructive criticism and suggestions for the perfection of this document, and we hope that this Canti Village Disaster Risk Assessment Document can be useful for all of us. Amen.

Finally, we would like to express our deepest gratitude to all parties who have helped and supported this program.

Canti, March 30 2024

Head of Canti Village,

JAHIDIN

LIST OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I
INTRODUCTION

A. Background

The international community has dubbed Indonesia a “disaster supermarket”. Because all kinds of disasters can occur in Indonesia. Causing loss of life and property. Types of disasters in Indonesia can originate from natural threats or due to human activities. Starting from tsunamis, floods, volcanic eruptions and rain lava, earthquakes, landslides, tornadoes, tidal waves, abrasion, drought, fires, environmental pollution, technological failures, disease outbreaks, social conflicts and terrorism.

The issuance of Law No. 24 of 2007 concerning Disaster Management is a step forward for Indonesia in organizing disaster management efforts. This law was then followed up with the issuance of Government Regulation Number 21 of 2008 concerning the Implementation of Disaster Management. One of the derivatives of PP 21 of 2008 is the Regulation of the Head of the National Disaster Management Agency Number 02 of 2012 concerning General Guidelines for Disaster Risk Assessment. Disaster risk assessment is an approach to show the potential negative impacts that may arise as a result of a potential disaster that strikes.

In order to reduce potential disaster risks in the future, strategic steps need to be taken starting from an assessment of the disaster risk itself. This study was carried out to analyze and assess potential threatening disasters. In other words, disaster risk assessment is a tool for assessing the possibility and magnitude of losses due to existing disaster threats. Knowledge of the possibility and magnitude of losses so that the planning focus and integration of disaster management becomes more effective. It can be said that disaster risk assessment is the basis for ensuring harmony in the direction and effectiveness of disaster management in a region. Therefore, disaster risk studies need to be carried out in every area that is prone to disasters. This disaster risk study will produce risk levels and risk maps as well as action recommendations for regional disaster management planning.

It is hoped that this disaster risk study can become a basis for regions to develop disaster management policies. At the community level, it is hoped that the results of the study can become a strong basis for planning preparedness actions at the

community level. Based on this, the Canti Village Government together with community elements in the village prepared a disaster risk assessment document for Canti Village according to the results of discussions held on 14-22 March 2024 at the Canti Village hall, Rajabasa District, South Lampung Regency.

B. Objective

1. General purpose

   Encourage the realization of a resilient society capable of reducing disaster risk independently and sustainably.

2. Special purpose

   a. Assess the potential negative impacts that may arise as a result of a potential disaster.
   b. Increasing community institutional capacity in reducing disaster risk.
   c. Increased cooperation in reducing disaster risk by stakeholders.

C. Legal Foundation

1. UU no. 24 of 2007 concerning Disaster Management Article 36 paragraph (1) and (2);
2. Government Regulation Number 21 of 2008 concerning Implementation of Disaster Management Article 6;
3. Regulation of the Head of the National Disaster Management Agency Number 01 of 2012 concerning Disaster Resilient Villages;
4. Regulation of the Head of the National Disaster Management Agency Number 02 of 2012 concerning General Guidelines for Disaster Risk Assessment;
5. Technical Module for Facilitating Disaster Resilient Village/Subdistrict Activities regarding Participatory Disaster Risk Assessment.

D. Scope

The scope of the disaster risk study in Canti Village is the identification and study of threats, vulnerabilities, capacity and assessment of the magnitude of disaster risk in Canti Village.

E. Understanding

The following is the meaning of the terms used in the Canti Village Disaster Risk Assessment Document:

The following is the meaning of the terms used in the Rajabasa Village Disaster Risk Assessment Document:

1. **Disaster threat** is an event or event that could cause a disaster.
2. **The National Disaster Management Agency,** hereinafter abbreviated as BNPB, is a non-departmental government agency in accordance with statutory provisions.
3. **The Regional Disaster Management Agency,** hereinafter abbreviated as BPBD, is a regional government agency that carries out disaster management in the region.
4. **Disasters** are events or series of events that threaten and disrupt people's lives and livelihoods caused by both natural and/or non-natural factors and human factors, resulting in human casualties, environmental damage, property loss and psychological impacts.
5. **Disaster Risk Assessment** is an integrated mechanism to provide a comprehensive picture of a region's disaster risk by analyzing the threat level, loss level and regional capacity. Disaster Risk Assessment in other words isAnalysisDisaster Risk involves aspects of socio-economic cost-benefit analysis, determining priorities, determining acceptable levels of risk, as well as elaborating scenarios and strategic steps.
6. **Capacity** is the ability of regions and communities to take action to reduce the level of threat and level of losses due to disasters.

7. **Vulnerability** is a condition of a community or society that leads to or causes inability to face the threat of disaster.
8. **Preparedness** is a series of activities carried out as an effort to eliminate and/or reduce the threat of disasters.
9. **Disaster victims** are people or groups of people who suffer or die as a result of a disaster.
10. **Participation** is community involvement in solving a problem.
11. **Map** is a collection of points, lines, and areas defined by their location with a particular coordinate system and by their non-spatial attributes.
12. **Disaster Risk Map** is a description of the level of disaster risk in an area based on a Disaster Risk Study made in a participatory manner.
13. **Disaster-prone** is the geological, biological, hydrological, climatological, geographical, social, cultural, economic and technological conditions or characteristics of an area for a certain period of time that reduce the ability to prevent, mitigate, achieve preparedness and reduce the ability to respond to adverse impacts. certain dangers.
14. **Disaster risk** is the potential loss arising from a disaster in an area and a certain period of time which can include death, injury, illness, life at risk, loss of sense of security, displacement, damage or loss of property, and disruption of community activities.
15. **Risk Level** is a comparison between the level of loss and the regional capacity to minimize the level of loss and the level of threat due to disasters.

CHAPTER II
GENERAL DESCRIPTION

A. Regional Overview

According to BPS data for 2020, Canti Village is included in the self-supporting village classification. Geographically, Canti Village is in the Rajabasa District, South Lampung Regency, Lampung Province. The distance from Canti Village to the District Capital is 3.3 km, to the Regency Capital 11.4 km and to the Provincial Capital 80.4 km. Canti Village is directly adjacent to:

- North: Canggung Village, Rajabasa District
- South: Banding Village, Rajabasa District
- East: Mount Rajabasa
- West: Sunda Strait Sea

The number of people in Canti Village consists of;

Table 2.1. Number of people in each hamlet

No.	Hamlet	Gender		Amount
		Man	Woman	
1	Hamlet I	215	181	**396**
2	Hamlet II	226	245	**471**
3	Hamlet III	402	366	**768**
4	Hamlet IV	244	223	**467**
AMOUNT		**1,087**	**1,015**	**2,102**

Source: Canti Village Profile, 2024

Table 2.2. Land Use in Canti Village

No	Land Type	Area (Ha)
1	Rice field area	64 Ha
2	Area of dry/moor land	172 Ha
3	Residential land area	60 Ha
4	The area of community and individual plantation land	173 Ha
5	Wide public facilities	1.81 Ha
6	Area of protected forest land	200 Ha

Source: Canti Village Profile, 2024

Table 2.3. Population by livelihood

No.	Livelihood	Amount
1	Farmers/Plantation	342
2	Not Yet/Not Working	600
3	Freelance	38
4	Student/Students	243
5	Self-employed	164
6	Private sector employee	77
7	Taking care of household	480
8	Farm/Plantation Workers	5
9	Government employees	9
10	Village Apparatus	14
11	Honorary Employees	4
12	Retired	4
13	Driver	13
14	Trading	10
15	Household assistant	19
16	Teacher	20
17	Bricklayer	26
18	Carpenter	5
19	TNI/POLRI	1
20	Fisherman	27
21	Motorcycle taxis driver	7
TOTAL		**2,102**

Source: Canti Village SID, 2024

Based on data from BPS in 2020, data on educational facilities in Canti Village includes 1 Canti 1 State Primary School, 1 South Lampung 5 State Ibtidaiyah Madrasah and 1 Al Islah Early Childhood School.

