



Assessment Tool on the Impact of Tsunami Ready Indicators to Recognized Tsunami Ready Community

Piloting in Indonesia

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Introduction to Assessment

Background

The Tsunami Ready Recognition itself is a significant milestone

It is equally important to understand **the real-world impact of the Tsunami Ready Programme on communities.**

- Has it increased awareness?
- Has it strengthened local preparedness?
- Are the DRR teams and community members more confident and capable in responding to tsunami threats?

Introduction to Assessment

Objectives

The tool aims to assess:

- How the **recognition has influenced disaster preparedness** activities.
- Their **current capacity after being recognized** as a Tsunami Ready Community.
- **Gaps and challenges** they have faced since the recognition.
- The **overall sustainability** of tsunami preparedness measures in these communities.

Introduction to Assessment

TR Indicators and the EW4All Pillars



Early
Warnings
for All

- Disaster Risk Knowledge
- Warning Detection
- Warning Dissemination
- Preparedness and Response

Assessment Tools on the Impact of TR Indicators to Recognized TR Community

Introduction to Assessment

Survey Implementation Methodology

The study method use structured survey questionnaires administered to three distinct target groups within the recognized community:

- **Village Leaders:** To gather insights of the recognition toward institutional arrangements, policy integration, budget allocation, and oversight. (Respondent: Head of Village)
- **DRR Committee Members:** To gather insights of the recognition toward sustainability and capacity of the 12 indicators, technical capacity and confidence DRR roles. (Respondent: 5-10 village DRR team including the head / leader of the team)
- **General Villagers:** To gather community insights of tsunami preparedness after the recognition is given (Respondent: 5-10 community member, gender and age balance).

Introduction to Assessment

Expected Outcomes

This study will be an **evidence-based approach to assess the mid-term impact of the UNESCO-IOC Tsunami Ready Recognition at the community level.**

Through structured survey instruments and analysis, the study will generate valuable insights into how recognition translates into lived preparedness, institutional change, and community resilience.

Introduction to Assessment

Expected Outcomes

- Clear **documentation of perceived and real changes** attributable to the UNESCO-IOC recognition.
- A **comprehensive profile of the current tsunami preparedness in the Tsunami Ready-recognized village** and evidence-based insights on whether Tsunami Ready Recognition has strengthened resilience.
- **Identified gaps** (e.g., lack of regular drills, insufficient awareness).
- **Actionable recommendations** for local governments, disaster management agencies, and UNESCO-IOC partners to enhance future tsunami readiness support and guidance.
- **Policy recommendations** to enhance the program.
- A **case study report that can replicate** in other communities nationally and regionally.

