

**DOCUMENT
PARTICIPATORY DISASTER RISK ASSESSMENT
(KRB)**

**RAJABASA VILLAGE, RAJABASA DISTRICT,
SOUTH LAMPUNG DISTRICT
LAMPUNG PROVINCE
2024**



APPROVAL SHEET

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

Rajabasa, 25 March 2024

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FOREWORD

We offer thanks and gratitude to Allah SWT, the Almighty God, for all His grace and guidance.

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

Some of the outputs that have been achieved are the results of community participatory studies 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 Rajabasa Village Government and the Rajabasa 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 Rajabasa 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.

Rajabasa, March 25 2024

Head of Rajabasa Village,

Hermansyah HR

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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 21/2008 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 villages 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 Rajabasa Village Government together with community elements in the village prepared a disaster risk assessment document for Rajabasa Village according to the results of discussions held in 2024 at the Rajabasa 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 02 of 2012 concerning General Guidelines for Disaster Risk Assessment;
4. Technical Module Facilitation Disaster Resilient Village/Subdistrict Activities regarding Participatory Disaster Risk Assessment.

D. Scope

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

E. Understanding

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 is Analysis Disaster 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 data from the Central Bureau of Statistics (BPS) for 2022, Rajabasa Village is included in the self-supporting village classification. Rajabasa Village is geographically located in the Rajabasa District, South Lampung Regency, Lampung Province. The distance from Rajabasa Village to the sub-district capital is far

2 km, the distance to the Regency capital is 12 km, and the distance to the Provincial capital is 82 km. Rajabasa Village is directly adjacent to:

- North: Banding Village, Mount Rajabasa
- East: Mount Rajabasa
- South: Sukaraja Village and the Sunda Strait
- West: Sunda Strait

The number of people in Rajabasa Village consists of;

Table 2.1. Number of people in each hamlet

No.	Hamlet	Gender		Amount
		Man	Woman	
1	Rajabasa	175	174	349
2	Piabung	233	201	434
3	Ujau	229	218	447
AMOUNT		637	593	1,230

Source: Rajabasa Village Profile

Table 2.2. Land Use in Rajabasa Village

No	Land Type	Area (Ha)
1	Rice field area	64 Ha
2	Area of dry land/moorland	Ha
3	Residential area	15 Ha
4	Plantation land area	190 Ha
5	Wide public facilities	5.2 Ha
6	Forest land area	257 Ha
TOTAL LAND AREA		531.2Ha

Source: Rajabasa Village Profile

Table 2.3. Population by livelihood

Livelihood	Amount
Farmers/Plantation	203
Not Yet/Not Working	235
Freelance	26
Student/Students	198
Entrepreneur/trader	50
Private sector employee	122
Housewife	205
Midwife	1
Government employees	20
Village Apparatus	15
Honorary teacher	14
Retired	9
Driver	17
Trading	25
Household assistant	19
Civil servant teacher	6
Mason/Carpenter	16
TNI/POLRI	2
Fisherman	35
Motorcycle taxis driver	4
Breeder	8
TOTAL	1,230

Source: Rajabasa Village Profile

Based on data from BPS in 2022, data on educational facilities in Rajabasa Village, there is 1 Rajabasa State Elementary School, 1 Aisyiyah Rajabasa Kindergarten