CANTI VILLAGE MAP

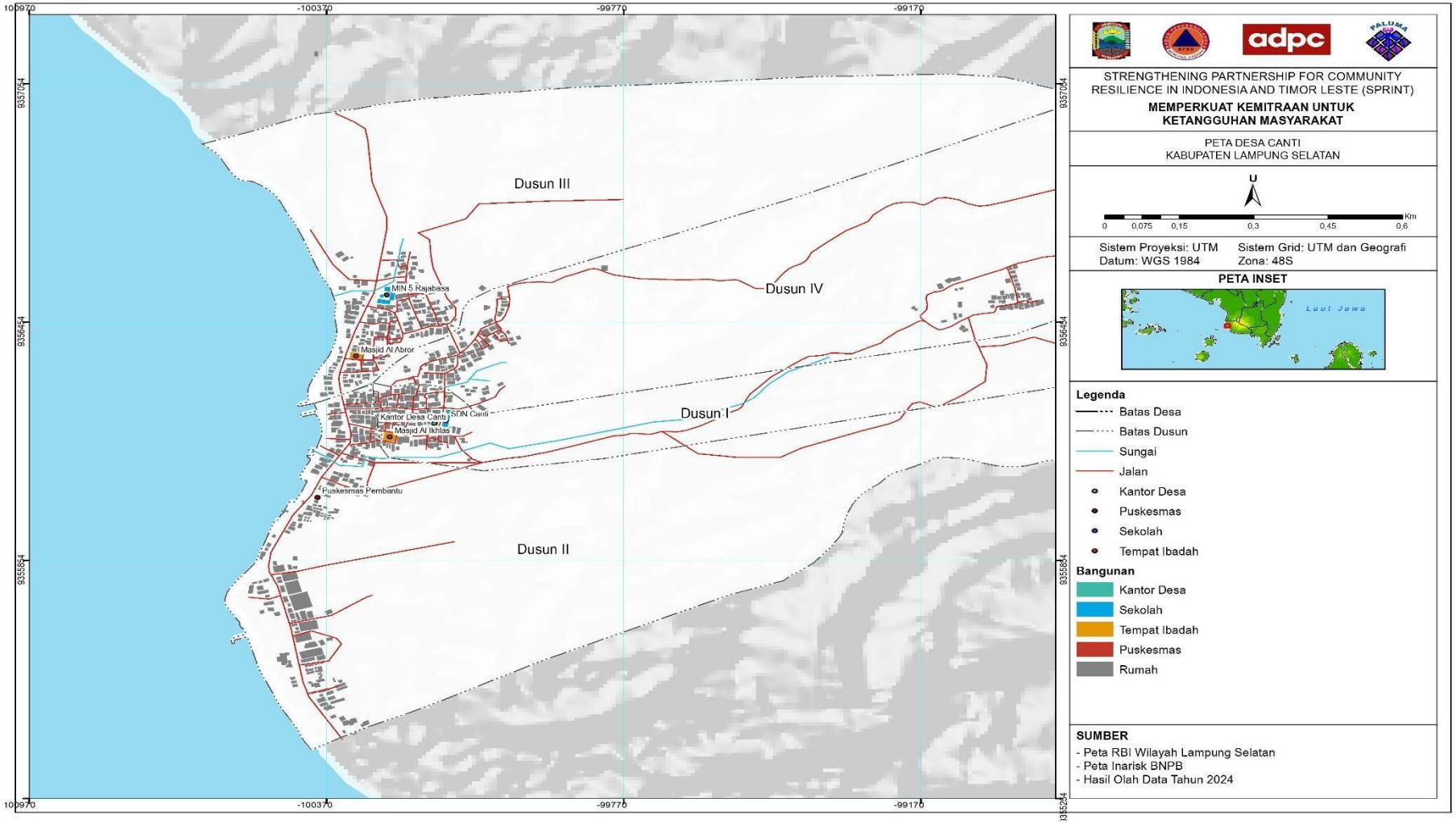

Figure 1 Map of Canti village, 2024

Table 2.4. Number of Hamlets and Neighborhood Units for Each Hamlet

No	Hamlet	Get alongNeighbor
1	I	3
2	II	3
3	III	3
4	IV	2

Source: Canti Village KRB Workshop, 2024

B. Disaster Overview

1. History of events

Incidents or incidents related to damage, loss or loss of life have occurred in Canti Village. The following events/events were recorded;

Table 2.5. The Canti Village disaster incident

NO	TIME	EVENTS / EVENTS	CHRONOLOGICAL
1.	1883	The eruption of Mount Krakatoa caused a tsunami	August 27, 1883, with a loss of life of 36,000 people. Based on residents' stories, at that time residents in Rajabasa were completely swept away by the tsunami except those who are outside the area, go on Hajj
2.	1986, 2011, 2022	Flood	In 2011 there was a flood in Hamlet III; - There are 1 RT 009 affected riprap heavily damaged Hamlet IV; - RT 010 which was affected had 3 houses badly damaged, the bridge connecting Hamlet III and Hamlet IV was badly damaged In 2022 and 2023 there will be flooding in Hamlet II in RT 005 and 006; - RT 005 has 10 houses flooded, - RT 006 has 10 buildings flooded.
3.	2018	Tsunamis	On December 22 2018 at 21.30 WIB with impact Hamlet II RT 005 and 006; - 5 stalls were heavily damaged, 1 prayer room was heavily damaged, 1 pier was heavily damaged - 3 houses were moderately damaged, 7 houses were slightly damaged
4.	2023	Tornado	In October 2023 with the impact of damaged houses Hamlet II; - 1 house was slightly damaged Hamlet III; - 1 house was badly damaged Hamlet I; - 3 houses were slightly damaged

5.	2020	Covid-19	In 2020 there were no fatalities, there were around 35 people in self-isolation spread across almost all hamlets
6.	1999, 2023	Fire	1 house burned down in Hamlet II RT 004 The fire occurred in Hamlet IV on agricultural land
7.	2017	Flood Rob	On November 28 2017, this occurred in Dusun II, RT 005, with the impact being that 3 houses were moderately damaged, 6 shops were slightly damaged and the pier was slightly damaged.
8.	2006	Earthquake	The Kemiling Swarm Earthquake affected 5 buildings with light damage, 9 houses were damaged and clean water sources turned cloudy and dry.
9.	2000	Malaria,chikungunya	Occurs in season transition, in Hamlet II there were 7 people attacked by malaria, 3 people attacked by chikungunya

Source: Canti Village KRB Workshop, 2024

2. Potential hazard

Potential hazards are possible events that could cause a disaster. From the results of the studies that have been carried out, there is a potential for danger in Canti Village.

Table 2.6. Variety of Threats

TYPE OF THREAT	VARIETY OF THREATS
Geological threats	Earthquake, tsunami
Hydrometeorological Threats	Flash floods, tornadoes, landslides, tidal floods
Biological threats	Covid-19, malaria mosquito
Threat of failure Technology	-
Environmental threats	House fires, land fires and piles of unmanaged rubbish.
Social threats	-

Source: Canti village KRB workshop, 2024

CHAPTER III
ASSESSMENT OF VILLAGE CAPACITY AND VULNERABILITY

Capacity assessment is an assessment of the ability of a system or entity to cope with certain risks or pressures. Meanwhile, vulnerability studies focus on identifying and evaluating potential losses or negative impacts that could arise due to the vulnerability or susceptibility of a system to threats or disturbances.

A. CANTI VILLAGE CAPACITY STUDY

Capacity is a form of community and stakeholder resources to prevent or reduce threats, avoid threats and reduce existing weaknesses. Despite the threats above, Canti Village also has capacities that can be used to minimize disaster risks.

The determination of this capacity is obtained from analyzing existing livelihood assets in society, namely human, physical, economic, socio-political and environmental resource assets. The following are some of the capacities possessed by Canti Village as a result of the disaster risk assessment carried out by the community in the Disaster Risk Assessment workshop in facing threats.