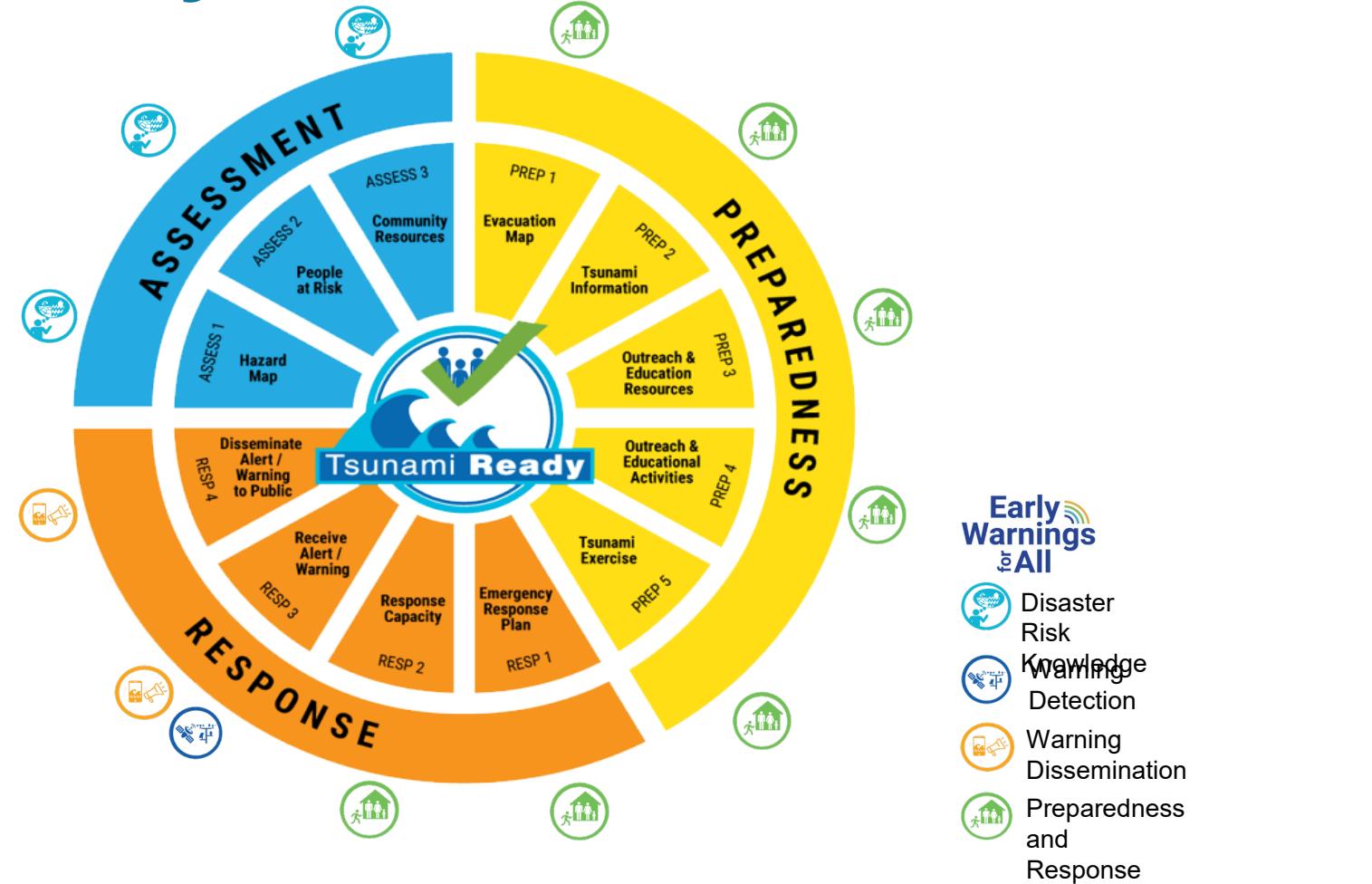


Introduction to Assessment

Questions for Community Leader

16 general questions
on Tsunami Ready

1 Responder per village



Assessment Tools on the Impact of TR Indicators to Recognized TR Community

Introduction to Assessment

Questions for Community DRR Team

84 Questions

13 general questions on Tsunami Ready

13 questions Assessment

30 questions Preparedness

23 questions Response

Respondent:

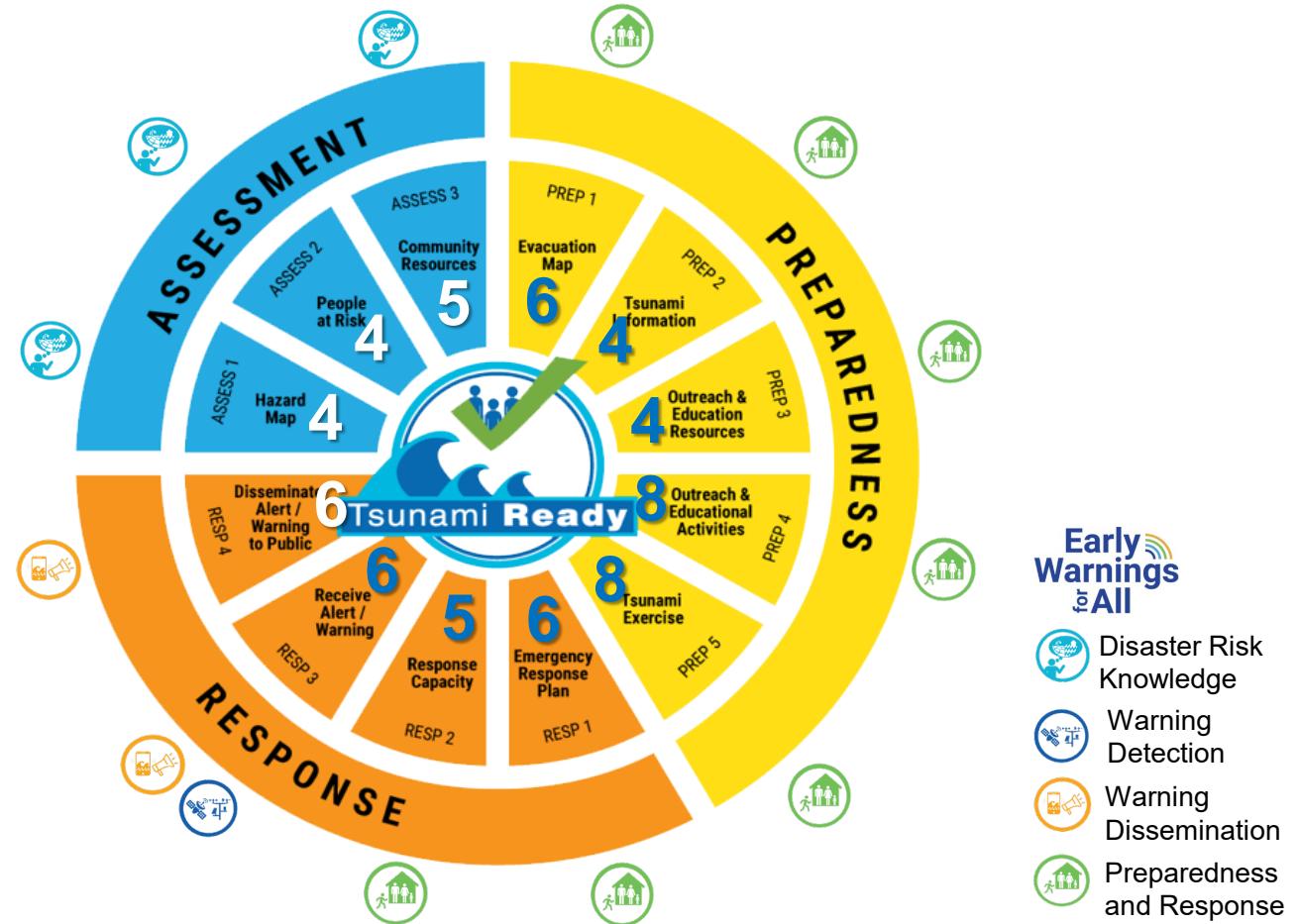
1. Head of DRR (1 respondent)
2. DRR Team Members (5-7 respondent)