RAJABASA VILLAGE MAP

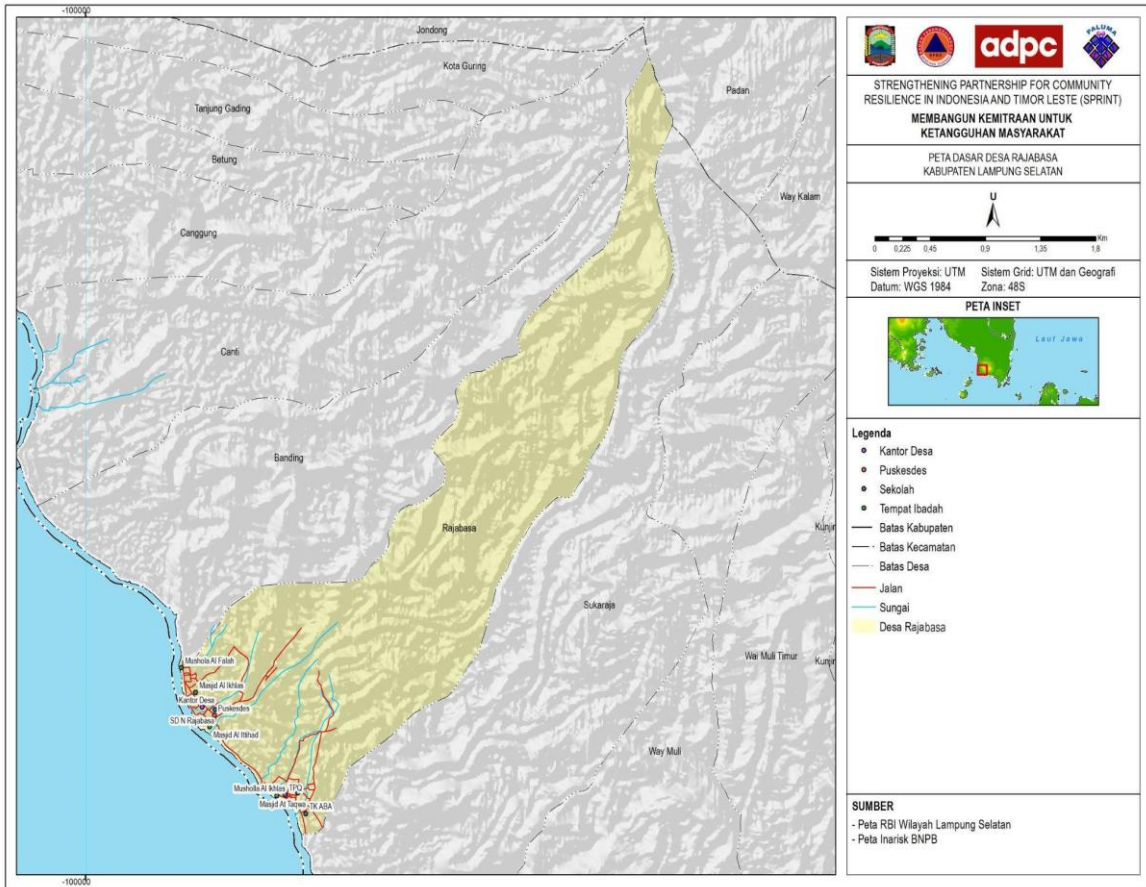


Figure 1 Map of Rajabasa Village

Table 2.4. Number of Neighborhood Units in Each Hamlet

Hamlet	Citizens Association	Rukun Tangga
Rajabasa	1	3
Piabung	1	3
Ujau	1	3

Source: Rajabasa Village Profile

B. Disaster Overview

1. History of events

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

Table 2.5. Rajabasa Village disaster incident

NO	TIME	EVENTS / EVENTS	CHRONOLOGICAL
1.	1883	The eruption of Mount Krakatoa caused a tsunami	The eruption of Mount Krakatoa occurred on Sunday, August 26, 1883, with an estimated 36,402 fatalities and caused ash rain for months and the impact reached overseas.
2.	1986	Flash floods	Due to high intensity rain for two days and two nights in a row, causing flash floods in hamlet 1 Rajabasa RT 002, 3 houses were affected by flooding and the neighborhood road was covered with stone material, approximately 300 meters. One generator unit was swept away by the current.
3.	2020	Covid-19	Starting to enter Rajabasa Village in April 2020, there was 1 person who was exposed to Covid-19 and was isolated in hospital, and 50 people were in self-isolation.
4.	2018	Tsunamis	The tsunami caused by the eruption of Mount Anak Krakatau (GAK), on Saturday, December 22 2018, at 21.30 WIB, affected the following: <ol style="list-style-type: none"> 1. Hamlet II had 6 houses heavily damaged, 6 houses slightly damaged and 1 prayer room slightly damaged 2. Hamlet I, RT 001 had 1 victim missing, 5 houses were slightly damaged, RT 002 had 12 houses heavily damaged, 5 moderately damaged, 4 slightly damaged, 1 mosque heavily damaged. 3. Hamlet III, RT 007 had 3 houses swept away by the tsunami, 1 prayer room slightly damaged and 2 victims died, 4 houses were heavily damaged, 6 houses were slightly damaged, RT 008 had 3 houses slightly damaged, RT 009 1 house had light damage,

5.	2021	Strong winds	Occurred in Hamlet II RT 006, incident at 05.30 WIB. Resulting in 1 house being moderately damaged due to a falling tree, 6 other houses being moderately damaged, 10 houses being lightly damaged
6.	1994 and 2006	Earthquake	There was a change in the source of the spring water which was previously clear to become cloudy and caused panic
7.	2018, 2023	Drought	Drought caused clove trees and bananas to die resulting in crop failure.

Source: Rajabasa 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 Rajabasa Village.

Table 2.6. Variety of Threats

TYPE OF THREAT	VARIETY OF THREATS
Geological threats	Earthquakes, tsunamis, volcanic eruptions
Hydrometeorological Threats	Flash floods, tornadoes, droughts, landslides
Biological threats	Covid-19, planthoppers, malaria mosquitoes
Threat of failure Technology	-
Environmental threats	Fires, deforestation, trash
Social threat	-

Source: Rajabasa 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. VILLAGE CAPACITY STUDY OF RAJABASA VILLAGE

Capacity is a form of community and party resources to prevent or reduce threats, avoid threats and reduce existing weaknesses. Despite the threats above, Rajabasa 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 that Rajabasa village has 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. Rajabasa Village Village Capacity Study

No.	Threat/Disaster	Variable	Capacity
1	Tsunamis	Human Resources	<ul style="list-style-type: none"> - Having disaster response volunteers (destana) - The community has resources in the form of vehicles for evacuation - public education about the signs of a disaster threat - the existence of an agreed early warning system
		Physical Resources	<ul style="list-style-type: none"> - There are places for evacuation, such as residents' houses, school buildings, mosques - There are 4-wheeled and 2-wheeled vehicles for evacuation - There are maps and evacuation routes - Availability Place Temporary evacuation TES) or final evacuation site (TEA)
		Environmental Resources	<ul style="list-style-type: none"> - Residents still have safe land in open areas in other areas - Road access for easy evacuation - Evacuation routes have been installed - Sufficient lighting source

		Economic resources	<ul style="list-style-type: none"> - The economic level of society is heading in a better direction - Abundant corn farming results - There are fruit products such as durians, bananas, rambutan, duku which meet needs
		Sociocultural resources	<ul style="list-style-type: none"> - There is high public concern - there are activities community service routine in their respective environments - There are regular community meetings through recitation groups for fathers every Friday night and women's groups on Friday afternoons which can be used as an opportunity for socialization.
2	Volcanic eruption	Human Resources	<ul style="list-style-type: none"> - Having disaster response volunteers (destana) - The community has resources in the form of vehicles for evacuation - public education about the signs of a volcanic eruption
		Physical resources	<ul style="list-style-type: none"> - There are maps and evacuation routes - exists system early warning which is a mutual agreement
		Environmental Resources	<ul style="list-style-type: none"> - Still has land in open areas in other areas - Road access for easy evacuation
		Economic resources	<ul style="list-style-type: none"> - There are regular contributions for emergency preparation for each RT - There are community savings in the form of livestock and jewelry
		Sociocultural resources	<ul style="list-style-type: none"> - There is high public concern - there are activities community service routine in their respective environments
3	Flash floods	Human Resources	<ul style="list-style-type: none"> - Having disaster response volunteers (destana) - The community has resources in the form of vehicles for evacuation - public education about the signs of flash floods - There is data on vulnerable groups
		Physical resources	<ul style="list-style-type: none"> - Flood resistant building structures - Easy access to evacuation routes - The community is aware that they live in an area prone to flood disasters - The public knows the signs of an impending flood disaster
		Environmental Resources	<ul style="list-style-type: none"> - Still has land in open areas in other areas - Road access for easy evacuation
		Economic resources	<ul style="list-style-type: none"> - People have savings, livestock, deposits, or other things for emergency reserves
		Sociocultural resources	<ul style="list-style-type: none"> - There is system mutual cooperation And community service driven by citizens - There are regular meetings, recitations and so on as a means of communication and socialization

4	Strong winds	Human Resources	<ul style="list-style-type: none"> - Having disaster response volunteers (destana) - The community has resources in the form of vehicles for evacuation - There is public education about SOPs when strong winds occur and SOPs for evacuating the threat of strong winds
		Physical resources	<ul style="list-style-type: none"> - There are maps and evacuation routes - There has been an agreement on the location of the final evacuation site or refugee barracks
		Environmental Resources	<ul style="list-style-type: none"> - Access to evacuation routes that are easy to pass - People are aware that they live in disaster-prone areas
		Economic resources	<ul style="list-style-type: none"> - People have savings, livestock, deposits, or other things for emergency reserves
		Sociocultural resources	<ul style="list-style-type: none"> - There is system mutual cooperation And community service driven by citizens - There are regular meetings, recitations and so on as a means of communication and socialization

B. VULNERABILITY ASSESSMENT OF RAJABASA 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 which society can be exposed to threats. Threats can be in the form of inappropriate policies, low community motivation, resulting in 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 disasters in Rajabasa 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 Rajabasa village Disaster Risk Assessment Workshop.