Table 3.1. Canti Village Capacity Study

No.	Threat/Disaster	Variable	Capacity
1	Tsunamis	Human Resources	FPRB-Destana and OPDIS were formed, It's been agreed system early warning There has been training to increase volunteer capacity (tagana, sibad PMI) Plan documents are available contingency which can be activated into an operational plan
		Physical resources	Temporary evacuation places (TES) are already available at schools and mosques. Final evacuation places (TEA) are available at residents' homes in Hamlet IV RT 011 and Hamlet III in Gelumpai (RT 007, 008 and 009)
		Environmental Resources	- The community has abundant sources of clean water - There is track evacuation going to the location of the gathering point or final evacuation place that is easy to pass.
		Economic resources	- Availability of sufficient food sources (bananas, durian, corn, rice, cassava) - There are various processed food MSMEs such as banana chips, dry cakes, wet cakes. - There are many hatchery industries - There is a beautiful pier
		Sociocultural resources	- There are fishermen groups, farmer groups, the Association of Farmer Groups

			- There are regular meetings every Friday night for men and Friday afternoons for mothers - The existence of a union group (for funeral purposes, wedding receptions)
2	Flash floods	Human Resources	Having disaster volunteers (Destana) Have a spirit of mutual cooperation Have an evacuation vehicle Have the individual ability to carry out rescue work when a disaster occurs
		Physical resources	There are Temporary Evacuation Places (TES) and Final Evacuation Places (TEA) Many residents' houses are in disaster-safe areas
		Environmental Resources	There is good and proper road access to get to the evacuation site
		Economic resources	- Availability of sufficient food sources (bananas, durian, corn, rice, cassava) - There are MSMEs that process banana chips, dry cakes, and wet cakes. - There are restaurants
		Sociocultural resources	- There are fishermen groups, farmer groups, the Association of Farmer Groups - There are regular meetings every Friday night for men and Friday afternoons for mothers, - The existence of a union group (for funeral purposes, wedding receptions)
3	Earthquake	Human Resources	Having disaster volunteers (Destana) Have a spirit of mutual cooperation Have an evacuation vehicle Have the individual ability to carry out rescue work when a disaster occurs Having knowledge when an earthquake occurs with Standard Operating Procedures (SOP) 3B (Kneel, Cover, Survive) Having knowledge about evacuation with BBMK Standard Operating Procedures (don't run, don't make noise, don't push, don't turn back)
		Physical resources	There is a Temporary Evacuation Place (TES) and a Final Evacuation Place (TEA) that have been agreed upon There are many residents' houses in disaster-safe areas that can be used as evacuation places
		Environmental Resources	There is good and proper road access to get to the evacuation site
		Economic resources	- There are sufficient food sources (bananas, durians, corn, rice, cassava) and fruit - There are MSMEs of banana chips, cookies, cakeswet business catering etc - There are many pond and shrimp fishing industries .
		Socio-cultural	- There are fishermen groups, farmer groups, the

		resources	Association of Farmer Groups, - There are regular meetings every Friday night for men and Friday afternoons for mothers, - The existence of a union group (for funerals, wedding receptions, etc.)
4	Flood Rob	Human Resources	Having disaster volunteers (Destana) Have a spirit of mutual cooperation Have an evacuation vehicle Have the individual ability to carry out rescue work when a disaster occurs There is knowledge of residents about the expected arrival of tidal floods (in the middle of the Hijri month on the 15th)
		Physical resources	There are Temporary Evacuation Places (TES) and Final Evacuation Places (TEA) Many residents' houses are in disaster-safe areas so they can be used as evacuation places
		Environmental Resources	- There is good and proper road access to get to the evacuation site - Some evacuation route signs to the barracks have been installed shelter
		Economic resources	- There are sufficient food sources (bananas, durians, corn, rice, cassava) and fruit - The existence of MSMEs with banana chips, dry cakes and wet cakes to support sustainable living
		Socio-cultural resources	- There are fishermen groups, farmer groups, the Association of Farmer Groups, - There are regular meetings every Friday night for men and Friday afternoons for mothers, there are union groups (for funerals, wedding receptions)

Source: Canti Village KRB Workshop, 2024

B. VULNERABILITY ASSESSMENT OF CANTI VILLAGE

Vulnerability is the level of a society's lack of ability to prevent or reduce the impact to achieve readiness in facing certain dangers. Vulnerability can take the form of socio-cultural, physical, economic, natural and environmental problems which can have various causes.
So vulnerability is a negative condition in society so that it can be exposed to threats. Threats can be in the form of inappropriate policies, low community motivation, and a lack of facilities and infrastructure to support capacity. Apart from general causal factors, there are also several vulnerability factors that can influence the high risk of disaster in Canti Village. This vulnerability can be seen from several measurable factors including human, physical, economic, socio-political and natural or environmental factors.

The following is a vulnerability assessment that was jointly identified in the Canti Village Disaster Risk Assessment workshop.

Table 3.2. Canti Village Vulnerability Study

No	Types of Disasters	Consequences and Impact	Location	Resources
1	Tsunamis	The trauma felt by the community was that 6 food stalls were heavily damaged, 1 prayer room was heavily damaged, the pier was heavily damaged, 10 boats were heavily damaged, 5 houses were slightly damaged, 2 fish ponds were slightly damaged, 7 motorbikes were heavily damaged.	Hamlet II RT 04,05 and 06 Hamlet III RT 09	Experience it first hand
2	Flash floods	2011 Flood, Trauma felt by the community along the river, 11 people were seriously traumatized, 3 houses were badly damaged, 1 cage unit was badly damaged, 3 livestock (goats) were lost, 5 boats were badly damaged, 33 meters of riprap was badly damaged, 25 Kg of dried cloves, 1 bridge was seriously damaged, 4 fish ponds measuring 6x6 m were badly damaged.	Hamlet IV RT 010 And Hamlet III RT 07 and 09	Know and experience directly
3	Earthquake	Hamlet II: 4 houses heavily damaged Hamlet II: 10 houses slightly damaged. Hamlet I and III: 11 houses were slightly damaged Hamlet IV: 2 houses slightly damaged	One village	Experience it first hand
4	Rob flood	5 houses were slightly damaged, 15 meters of provincial road damaged (asphalt peeling), 6 shops were heavily damaged, 10 fishing boats were moderately damaged	Hamlet II RT 05 Hamlet III RT 09	Experience it first hand

Source: Canti Village KRB Workshop, 2024

C. Canti Village disaster risk analysis

Disaster risk is the possibility of losses occurring in an area within a certain period of time due to a threat turning into a disaster. Risks can include death, injury, illness, mental disorders,

forced evacuation, damage or even loss of property, loss of sense of security and disruption of community activities. The correlation or pattern of relationship between capacity threats and vulnerability is a benchmark for calculating the resulting disaster risk. The risk level of a disaster is based on the formula:

DISASTER RISK = THREATS X VULNERABILITIES
CAPACITY

The higher the threat of danger in an area, the higher the risk of that area being affected by a disaster. Likewise, the higher the level of vulnerability of the community or population, the higher the level of risk. But on the contrary, the higher the level of community capability, the smaller the risks they face.

By using risk analysis calculations, the level of risk faced by the area concerned can be determined. As a simple step for assessing the risk of recognizing dangers/threats in the area concerned. All of these hazards/threats are inventoried, then existing vulnerabilities are estimated and compared with capacity factors which are currently still limited.

Based on the results of the Disaster Risk Study which was formulated together with measuring existing vulnerabilities and combined with capacity factors, it can be seen that the level of disaster risk in Canti Village can be depicted as in the following table:

Table 3.3. Risk level based on capacity x vulnerability

RISK LEVEL		CAPACITY LEVELS		
		TALL	CURRENTLY	LOW
LEVEL OF VULNERABILITY	LOW	earthquake		
	CURRENTLY	Rob flood	Flash floods	
	TALL			Tsunamis

Tall
Currently
Low

CHAPTER IV
DISASTER RISK ASSESSMENT

A. Threat Ranking

Threat ranking aims to understand and assess the types of threats, rank their probability of occurrence and estimate their impact.