Pillar 1: 13 Questions

Pillar 2: -

Pillar 3: 12 Questions

Pillar 4: 41 Questions



Introduction to Assessment

Questions for Community Members

56 Questions

6 general questions on Tsunami Ready

10 questions Assessment

29 questions Preparedness

11 questions Response

Respondent:

7-10 respondent

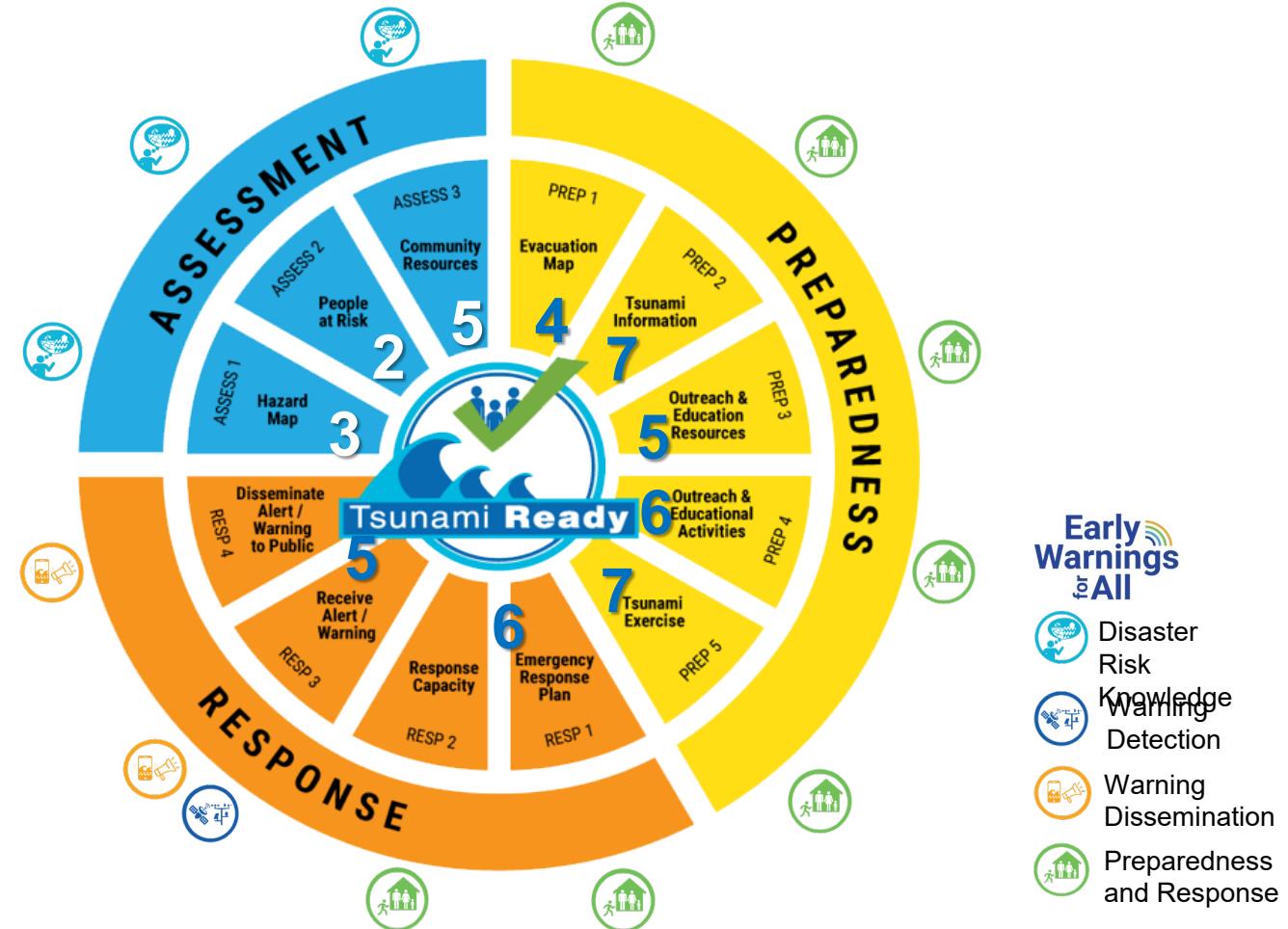
(Gender balance and age
between 21 – 70)

Pillar 1: 10 Questions

Pillar 2: -

Pillar 3: 5 Questions

Pillar 4: 35 Questions



Introduction to Assessment

Schedule

Date	Activity
June – August 2025	
11 August 2025	Introduction to BMKG Mitigation Section
20 Agustus 2025	Introduction to BMKG Station Offices
21 August – 7 September 2025	Data Collection by Enumerators
September – October 2025	Compilation, Analysis, and Reporting
November 2025	Sharing of 1st Draft at the International Tsunami Symposium in Hyderabad