Table 3.2. Rajabasa Village Vulnerability Study

No	Types of Disasters	Consequences and Impact	Location	Resources
1	Tsunamis	2 people died, 1 person was missing, 34 houses were heavily damaged, 5 houses were moderately damaged, 17 houses were slightly damaged	Hamlet I, II and III	Experience live, TV, social media.
2	Flash floods	3 houses were directly affected, rocks and soil blocked the road	Hamlet I RT 002	Experience it first hand

3	Covid-19	1 person isolated in hospital, 50 people isolated independently	1 Village	TV, Social media
4	Landslide	Hoarding agricultural land, in hilly areas	Hamlet III	See directly
5	Strong winds	A tree fell on a house	Hamlet II RT 006	Experience it first hand
6	Volcanic eruption	Many casualties and damage to buildings and infrastructure	1 Village	Experience it first hand
7	Rubbish	In rivers and coastal areas, the impact is flooding, disease nests, the environment becomes dirty and slum, producing octane gas	1 village	See directly
8	Drought	clove trees, bananas, durian, duku died and the harvest failed	1 village	Experience it first hand
9	Earthquake	The spring water turned murky and had psychological impacts	1 Village	TV, radio and social media

Source: KRB Rajabasa Workshop, 2024

C. Rajabasa 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 can be formulated using the formula:

$$\text{DISASTER RISK} = \frac{\text{THREATS} \times \text{VULNERABILITIES}}{\text{CAPACITY}}$$

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 or threats in the area concerned. All hazards or 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 Rajabasa village can be depicted as in the following table

Table 3.3 Risk Level and Capacity of Rajabasa Village

RISK LEVEL		CAPACITY LEVELS		
		TALL	CURRENTLY	LOW
LEVEL OF VULNERABILITY	LOW	Drought	Strong wind	
	CURRENTLY		Flash floods	
	TALL			Tsunamis

Tall	_____
Currently	_____
Low	_____

Source: KRB Rajabasa Workshop, 2024

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	4	7	1
2	Flash floods	2	3	5	2
3	Covid-19	1	1	2	9
4	Strong winds	1	2	3	4
5	Earthquake	2	1	3	6
6	Drought	2	2	4	3
7	Landslide	2	1	3	5
8	Rubbish	1	1	2	7
9	Volcanic eruption	1	2	3	8

Source: Rajabasa Village KRB Workshop, 2024

Information:

Possible Occurrence	Estimated Impact
Value 1 = Very unlikely to occur Value 2 = Slight possibility of occurrence Score 3 = Very likely to happen Score 4 = Definitely happens	Score 1 = Not serious Score 2 = Somewhat severe Score 3 = Severe Score 4 = Very severe

From the results of discussions held at the Rajabasa Village KRB Workshop, 2024 on 5-6 February 2024, it was agreed that there were 9 threats that could potentially occur in Rajabasa Village. The threat rankings from highest to lowest are; 1) Tsunami, 2) Flash flood 3). Drought 4) Strong winds 5) Landslides 6) Earthquakes, 7) Garbage 8) Volcanic eruptions 9) Covid-19. It was agreed that the disaster risk assessment at the Workshop and the preparation of this document would focus on four threats, namely flash floods, tsunamis, flash floods and earthquakes.

B. Threat Character Assessment

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

Table 4.2. Tsunami threat character

NO	CHARACTER	STUFFING
1	What Type (natural, non-natural, mixed)	Natural (geological) disasters
2	What is the cause	Deep sea earthquakes, underwater volcanic eruptions, landslide, submarines, meteor impacts
3	What is the trigger?	Ocean waves that move quickly and cause tsunamis
4	What is the dangerous danger of threats The	Beach damage, destruction of buildings and potential loss of human life and damage to infrastructure
5	What are the signs of his arrival the threat	Sudden changes in the coastline, including sudden low tide or high-speed waves, are signs of an approaching tsunami
6	Can this threat be predicted? With do we predict?	Although it is difficult to precisely determine when and where a tsunami will occur, there is an early warning system that can detect a potential tsunami
7	How much time? (<i>time between signs and events</i>)	20-30 minutes
8	When do disasters usually occur? happen?	Unpredictable
9	How many times does it occur in one period (a year, a season, other?)	Unpredictable

10	How long did it happen (in one incident)	The incident can last from a few minutes to more than 1 hour. Depends on a number of factors including the source of the cause
11	How long do the effects last?	It could be 1 week, 1 month or even years
12	Where are the threatened areas?	All settlements are located along the coast of Rajabasa village
13	Where is the area where this occurs frequently?	Rajabasa Hamlet at RT 001 AND RT 002, Piabung Hamlet at RT 004 and Ujau Hamlet at RT 007, 008 and RT 009.
14	How big/wide is that affected by this threat	3 Hamlets, 7 RT
14	What's the trend? <i>(compare present condition with several years / past)</i>	There were more tsunami victims in the 1883 incident than in the 2018 tsunami.

Source: Rajabasa Village KRB Workshop, 2024

Table 4.3. Flood threat character

NO	CHARACTER	STUFFING
1	What Type (natural, non-natural, mixed)	Nature (hydrometeorology)
2	What is the cause	Continuous heavy rain for 2 Day two night
3	What is the trigger?	location of the house and land located in lowlands, waterways covered in rubbish.
4	What are the dangers of this threat?	-Water inundated agricultural land and residential areas which can cause crop failure as well unable to move/work - Resulting in a closed roadrock who were carried away by the flood
5	What are the signs of his arrival the threat	- Dark clouds and rain that didn't stop for 2 days and 2 nights
6	Can the threat be predicted by the incident? With do we predict?	Predictable; - By looking at natural signs such as continuous rain
7	How much time? <i>(time between signs and events)</i>	12 - 24 hours
8	When do disasters usually occur? happen?	In the rainy season
9	How many times does it occur in one period (a year, a season, other?)	Once every rainy season

10	How long did it happen (in one incident)	1-3 days
11	How long do the effects last?	1 week - 1 month
12	Where are the threatened areas?	Rajabasa Hamlet RT 001
13	Where is the area where this occurs frequently?	Lowland area close to the river
14	How big/wide is that affected by this threat	RT 001 in Rajabasa Hamlet
15	What is the trend (comparing current conditions with several years/past)	Same as previous year with smaller impact. However, it does not rule out the possibility that major flooding could occur again due to climate change uncertain.