Table 4.1. Threat Ranking

No	VARIETY OF THREATS	POSSIBILITY OF HAPPENING	ESTIMATED IMPACT	TOTAL	RATING
1	Tsunamis	3	3	6	1
2	Flash floods	3	2	5	2
3	Covid-19	1	1	2	7
4	Tornado	1	1	2	5
5	Earthquake	3	1	4	3
6	Flood Rob	2	1	3	4
7	malaria outbreak,chikungunya	1	1	2	6

Source: KRB Canti Workshop, 2024

Information:

Possible Occurrence	Estimated Impact
Value 1 = Very unlikely to occur. Value 2 = Very unlikely to occur Score 3 = Very likely to happen. Score 4 = Definitely happen	Value 1 = Not heavy Value 2 = Somewhat heavy Value 3 = Heavy Score 4 = Very heavy

From the results of discussions held at the Canti Village Disaster Risk Assessment workshop on 1-2 February 2024, it was agreed that there were 7 threats that could potentially occur in Canti Village. The threat rankings from highest to lowest are:

1. Tsunamis
2. Flash floods
3. Earthquake
4. Rob flood
5. Windnipplepickaxe
6. Malaria outbreak
7. Covid-19.

It was agreed that the disaster risk assessment at the workshop and preparation of this document would focus on four threats, namely tsunamis, flash floods, earthquakes and tidal floods.

B. Threat Character Assessment

A threat is a condition caused by nature, human action or a combination of both, which can cause losses in terms of human, economic, infrastructure, environmental and socio-political aspects. Each region has different potential threats depending on geographical, environmental, socio-political, economic and population conditions.

Each form of threat has a different character, even the same threat will have a different character because of the different locations. The character or characteristics of threats must be recognized. These characters or characteristics can be expressed using scientific or natural measures. Several things that are studied from the character of the threat are the name of the threat, its type, origin/cause, signs, time interval, damaging factors, speed, frequency, duration, period and intensity.

Table 4.2. Character of the Tsunami threat in Canti Village

NO	CHARACTER	STUFFING
1	What type (natural, non-natural, mixed)	Tsunami (natural disaster)
2	What is the cause	Tectonic earthquakes, mountain eruptions in the deep ocean, and volcanic earthquakes
3	What are the damaging factors?	High waves, debris, rubbish and large logs carried by the water
4	What are the warning signs	The sudden receding of sea water, the sudden arrival of high waves
5	Time out	Cannot be determined
6	Frequency	Cannot be determined
7	Duration	10-30 minutes
8	Intensity	Hamlet II and Hamlet III
9	Duration	30-60 minutes
10	Intensity	Very strong, along the coast
11	Position	The closest settlements to the sea are 8 meters from Hamlet II and Hamlet III

Source: Canti village KRB workshop, 2024

Table 4.3. The character of the threat of flash floods in Canti Village

NO	CHARACTER	STUFFING
1	What type (natural, non-natural, mixed)	Flash floods (hydrometeorology)
2	What is the cause	High intensity rain occurred for 24 hours without a break.
3	What are the damaging factors	Deforestation, narrowing of river flows, careless dumping of rubbish, debris from trees carried by water
4	What are the warning signs	The water discharge is increasing or increasing than usual, many tree branches are being carried away by the water current
5	Time out	1 hour from signs appearing
6	Speed is present	5 – 10 minutes
7	Period	1-2 times every rainy season
8	Frequency	1-2 times every rainy season
9	Duration	2-3 Hours
10	Intensity	Hamlet III and Hamlet IV
11	Position	The closest house to the river is 2 meters

Source: Canti Village KRB Workshop, 2024

Table 4.4. Character of the threat of the Canti Village Earthquake

NO	CHARACTER	STUFFING
1	What type (natural, non-natural, mixed)	Earthquake (natural disaster)
2	What is the cause	Earth's plates shift and volcanic eruptions
3	What are the damaging factors	Vibrations or shocks so powerful that they can collapse buildings
4	What are the warning signs	There isn't any
5	Time out	There isn't any
6	Speed is present	10 - 59 seconds
7	Period	Unknowable
8	Frequency	Not known
9	Duration	10 - 59 seconds
10	Intensity	All hamlets in Canti village, especially hamlet II
11	Position	All hamlets in Canti village

Source: Canti Village KRB Workshop, 2024

Table 4.5. The character of the threat of flooding in Canti Village

NO	CHARACTER	STUFFING
1	What type (natural, non-natural, mixed)	Tidal floods (hydrometeorology and nature)
2	What is the cause	The moon's gravitational force causes sea levels to rise
3	What are the damaging factors?	Strong winds blow from the west, pushing water towards land
4	What are the warning signs	Occurs during the full moon
5	Time out	30-60 minutes
6	Speed is present	5-30 minutes
7	Period	Unknowable
8	Frequency	Unpredictable
9	Duration	2 – 3 days
10	Intensity	Hamlet II RT 005, and Hamlet III RT 009
11	Position	The closest building to the beach is 8 meters away

Source: Canti Village KRB Workshop, 2024

C. Disaster Risk Level Assessment

Disaster risk assessment is basically an effort to produce the level of disaster risk in an area through calculating three main components, namely threat, vulnerability and capacity. Capacity is the resources available to reduce vulnerabilities and prevent threats or reduce the level of threats. These resources can be in the form of policies, activities, knowledge, skills, tools, personnel, funds and others. The greater the available resources, the higher the power, the lower the risk. Conversely, the fewer the resources, the lower the strengths or the higher the weaknesses, the higher the risk.

The risk level is obtained from comparing the loss level with the capacity level. A high risk level (T) indicates that the capacity to reduce existing losses is still low, while a low risk level (R) indicates that they have the capacity to reduce the level of existing losses. The moderate risk level (S) indicates a balance between available capacity and existing vulnerabilities.

Table 4.6. Tsunami Threat Risk Assessment

Type of threat: Tsunami Village:

Canti District: Rajabasa

Regency/City: South Lampun

Lampung province

ASSETS AT RISK	ESTIMATE THE FORM OF RISK IN ASSETS			VULNERABILITIES CAUSE ASSETS TO BE AT RISK	CAPACITY AVAILABLE	RISK LEVEL (T/S/R)
	FORM OF RISK	AMOUNT	NOMINAL			
MAN	The victim had minor injuries	6 people	IDR 600,000/person	Piles of rubbish and wood, stones and mud cause the environment becomes damaged, dirty and messy	There is a team of village volunteers/village FPRB and community members who are always ready to work together	S
	Itching and headaches Evacuate	100 people 150 people	Rp. 10,000,000 Rp. 100,000,000	Dirty water and piles of rubbish cause an unhealthy environment Residential areas affected	There is a 24 hour Regional General Hospital service There are refugee barracks	Q Q
ECONOMY / FINANCIAL	Residents cannot work	200 people	Rp. 100,000,000	Residents had to evacuate, several residents were sick	There is assistance for daily needs for affected residents	Q

	Business premises and stalls were closed and some were damaged	7 kiosks, 8 food stalls and a hatchery business were heavily damaged	IDR 250,000,000, -	Business premises and stalls were heavily damaged, resulting in the economy of the affected residents being paralyzed	Availability of final evacuation places or refugee barracks and assistance from various parties to ease the burden on affected residents	Q
	Fishing boat	5 units of engine boats	75,000,000	That boatmooredThe Canti Beach pier was badly damaged by the tsunami	Community self-help and mutual cooperation	Q
		6 units of boats	12,000,000 were carried away by the tsunami	The small boat was destroyed and could not be used again	Community self-help and mutual cooperation	S