Data Collection

NO	Village	Local BMKG
1	Gampong Jawa	Stasiun Geofisika Aceh Besar
2	Deah Glumpang	
3	Mon Ikeun	
4	LamKruet	
5	Tapakih	
6	Purus	Stasiun Geofisika Padang Panjang
7	Lolong Belanti	
8	Panggarangan	
9	Pangandaran	
10	Sidaurip	Stasiun Geofisika Tangerang
11	Kemadang	
12	Glagah	
13	Poncosari	
14	Parangtritis	Stasiun Geofisika Bandung
15	Tirtohargo	
16	Gadingsari	
17	Tambakrejo	
18	Pengastulan	Stasiun Geofisika Sleman
19	Tanjung Benoa	
20	Kuta Mandalika	
21	Galala	
22	Hative Kecil	Stasiun Geofisika Ambon

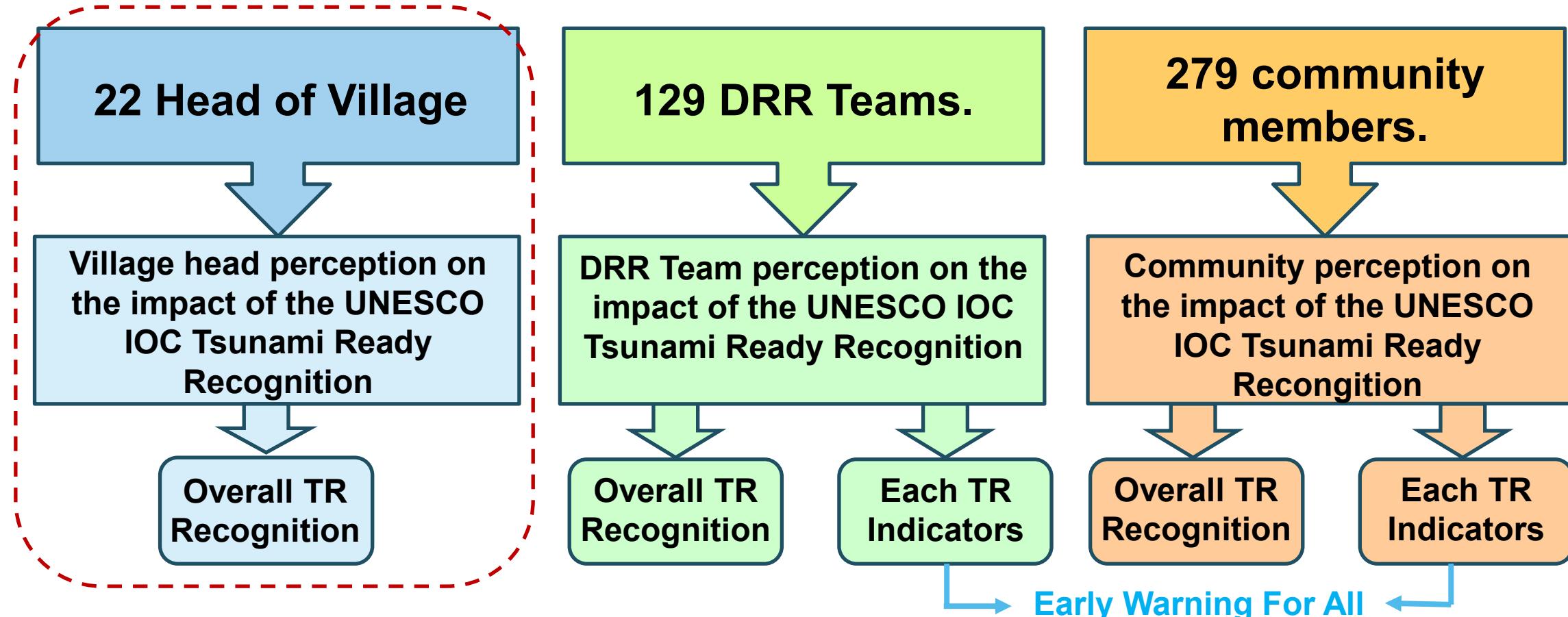
Data Collected

450 Respondents

Village	HoV	DRR	Com'ties	Total
Gampong Jawa	1	5	5	11
Deah Glumpang	1	6	5	12
Mon Ikeun	1	4	20	25
Lamkruet	1	4	8	13
Tapakih	1	7	20	28
Purus	1	8	38	47
Lolong Belanti	1	19	14	34
Panggarangan	1	5	14	20
Pangandaran	1	5	19	25
Sidaurip	1	7	10	18
Kemadang	1	6	7	14
Glagah	1	7	9	17
Poncosari	1	6	9	16
Parangtritis	1	6	13	20
Tirtohargo	1	9	15	25
Gadingsari	1	6	7	14
Tambakrejo	1	5	9	15
Tanjung Benoa	1	10	11	22
Pengastulan	1	5	11	17
Kuta Mandalika	1	10	15	26
Galala	1	4	12	17
Hative Kecil	1	5	8	14
Total	22	149	279	450