Source: KRB Rajabasa Workshop, 2024

Table 4.4. The character of the threat of drought

NO	CHARACTER	STUFFING
1	What Type (natural, non-natural, mixed)	Natural disasters (hydrometeorology)
2	What is the cause	Long drought, climate change
3	What is the trigger?	
4	What is the dangerous danger of threats The	Water sources are reduced, many corn and fruit crops are unsuccessful and crops fail, many residents suffer from respiratory diseases (ARI).
5	What are the signs of this threat?	Rain does not fall for 4-5 months
6	Can the threat be predicted by the incident? What do we predict with?	The threat can be predicted and is usually announced by the government that there will be a long dry season.
7	How much time? (time between signs and events)	4-5 months
8	When do disasters usually occur? happen?	Between April-September
9	How many times does it happen in one period (a year, annual, other?)	1 time
10	How long ago did it happen (in one time incident)	Between 4-5 months
11	How long do the effects last?	3 months
12	Where are the threatened areas?	The entire Rajabasa village
13	Where is the area where this occurs frequently?	The entire Rajabasa village
14	How big/wide is that affected by this threat	Entire Rajabasa village
15	What is the trend (comparing current conditions with several years/periods ago)	The trend is that there is a change compared to the previous year's incident, this year's dry season is longer, namely 6 months

Source: KRB Rajabasa Workshop, 2024

Table 4.5. Threat character Strong wind

NO	CHARACTER	STUFFING
1	What Type (natural, non-natural, mixed)	Nature (hydrometeorology)
2	What is the cause	shifting of earth's plates, volcanic eruptions
3	What is the trigger?	The colliding of the earth's plates causes tectonic earthquakes and volcanic eruptions
4	What's the danger? harm from these threats	The magnitude of the shock earthquake result the large number of human casualties, environmental damage, destruction infrastructure and impact psychological
5	What are the signs of his arrival the threat	not known
6	Can the threat be predicted by the incident? With do we predict?	It cannot be predicted because it happens suddenly
7	How much time? (time between signs and events)	Not known
8	When do disasters usually occur? happen?	Not known
9	How many times does it occur in one period (a year, a season, other?)	NoCan predicted
10	How long ago did it happen (in one time incident)	Between 1 to 59second,
11	How long do the effects last?	depending on the size of the earthquake, it could be 1 day – several months - several years
12	Where are the threatened areas?	The whole village
13	Where is the area where this occurs frequently?	Entire Village
14	How big/wide is that affected by this threat	Entire Village
15	What is the trend (comparing current conditions with several years/periods ago)	Earthquakes of varying scales are being felt more and more frequently in Rajabasa Village.

Source: KRB Rajabasa 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 hazard, 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

Threat Type: Tsunami						
Village/ : Rajabasa 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	Die	2 persons	IDR 10,000,000/person	People who live on the coast of the Sunda Strait	<ul style="list-style-type: none"> The FPRB-Destana team has been formed Training has been carried out to strengthen the capacity of volunteers 	Q
	Is lost	1 person	IDR 10,000,000/person			
	fear (trauma)	150 souls	IDR 100,000/person			
ECONOMY	Hatcheries	10 locations	IDR 30,000,000/location	The hatchery business was hitted tsunami		Q
	Roadside stall	8 stalls	IDR 5,000,000/stall	The stall's business premises were hitted tsunami		Q

	Can't work	147 people	IDR 100,000/person	Residents cannot work because the roads are impassable		Q
PHYSICAL/ INFRASTRUC TURE	Homes	17 families	Rp. 170,000,000	The house was slightly damaged	Community self-help and mutual cooperation	Q
	Stall/kiosk	7 units	Rp. 125,000,000	Heavily damaged	Community self-help and mutual cooperation	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 as plant decorator along The 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 4,000,000	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	S
SOCIAL POLITICS	Group meetings and Social activities disturbed	20 families		Community activities such as religious studies and routine community meetings were disrupted	There isThe FPRB team together with the Village Government carried out socialization and mental recovery of residents	Q

Source: KRB Rajabasa Workshop, 2024

Table 4.7. Flood threat risk assessment

Type of Threat: Flood Village: Rajabasa 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	Illness: coughs, colds, diarrhea, skin diseases	6 people	IDR 600,000,-	Stagnant water for a long time makes the environment dirty	There are health services, namely health cadres and Village health post	S

ECONOMY / FINANCIAL	Residents cannot work	18 people	IDR 7,560,000,-	Residents had to evacuate, several residents were sick	There is assistance for daily needs for affected residents	S
	Harvest Failure (Damaged Crops)	20 plots of land	IDR 30,000,000,-	Plants are submerged in water, soil is eroded and carried away by water, lots of rocks cover agricultural areas	-Have farming tools for recovery, -The existence of gapoktan which supports the return of land function	S
	Lack of animal feed	48 livestock	IDR 1,260,000,-	Residents are displaced and have difficulty finding food, many were carried away by the water current	There are providers of animal feed that can be purchased in other hamlets	S
	Sick livestock	21 livestock	Rp, 2,100,000	Cattle have no appetite,	There is a veterinarian who can be contacted	S

				the cage is submerged in water	to provide consultation and treatment of livestock	
PHYSICAL/ INFRASTRUCTURE	Residents' houses and their contents were inundated and hit by flooding	6 families	IDR 6,000,000,-	The water did not recede immediately, after the water receded the houses and environment became dirty because of the remaining material and rubbish carried by the flood	There is a culture of mutual cooperation among residents clean environment	S
	Livestock pens were flooded and damaged	6 cages	IDR 3,000,000,-	The water did not recede immediately, the drum material was destroyed because it was submerged and directly affected by the flood	There is a culture of mutual cooperation between residents to repair the damage	S
	Public facilities were flooded	1 school	2,000,000	When the water recedes, it leaves behind various materials rocks soil and rubbish, littering the contents of the school desks and chairs for schoolyard	There is mutual cooperation between the village government, the school and the students' parents to do the clean-up	S
	brisk hole	500 meters	IDR 10,000,000,-	The strong current of water causes roads to become damaged, the asphalt peels off and is carried away by the water current	There is a culture of mutual cooperation among community members to restore mobilization functions	S

	The roadbed is damaged	1 point	IDR 7,000,000	Talud with order stone, no foundation	Community cooperation for community service	R
NATURE / ENVIRONMENT	Dirty and dirty	6 houses	IDR 3,000,000,-	Water that does not recede immediately is accompanied by mud	There is a culture of mutual cooperation among residents	S
SOCIAL POLITICS	Group meetings and social activities disturbed	18 families		Heavy rain is still happening, electricity is out		R

Source: Kaltana Rajabasa Workshop, 2023

Table 4.8. Drought Threat Risk Assessment

Type of Threat: Drought						
Village/Sub District: Rajabasa						
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	Respiratory illness (cough and cold) due to dust	1500 people	Rp. 7,500,000,-	People live in a dry, dusty environment with cold air	<ul style="list-style-type: none"> • People are used to it • There are services easily accessible healthcare 	R
ECONOMY /	Decreased	all over	±Rp. 100,000,000,-	Availability of water	Society works	R

FINANCIAL	income from the agricultural sector due to failure harvest	field		limited and water use is prioritized for residents' daily needs	in other sectors such as selling livestock, selling wood, and builder	
	Livestock are thinner and reduce selling value		±Rp. 3-6 million/head	The availability of green fodder is reduced and livestock are susceptible to disease	<ul style="list-style-type: none"> • People can look for food elsewhere • The presence of supporting feed 	R
PHYSICAL/ INFRASTRUCTURE	The corblock road is cracked	7 Km	IDR 500,000,000,-	The weather is hot, the road is often used by trucks carrying wood and buses offering food Cattle	There is mutual cooperation cooperate in public	R
	The lake dries up	3				R
NATURE / ENVIRONMENT	Forage and plants dry up some died	all regions		Limited water availability	Residents can sell wood from dry and dead trees	R