PHYSICAL/ INFRASTRUCTURE	Homes Stall/kiosk	17 families 7 units	Rp. 170,000,000 Rp. 125,000,000	The house was slightly damaged Heavily damaged	Community self-help and mutual cooperation	Q
	Harbor road	15 meters	IDR 50,000,000	The main road is peeling and has holes because of the waves	There is assistance from the government and other parties as well as volunteers who are ready to carry out rebuilding	Q

	Prayer room	1 Unit	Rp. 110,000,000	The prayer room was directly affected by the tsunami waves which resulted in serious damage	There is assistance from Islamic organizations and community contributions to rebuild places of worship	Q
	Green Open Space (RTH)	100 trees	IDR 10,000,000	Damage to green open space asplantdecoratoralongThe road section was completely destroyed and needed replanting	FPRB destana volunteers, together with the village government. Community members and the Environmental Service are ready to replant	Q
	Waterways	3 points	IDR 36,000,000	The water channel was damaged by the tsunami waves	Community cooperation for community service	Q

NATURE / ENVIRONMENT	The streets are dirty and the waterways are covered with tsunami debris	The road section is 1 km long	IDR 15,000,000	The main roads and waterways were covered with rocks, rubbish, sticks, tree branches and mud.	Mutual cooperation carries out cleaning carried out by the community	Q
SOCIAL POLITICS	Group meetings and social activities disturbed	20 families		Community activities such as religious studies and routine community meetings were disrupted	There is an FPRB team together with the Village Government to carry out socialization and mental recovery of residents	Q

Source: Canti Village KRB Workshop, 2024

Table 4.7. Flash Flood Threat risk assessment

Threat Type: Flash floods
Village/ : Canti District:

Rajabasa Regency/City : South

Lampung

Lampung province

ASSETS AT RISK	ESTIMATE THE FORM OF RISK IN ASSETS			VULNERABILITIES CAUSE ASSETS TO BE AT RISK	CAPACITY AVAILABLE	RISK LEVEL (T/S/R)
	FORM OF RISK	AMOUNT	NOMINAL			
MAN	Minor injuries	10 People	IDR 100,000/person	Tripped while evacuating livestock	There are supporting community health centers and health cadres who are ready to help	S
	fear (trauma)	15 souls	Rp. 500,000/person	Due to frequent flooding, 5 residents experienced trauma	There is an FPRB at the Canti village destana and a psychosocial team assisted by the Rajabasa District Health Center who are ready to provide assistance to affected residents	S

ECONOMY / FINANCIAL	Damaged plants	8 hectares	RP. 12,000,000/Hectare	As a result of being hit by flash floods, corn and fruit crops failed	There are other businesses and savings to continue life in addition to assistance from various parties	R
PHYSICAL/ INFRASTRUCTURE	Damage to house buildings	3 houses were badly damaged 8 slightly damaged	IDR 100 million/house Rp. 5 million/house	The building is located on the bank of the river	There is an FPRB team and village government as well as community members who are ready to help carry out rehabilitation	S

NATURE / ENVIRONMENT	Narrowing of waterways and lots of rubbish	3 points	Rp. 15,000,000	The narrowing of rivers and other waterways and the accumulation of rubbish in them throughout River flow	• The community has minimal efforts and equipment to clean up rubbish. • High spirits mutual cooperation community members	S
SOCIAL POLITICS	The settlement is on the river bank	3 Hamlets	IDR 15,000,000	Outreach to residents in areas prone to flash flood disasters	There is a Canti Village FPRB team which is ready to carry out capacity building and further outreach	S

Source: Canti Village KRB Workshop, 2024

Table 4.8. Earthquake Threat Risk Assessment

Type of Threat: Earthquake
Village/Sub District: Canti
District: Rajabasa
Regency/City: South Lampung
Lampung province

ASSETS AT RISK	ESTIMATE THE FORM OF RISK IN ASSETS			VULNERABILITIES CAUSE ASSETS TO BE AT RISK	CAPACITY AVAILABLE	RISK LEVEL (T/S/R)
	FORM OF RISK	AMOUNT	NOMINAL			
MAN	The victim died Trauma The victim had minor injuries	0 people 9 people 5 people	Rp. 00 Rp. 100,000/person Rp. 100,000/person	Earthquakes often occur, even though they are of moderate intensity Falling roof tiles and falling from running	- The FPRB Destana Team and OPdis Canti have been formed, - There is knowledge of safety procedures, 3B and BBMK	R

ECONOMY/FINANCIAL	Stalls and businesses are closed The workers don'tgo to work	20 stalls 72 people	Rp. 150,000/stall Rp. 150,000/person	There was panic among the residents so stop business Many companies have closed their businesses waiting for the government's announcement	There is a village government and FPRB Destana who provide education to community members. There was an announcement from BPBD that the earthquake did not have the potential for a tsunami	S

PHYSICAL/ INFRASTRUCTURE	The walls are cracked	25 houses	IDR 500,000/house	Old houses and construction that do not meet earthquake safe building standards	There is a culture of mutual cooperation among community members who have high concern	S
	Water sources	7 points	IDR 250,000/point	The water source turned murky and receded	There are other reliable water sources	R
NATURE / ENVIRONMENT	Talud Waterways	2 points 3 points	Rp.3,000,000/point IDR 4,500,000/point	Empty stone dams are not strong enough to withstand earthquake vibrations The water channel was blocked by a landslide	There is APBDes support, community self-help and government assistance	R
SOCIAL POLITICS	Study activities	3 mosques	Rp. 4,000,000/mosque	Traumatized so the event was canceled	There is a mosque spiritist calm his congregation	R
	Regular PKK meetings	3 meetings	Rp. 2,000,000/meeting	Contributions and social gatherings have been stopped until the situation calms down	There are religious figures who calm the residents	R

Source: Canti Village KRB Workshop, 2024

Table 4.9. Risk assessment of Rob Flood Threat

Type of Threat: Flood Flood

Village: Canti District:

Rajabasa Regency/City: South

Lampung

Lampung province

ASSETS AT RISK	ESTIMATE THE FORM OF RISK IN ASSETS			VULNERABILITIES CAUSE ASSETS TO BE AT RISK	CAPACITY AVAILABLE	LEVEL RISK (T/S/R)
	FORM OF RISK	AMOUNT	NOMINAL			
MAN	Fever	25 people	IDR 100,000/person	Children, toddlers, elderly	There are health facilities that operate 24 hours	R
	Itching pain	21 people	IDR 100,000/person	Children and parents	There are health facilities that operate 24 hours	R
ECONOMY / FINANCIAL	Fishermen cannot go to sea	10 People	IDR 10,000,000,-	The boat was damaged by being flooded	The ability of fishermen to repair their own boats Mutual cooperation in draining ponds by residents	R
	Shrimp	2 pools	Rp. 10,000,000/pond	The pond is flooded with floodwater and dead fry		
	Roadside stall	5 stalls	IDR 2,000,000/stall	The shop was submerged by the flood, activity stopped, the merchandise was washed away	There is a culture of mutual cooperation in society for doclean ing	R

PHYSICAL/ INFRASTRUCTURE	Road damage	30 meters	±Rp. 35,000,000	The roads have potholes and endanger residents' mobility	There is a culture of mutual cooperation in society for Repairing roads	S
	Damage to public facilities	1 pier	Rp. 5,000,000,-	The old building is no longer sturdy and is submerged in floodwaters	There is mutual cooperation and assistance funds from related agencies	R
NATURE / ENVIRONMENT	Piles of rubbish	2 locations	Rp.6,000,000	Tidal floods bring rubbish into the environment so that it becomes dirty and slum	• There ismutual cooperationcommunity members to clean the environment	SR
SOCIAL POLITICS	Study activities	2x activities	IDR 3,000,000	Mosques and prayer rooms were flooded	There is a school building that can be used for activities	R

Source: KRB FPRB-destana Canti Workshop, 2024

D. Map

1. Threat map

   The threat map depicts the position of threats in the village area. This map was created to see the threats that exist in the risk assessment. In an area there can be more than one threat. From the results of the Canti Village Disaster Risk Assessment workshop, participants described the threat map in a participatory manner and were in positions as in the following picture:

2. Risk Map

   A risk map is a description of the level of disaster risk in an area based on a participatory disaster risk assessment. This map is to see the areas/regions in the village that have the highest risk, so that planning to reduce risk is more focused on areas that have high risk.