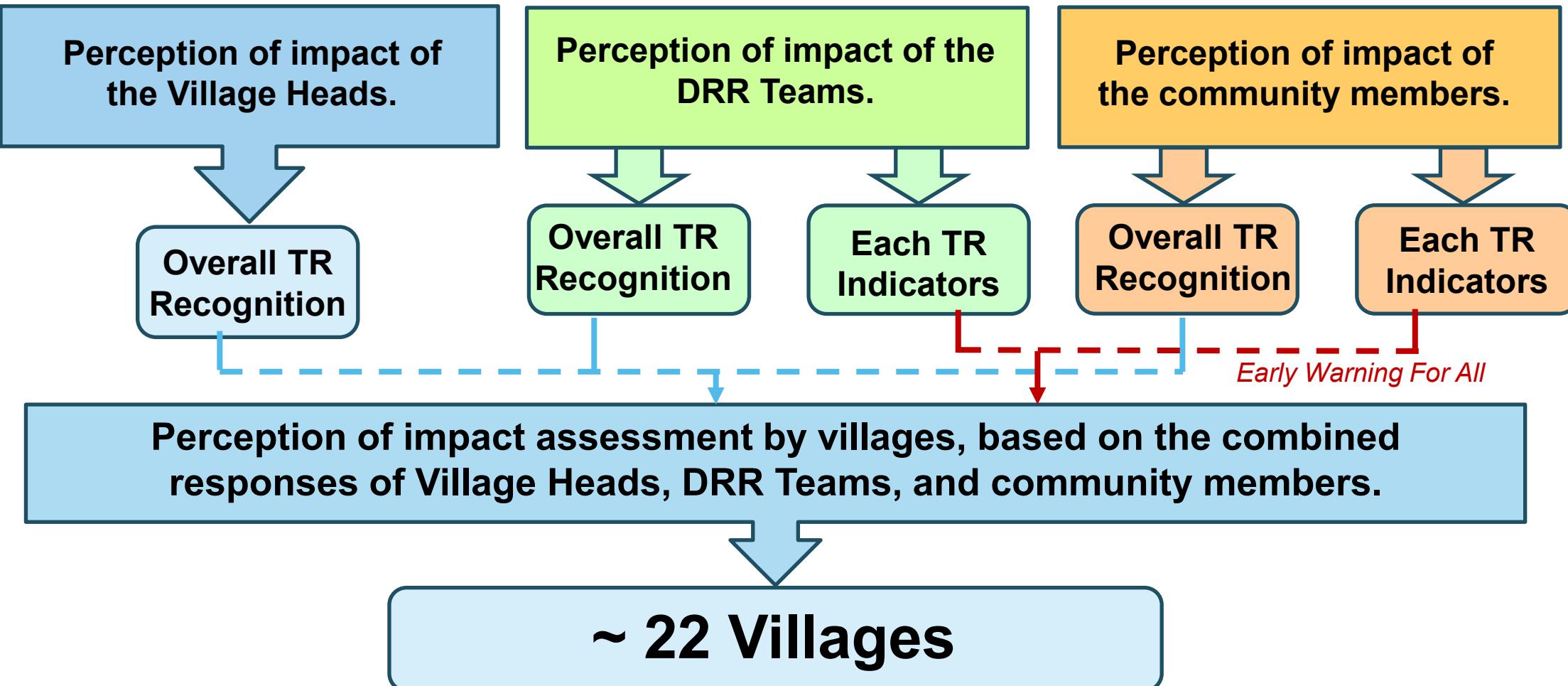
Potential Data Analysis

1. Perception of the impact of UNESCO-IOC Tsunami Ready Recognition based on Respondent



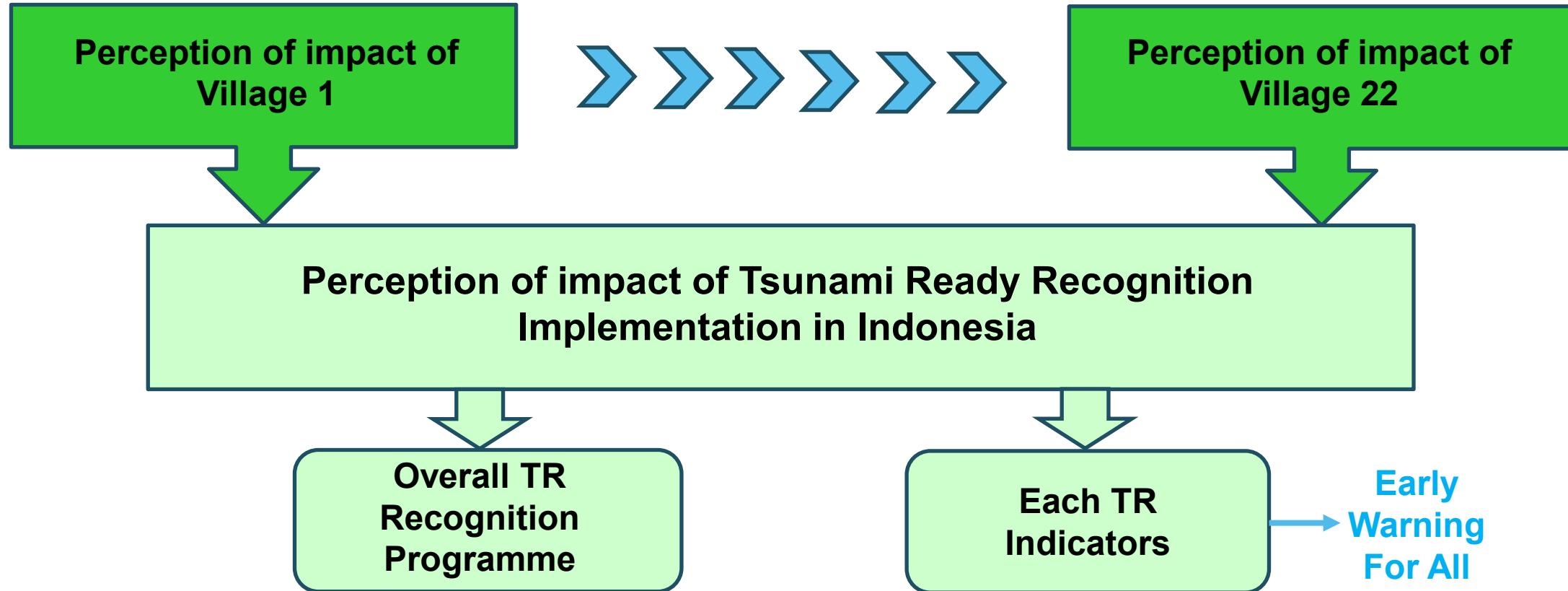
Potential Data Analysis

2. Impact of UNESCO-IOC Tsunami Ready Recognition for each Village



Potential Data Analysis

3. Perception of impact of UNESCO-IOC Tsunami Ready Recognition based In Indonesia

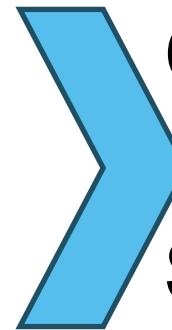


Preliminary Data Analysis

Perception of the head of village on the impact of the UNESCO IOC Tsunami Ready Recognition