SOCIAL POLITICS						

Source: KRB Rajabasa Workshop, 2024 Table 4.9. Risk assessment Threat of angina

Type of threat: Strong winds Village: Rajabasa 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	Serious injury	0 people	Rp. /soul	Children, toddlers, elderly	There is a companion/family who helps save yourself	R
	Minor injuries	5 people	IDR 500,000 / person	2 children 3 adults.	The public already knows the signs of strong winds	S
ECONOMY / FINANCIAL	Unable to work	10 people	IDR 10,000,000,-	Residents must repair damaged houses and damage to workplaces	Society can manage resources nature in the surrounding environment to meet daily needs	S

	Additional expenses for post-repair costs earthquake	10 houses	IDR 100,000,000,-	Many roof tiles fell and trees collapsed onto buildings	There is a culture of mutual cooperation in society for repair damage	S
PHYSICAL/ INFRASTRUCTURE	Patrol post damage	3 locations	±Rp. 15,000,000	Roofs made of asbestos and frame rotted wood	There is a culture of mutual cooperation in society for Repair damage	R
	Damage to public facilities	3 building	Rp. 150,000,000,-	Structure The old building is not sturdy, and the frame of the building Already weathered	-There is mutual cooperation to restore function - availability of financial assistance rehab/rekon from the government	S
NATURE / ENVIRONMENT	Located on the slopes of Mount Rajabasa and on the edge of the Sunda Strait	3 locations	Rp. 30,000,000	The yard is located on the slope Mount Rajabasa and along the shores of the Sunda Strait	<ul style="list-style-type: none"> • Society has a culture of saving • People are starting to realize that they live in a disaster-prone area 	R
SOCIAL POLITICS	There is community agreement in mutual cooperation activities	3 hamlets	Rp. 1,500,000	The existing agreement has not yet made official regulations, or village regulations/perdes.	Every hamlet has a mutual cooperation agreement/community service orally	S

Source: KRB Rajabasa 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 RAJABASA VILLAGE destana workshop, the participants' positions described the threat map in a participatory manner, and were in positions as in the following picture:

RAJABASA VILLAGE THREAT MAP

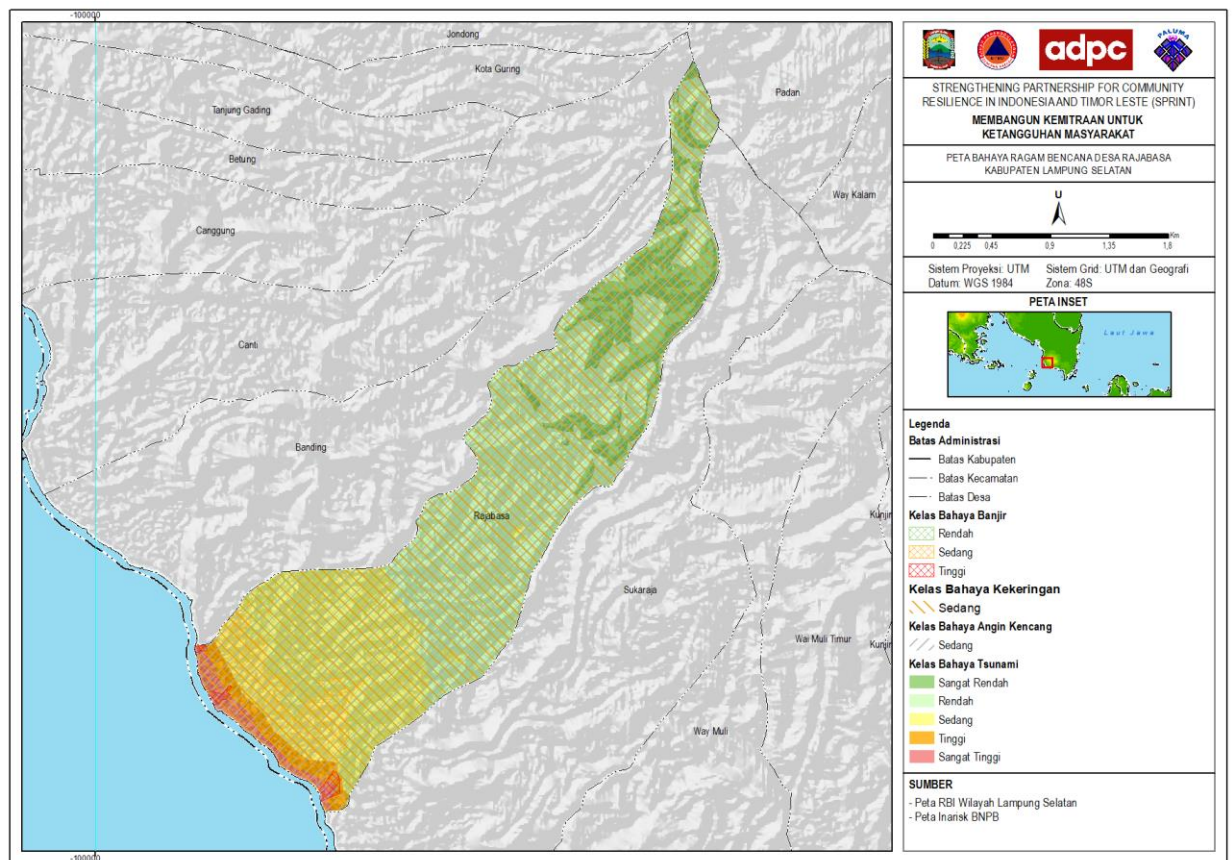


Figure 2. Threat Map of RAJABASA VILLAGE

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.