CANTI VILLAGE DISASTER THREAT MAP

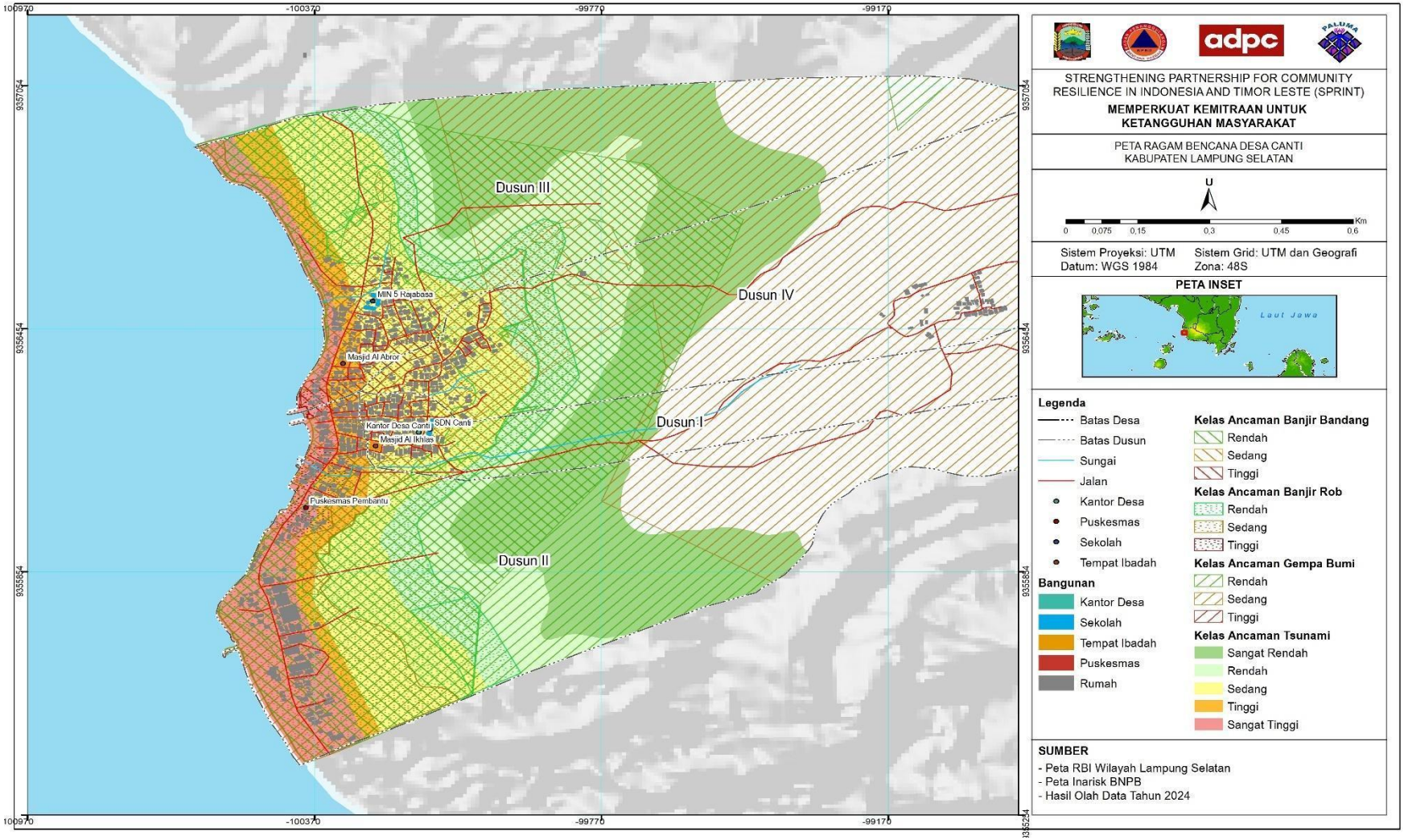

Figure 2. Various Disaster Threats in Canti Village

CANTI VILLAGE TSUNAMI RISK MAP

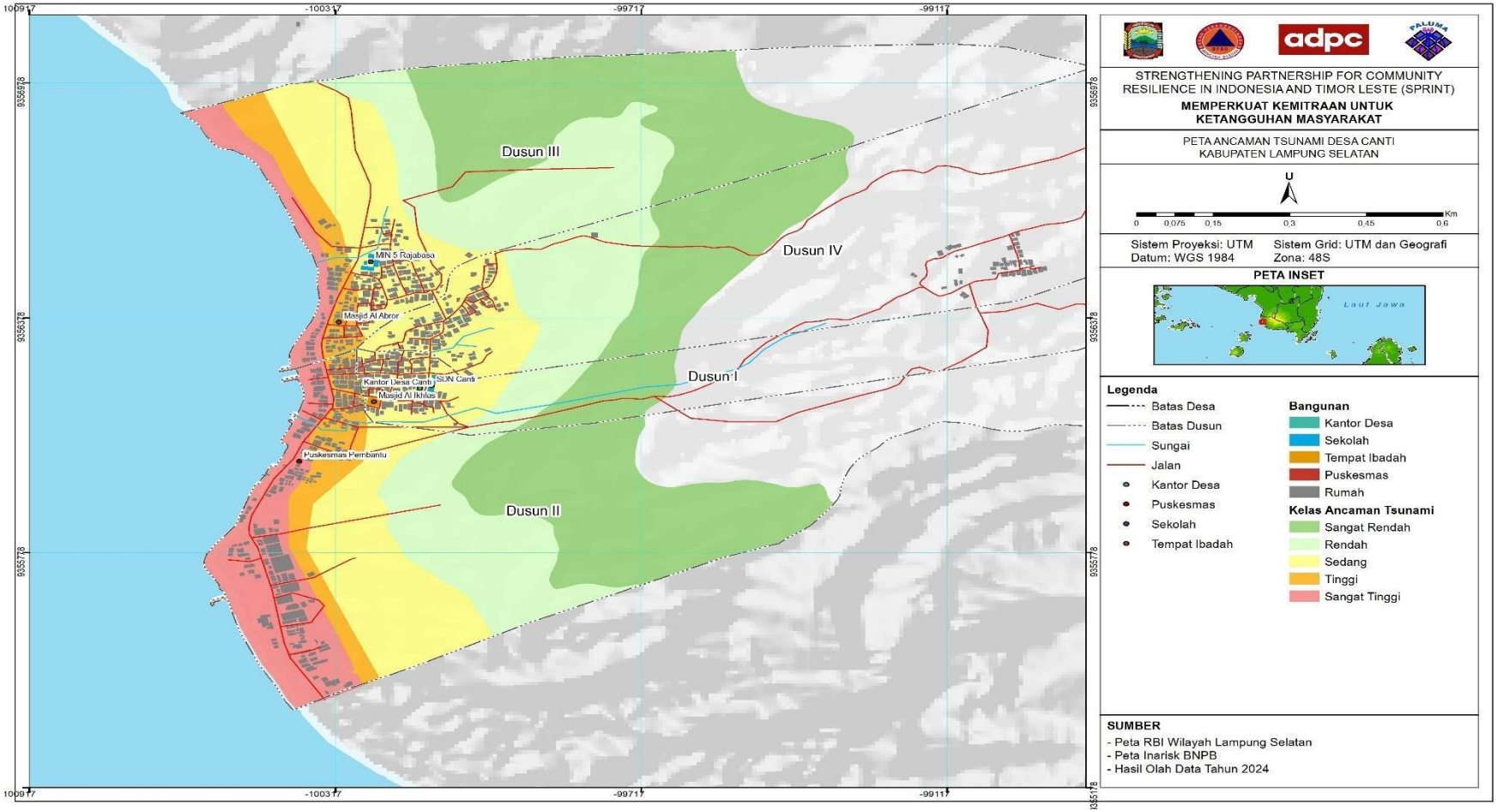

Figure 3. Tsunami Risk Map of Canti Village

CANTI VILLAGE FLASH FLOOD MAP

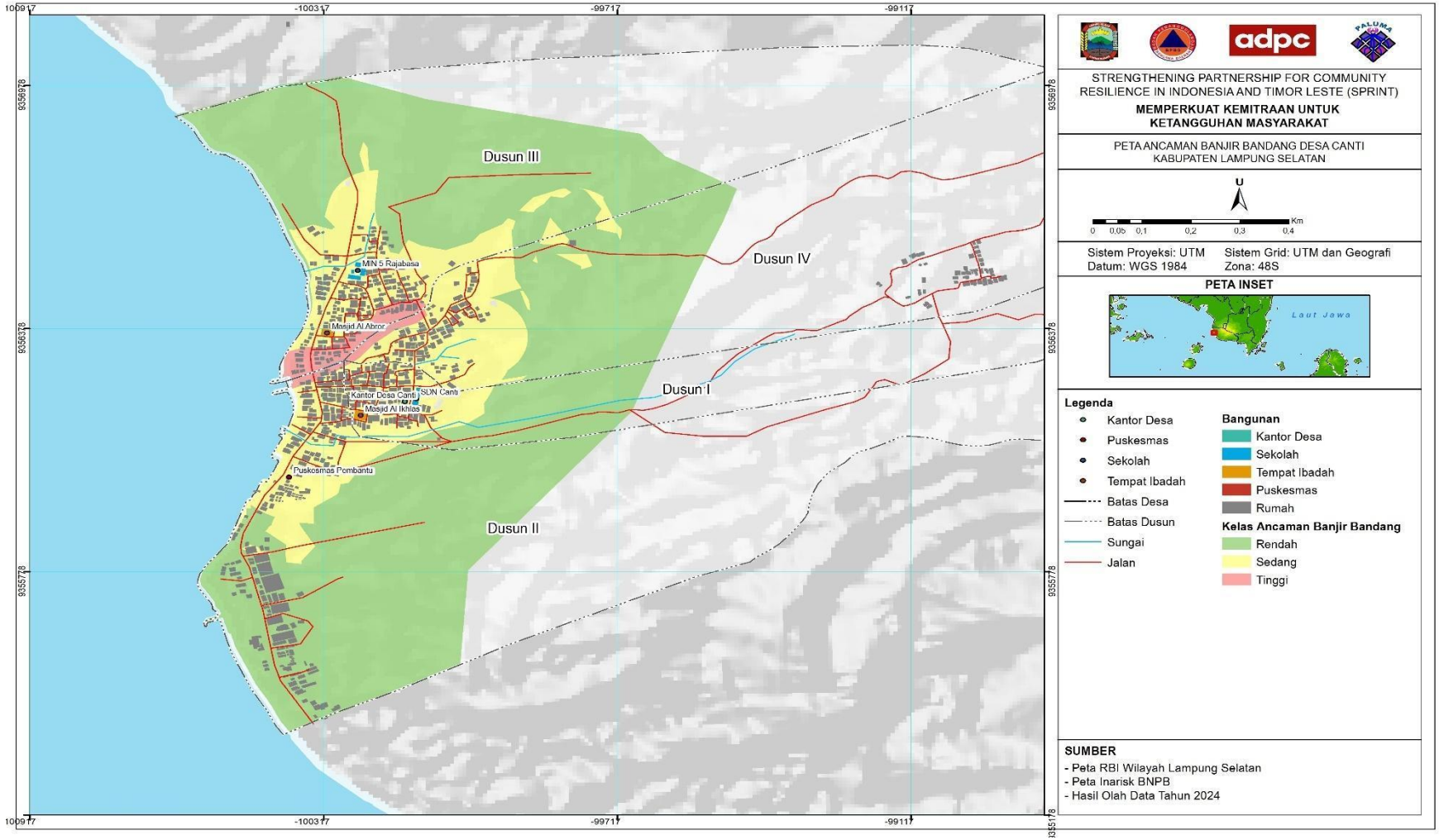

Figure 4. Flash Flood Risk Map of Canti Village

CANTI VILLAGE EARTHQUAKE RISK MAP

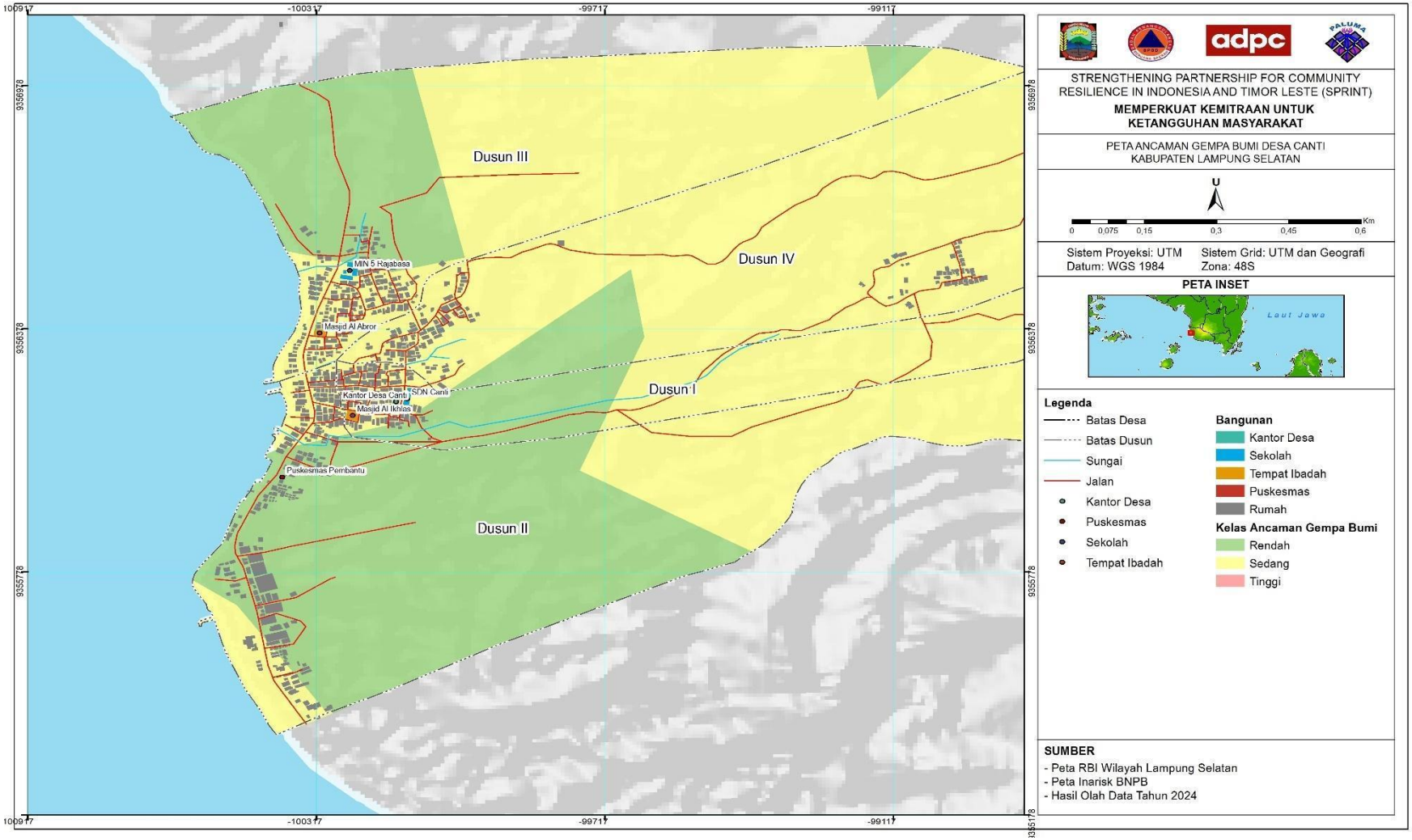

Figure 5. Earthquake Risk Map of Canti Village

CANTI VILLAGE ROB FLOOD THREAT MAP

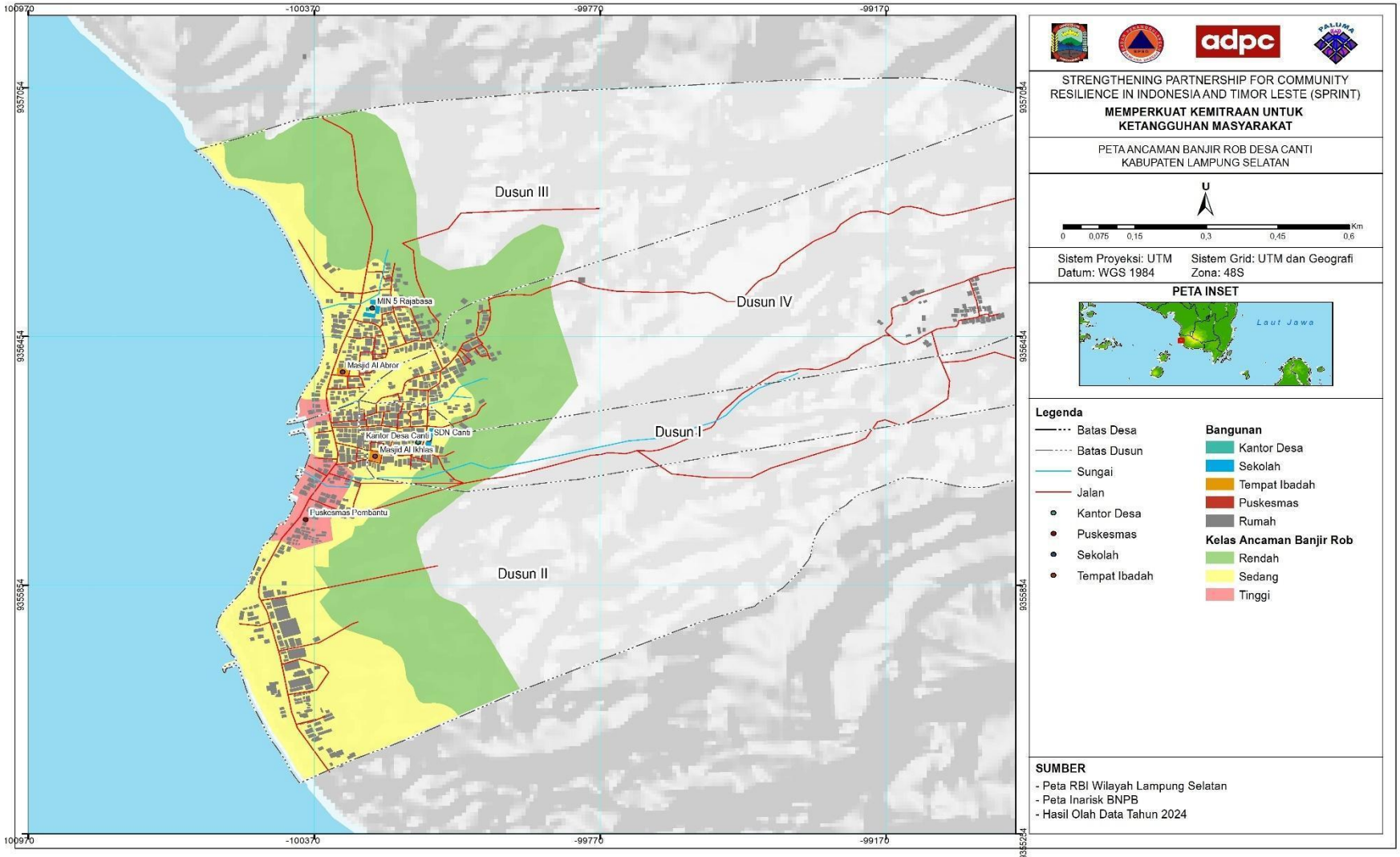

Figure 6. Flood Threat Map in Canti Village

E. RECOMMENDATION

After carrying out a risk study where the type of threat has been determined and a risk assessment has been determined, it is then proposed to make recommendations. The proposed recommendations aim to reduce the level of risk. Recommended activities are proposed for the stages before a disaster, during a disaster, and after a disaster.

Table 4.10. Recommendations for disaster management activities and actors

Village: Canti
District: Rajabasa Regency/City: South
Lampung Province: Lampung

PHASE/STAGE	ACTIVITY	INSTITUTION / ORGANIZATION										
		Rural Village	Youth Organization	Linmas	Lpm	Opdis	Fprb	Kes Cadre	Pkk	Gapokt An	Village Chief	Traditional Figure
Pre-disaster, when a disaster does not occur (prevention, mitigation and capacity building)	1. Safety training; - Carry out general and special training such as first aid, evacuation	√	√	√	√	√	√	√	√	√	√	√