Of the 22 villages that have been recognized as Tsunami Ready Communities, current 21 village heads were involved in preparing and submitting applications for recognition from UNESCO-IOC

Of the 21 village heads involved in the preparation and recognition process,

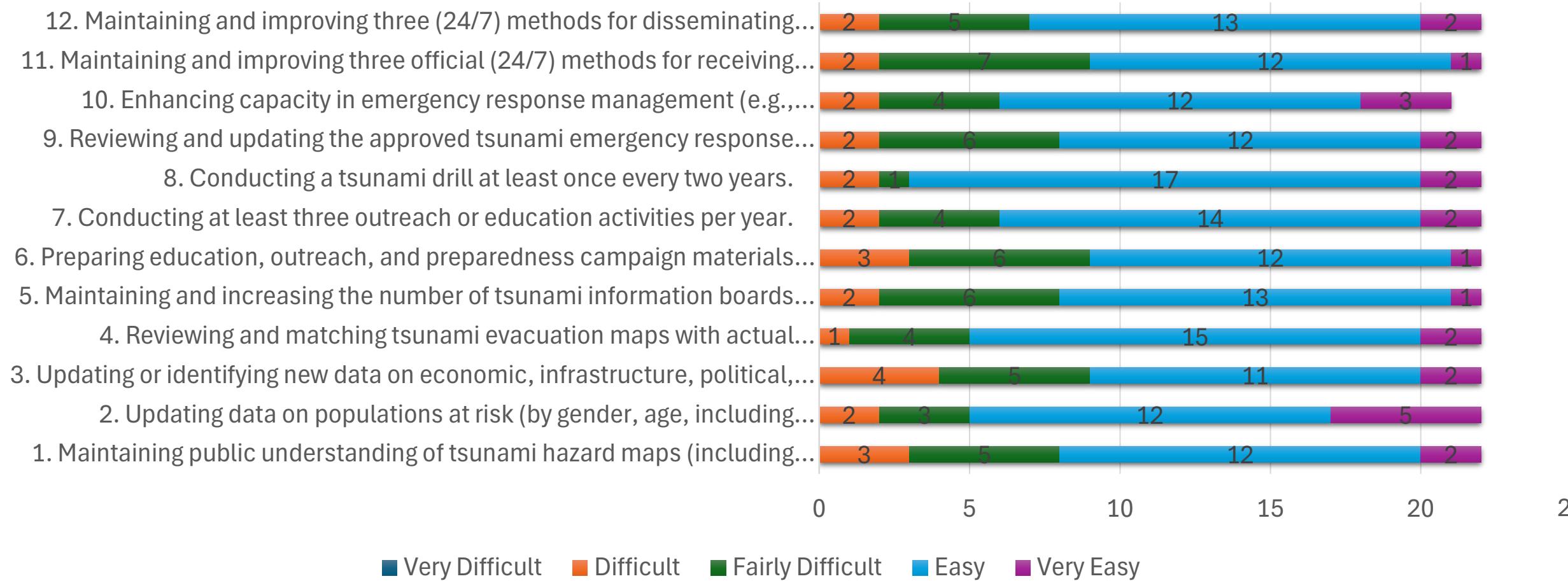


Continuity
Ownership
Sustainability

11 are very confident that their village have strong systems, high community awareness, and are ready in case of a tsunami event.