VOLCANO ERUPTION RISK MAP

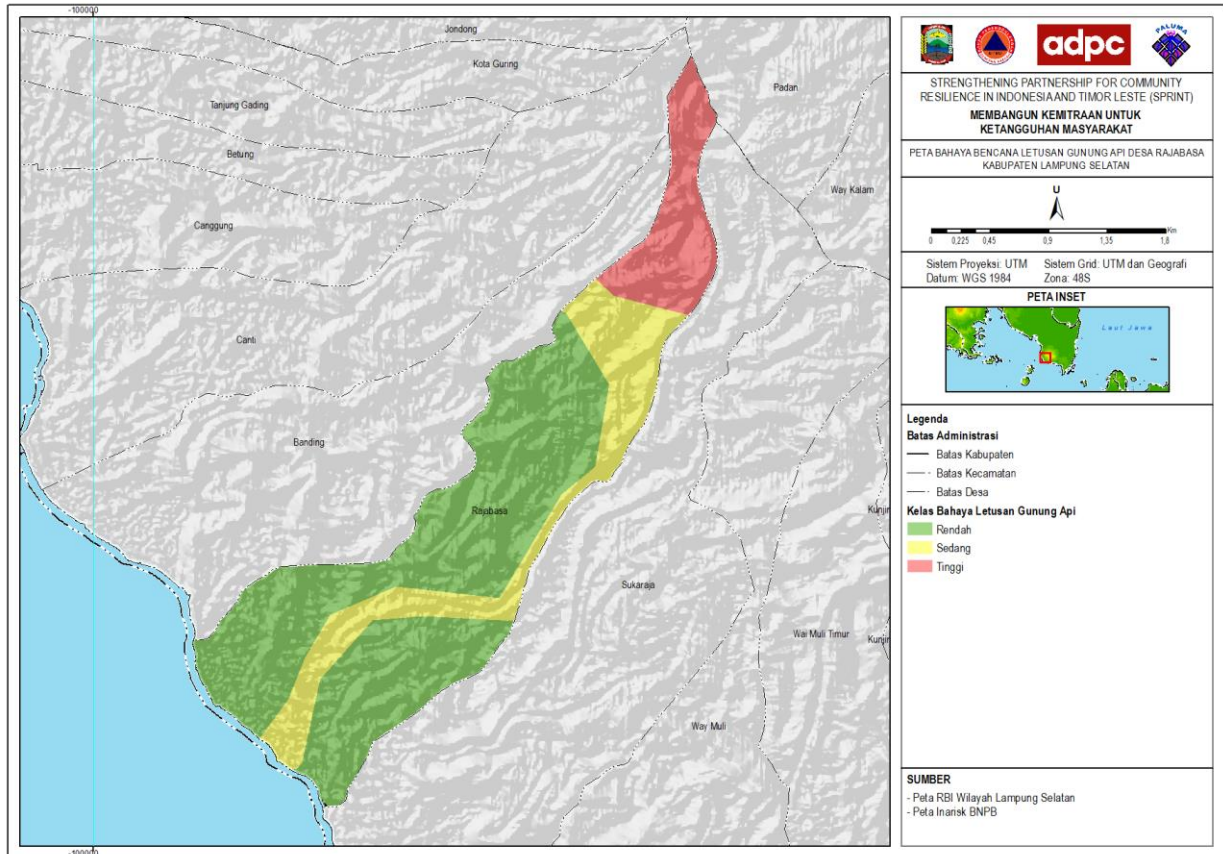


Figure 1. Disaster Risk Map for the Eruption of Mount Rajabasa

RAJABASA VILLAGE TSUNAMI RISK MAP

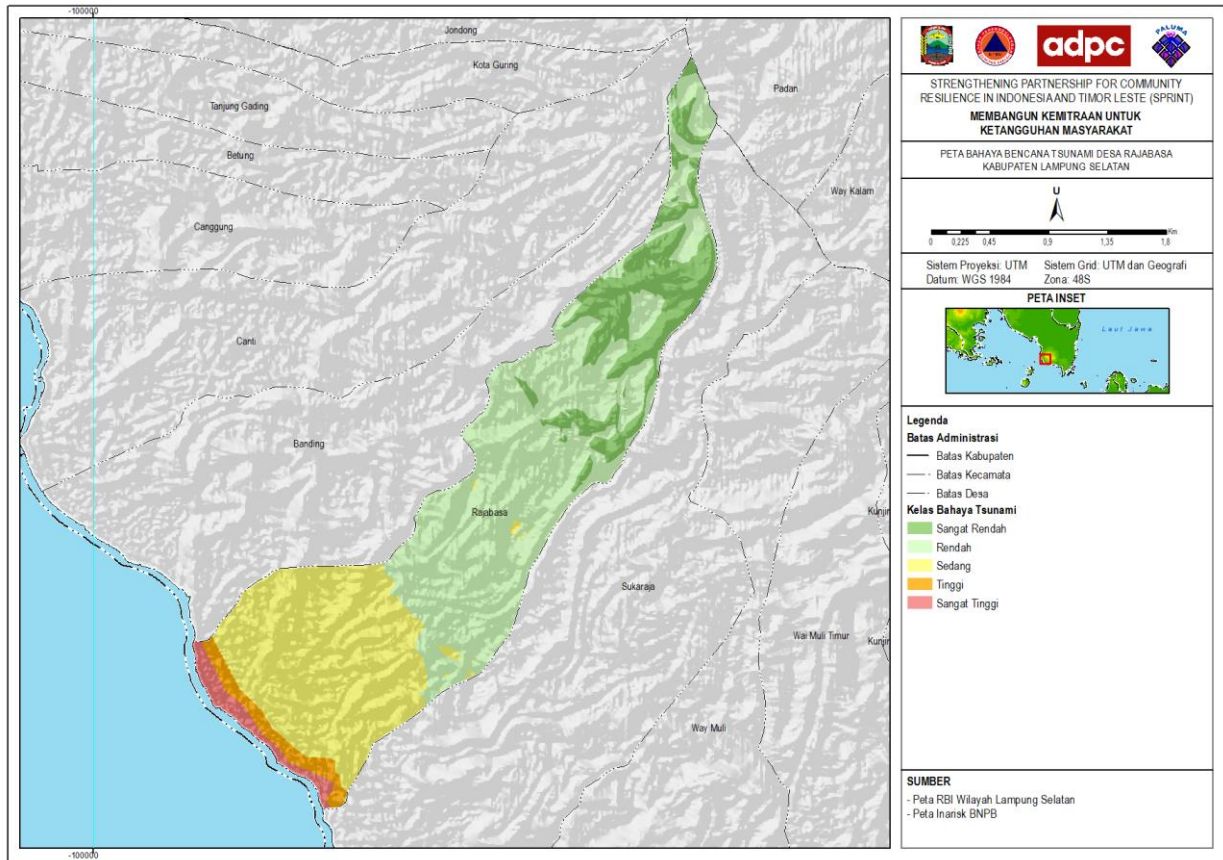


Figure 2. Tsunami Risk Map of Rajabasa Village

RAJABASA VILLAGE FLOOD RISK MAP

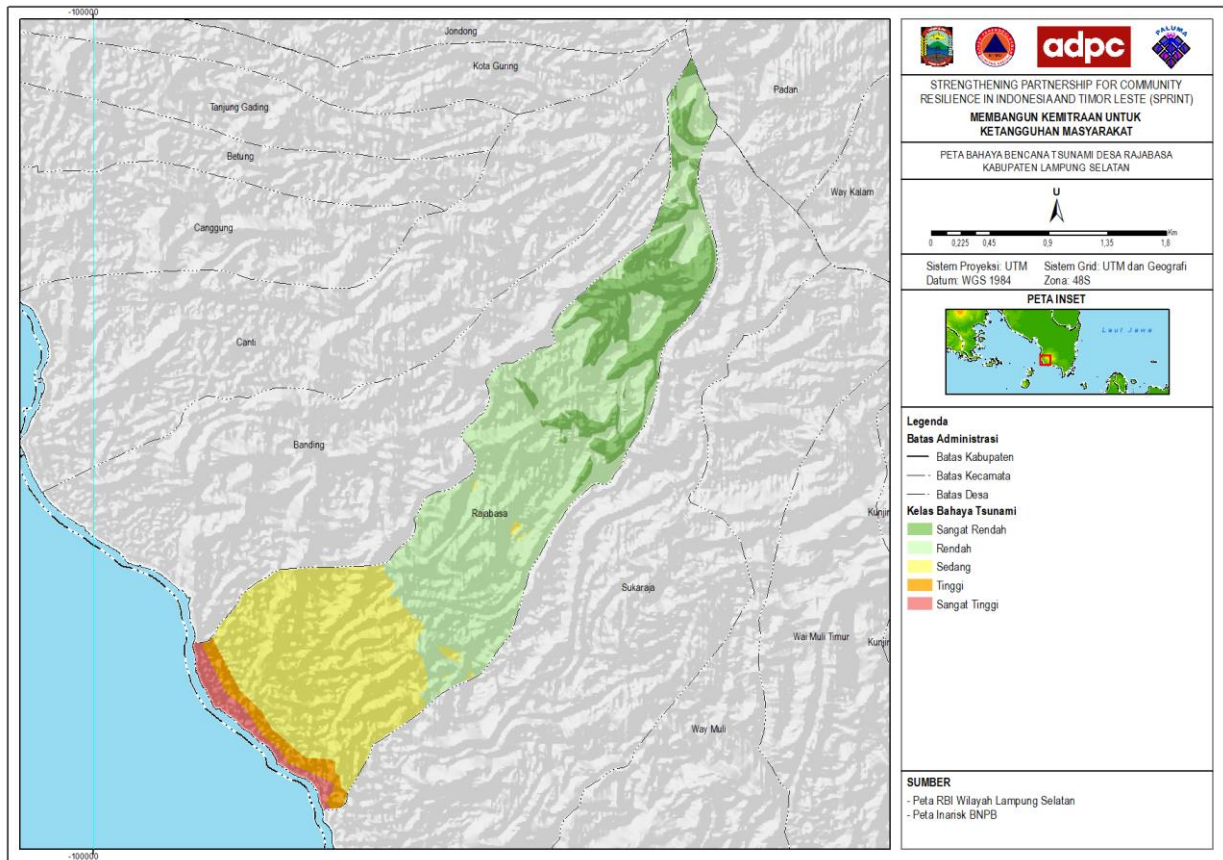


Figure 3. Rajabasa Flood Risk Map

FLASH FLOOD RISK MAP

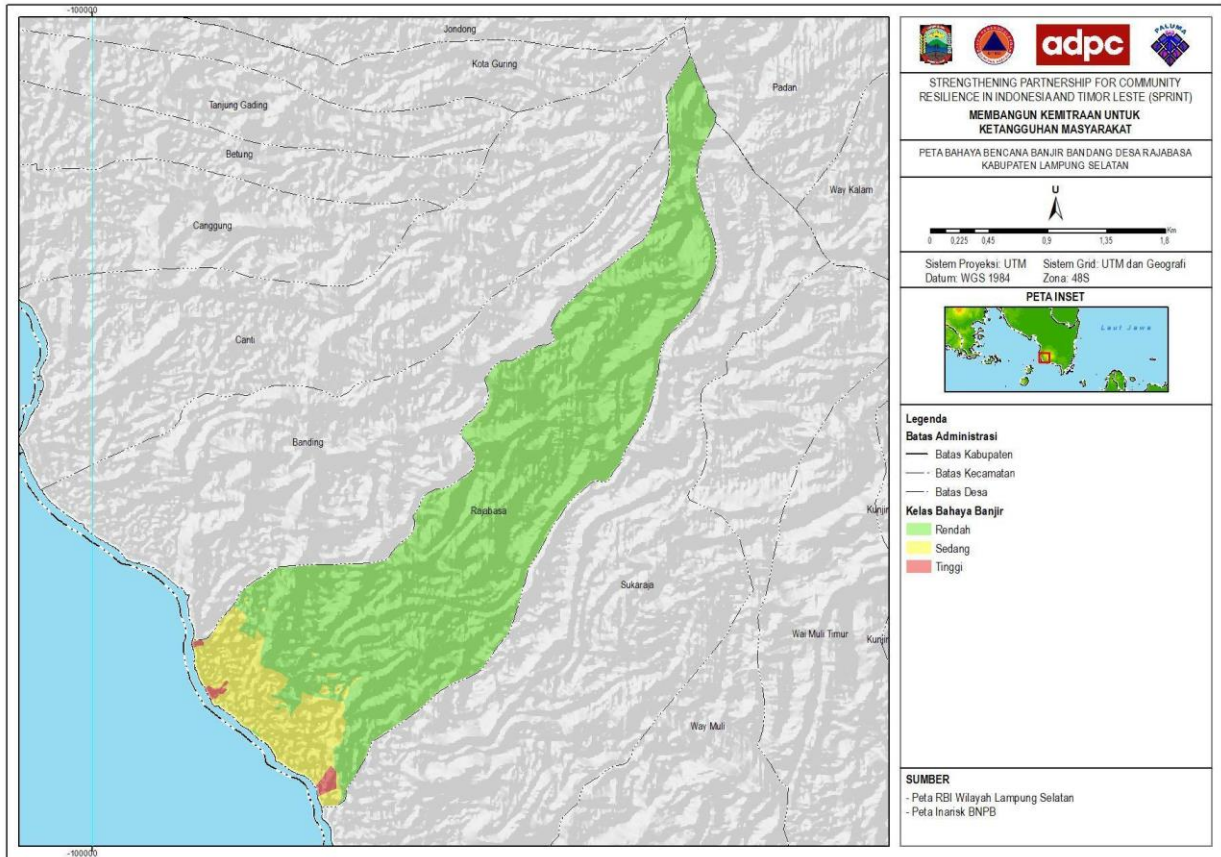


Figure 4. Flash Flood Risk Map of Rajabasa Village

RAJABASA VILLAGE DROUGHT RISK MAP

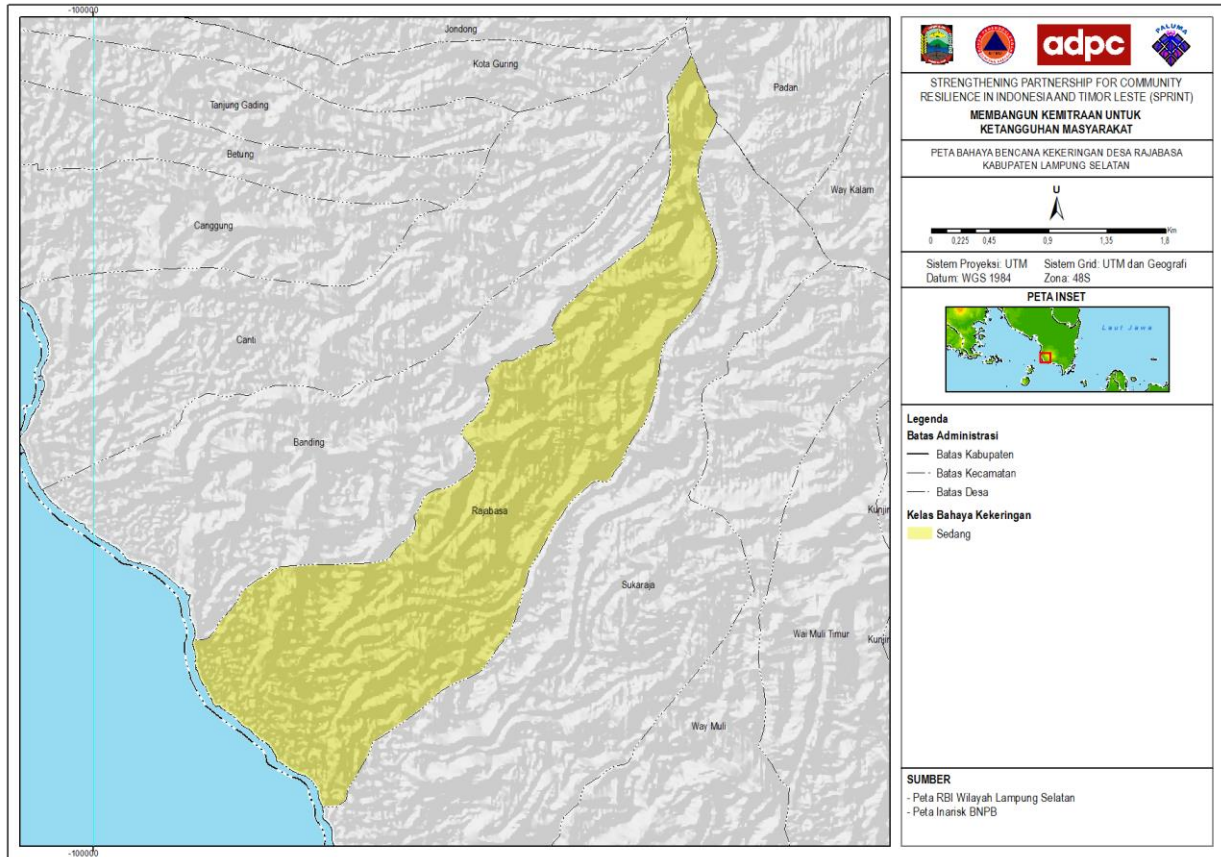


Figure 5. Rajabasa Village Drought Risk Map

RAJABASA VILLAGE STRONG WIND RISK MAP