	- Organizing evacuation simulations to increase community preparedness	√	√	√	√	√	√	√	√	√	√	√
	2. Infrastructure development; - Build and improve disaster-resistant infrastructure such as embankments and emergency shelters.	√	√	√	√	√	√	√	√	√	√	√
	- Carry out routine maintenance of infrastructure	√			√		√				√	

	3. Build and maintain a Warning System Early to provide quick information to community members regarding potential disasters; - Conduct trials of the Early Warning System so that it functions properly	√					√					
	4. Health services; - Improve village health facilities	√	√	√	√	√	√	√	√	√	√	√
Pre-disaster, when there is a potential for disaster (preparedness)	1. Announce to the citizens public about the signs of disaster	√					√					
	2. Urge members of the public to be prepared and secure important items	√	√	√	√	√	√	√	√	√	√	√
	3. Prepare a standby bag	√	√	√	√	√	√	√	√	√	√	√
	4. Packing items to be evacuated	√	√	√	√	√	√	√	√	√	√	√
	5. Informs the location of TEA and TES	√				√						
	6. Informs about the path evacuation	√				√						
	7. Setting up the destana team from contingency into an operational plan	√				√						
During emergency response	1. Establish a command post	√		√	√	√	√	√	√	√	√	√

	2. Perform search and rescue	√					√					
	3. Evacuate	√					√					
	4. Providing health needs	√		√				√				
	5. Do a quick assessment	√					√					
	6. Receive and distribute ready-to-eat aid and non-food aid	√		√			√					
	7. Dorecoveryearly	√	√	√								
Post-disaster	1. Carrying out data collection on human casualties, buildings and livestock	√	√	√	√	√	√	√	√	√	√	√
	2. Carry out data collection on affected land	√	√	√	√	√	√	√	√	√	√	√
	3. Create reports on data collection results and verification field	√	√	√	√	√	√	√	√	√	√	√
	4. Carrying out rehabilitation to restore functions	√					√	√			√	
	5. Provide psychosocial assistance for severely affected residents	√					√					
	6. Create reports for follow-up work plan activities	√					√					

CHAPTER V
CLOSING

Disaster risk studies are used as a basis for preparing disaster management plans for Canti Village. Therefore, the results of this risk assessment can be agreed upon and legalized by the Canti Village Government so that the implementation of disaster management in Canti Village can be more focused. It is hoped that by strengthening the village government regarding disaster risk assessment, the basis for making disaster management policies will be created. The policies taken later can touch more on efforts to reduce the impact of disaster victims, physical and economic losses and environmental damage.

Apart from that, this disaster risk study can be reviewed or evaluated. Evaluation is carried out so that the validity of the data and information that will be used as the basis for disaster management planning can always be updated. The evaluation process for disaster risk studies can be aligned with the development of risk studies across administrative boundaries. This needs to be done in order to create the development of joint disaster risk studies between directly adjacent administrative areas.

ARRANGED BY,

FPRB Canti Village