10 believe their village has improved and are better prepared than before, although some areas still need to be strengthened.

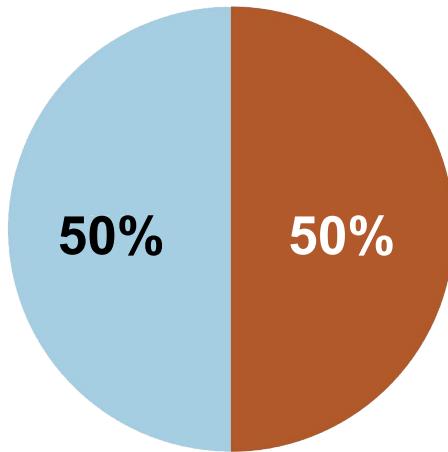
Maintaining 12 Indicator after Recognition



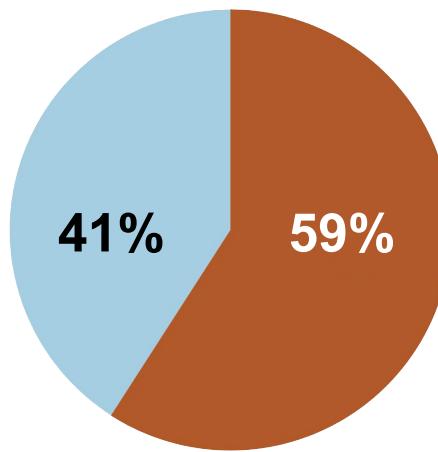
■ Very Difficult ■ Difficult ■ Fairly Difficult ■ Easy ■ Very Easy