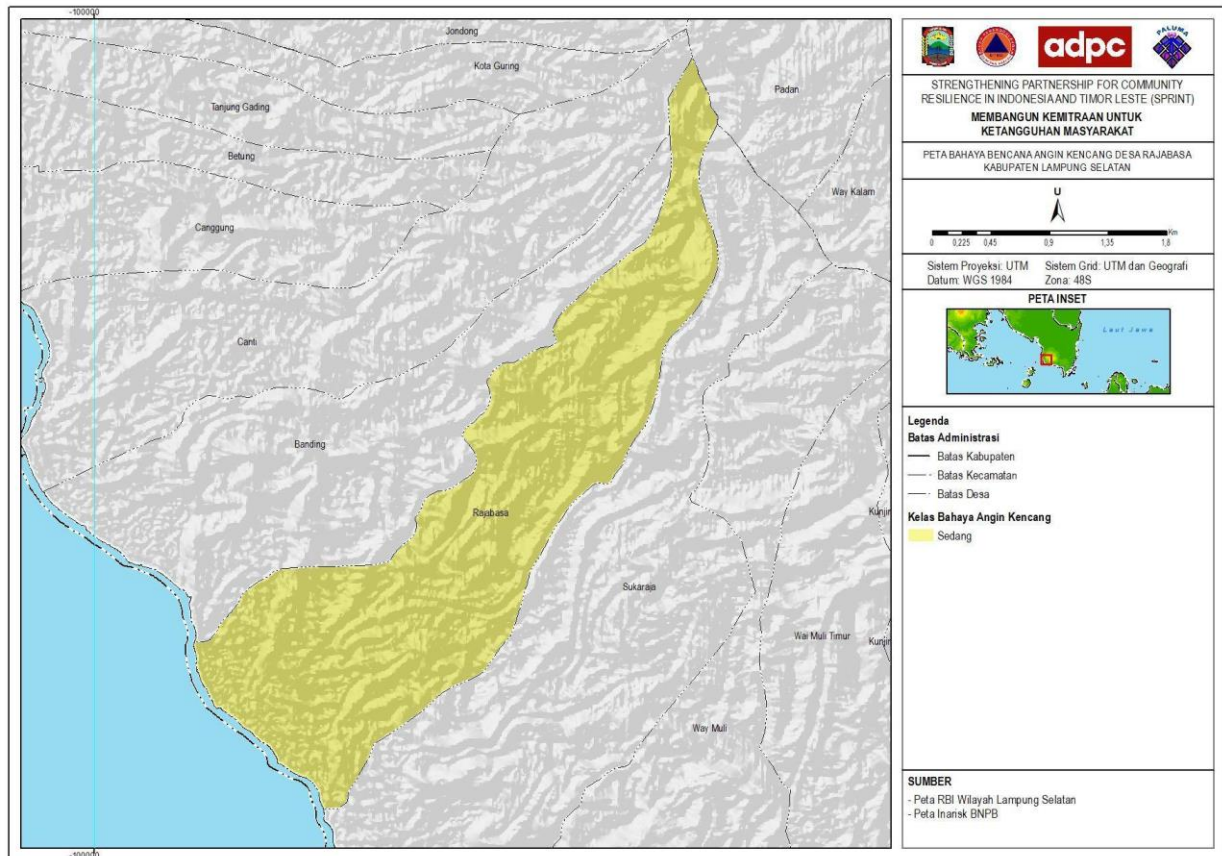


Figure 6. Rajabasa Village Strong Wind Risk Map

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.

Recommendations for Disaster Management Activities

Table 4.10. Recommendations for disaster management activities and actors for the Tsunami threat

Village: Rajabasa District: Rajabasa Regency/City: Lampung SouthLampung province												
PHASE/STAGE	ACTIVITY	INSTITUTION / ORGANIZATION										
		R ur al Vi lla ge	YO UT H OR GA NIZ ATI ON	LI N M AS	LP M	OP DIS	FP RB	K P K K	G	VIL LA GE CH IEF	TR AD ITI ON AL FI GU RE	
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. Recovery Early	√	√	√								
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	√					√					

CHAPTER V

CLOSING

Disaster risk studies are used as a basis for preparing the Rajabasa Village disaster management plan. Therefore, the results of this risk assessment can be agreed upon and legalized by the Rajabasa Village Government so that the implementation of disaster management in Rajabasa Village can be more focused. It is hoped that by strengthening the Village Government in disaster risk assessment, a 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, disaster risk studies 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.

DRAFTING TEAM

FPRB Rajabas Villa