Changes after UNESCO-IOC Recognition

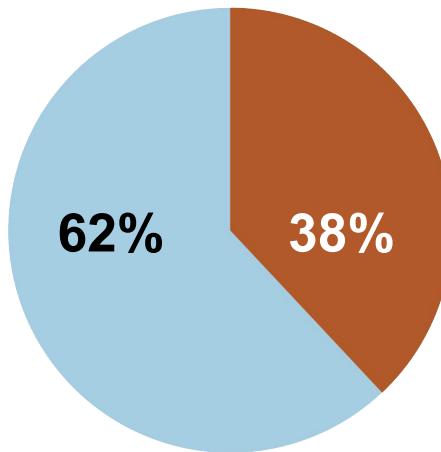
Budget Change



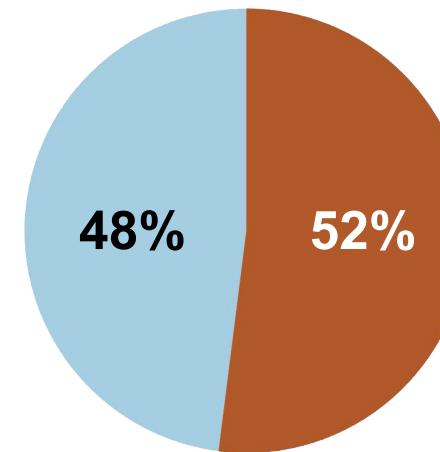
Policy Change



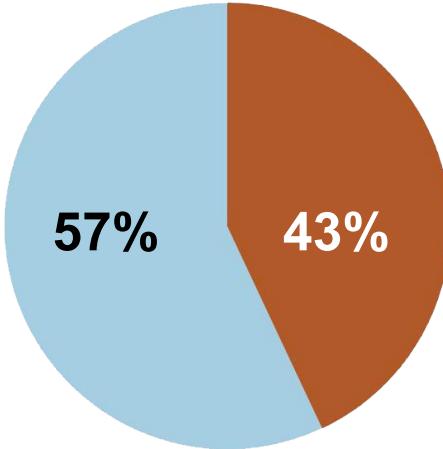
Community DRR Team



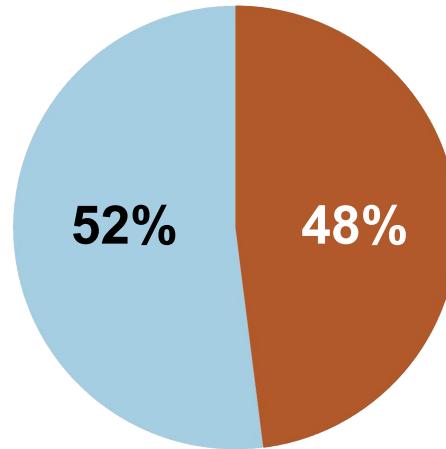
Improved Evacuation Sign and Access



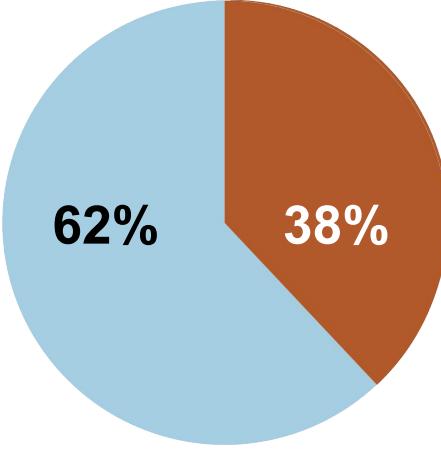
Sign Maintenance



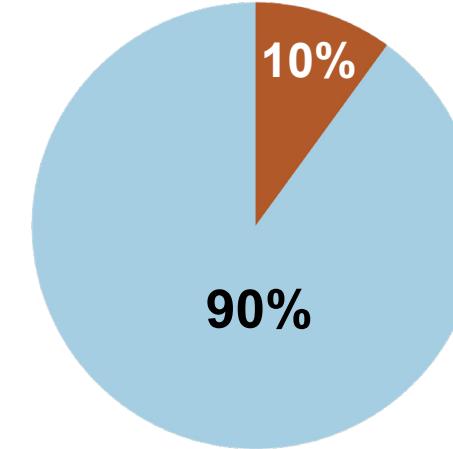
School Drill Activity



Community Drill Involvement



Public Awareness and Education

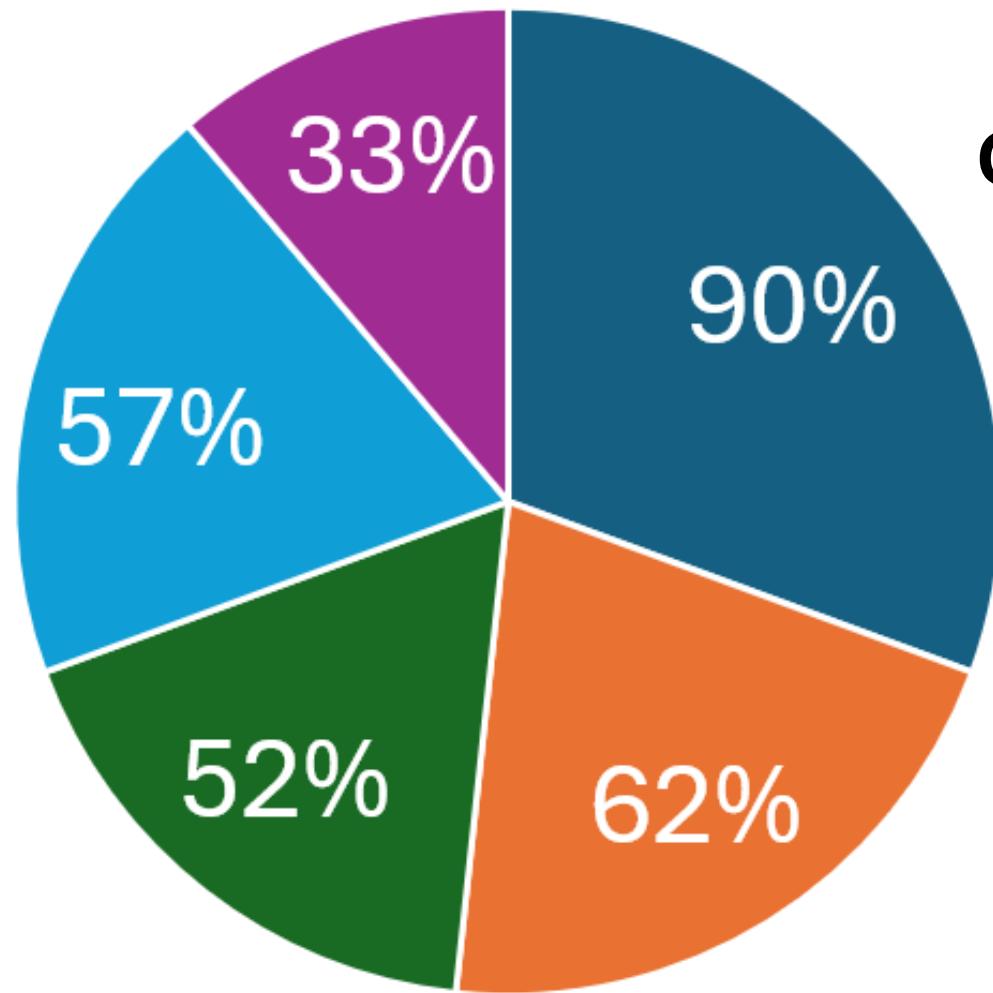


Increase



Remain the
same or
decrease

Community Awareness and Preparedness



Out of 22 Head of Village,

- Increased public awareness and education
- Community involvement in DRR drills/simulations
- School activity in evacuation drills
- Preparedness as part of daily life
- Change in community culture/behavior

Tsunami Evacuation Infrastructure and Information Board

Evacuation signs still installed, and routes remain accessible and maintained	57%	Village heads stated that tsunami evacuation signs are still in place and evacuation routes are accessible and well-maintained.
Increase in the number of tsunami evacuation signs and better access to safe zones (including accessibility for persons with disabilities)	48%	Village heads reported an increase in evacuation signs and improved access to safe zones, ensuring inclusivity for all.
Community familiarity with tsunami information boards, signs, maps, and evacuation routes	47%	Village heads stated that people are now more familiar with tsunami-related information and evacuation guidance.

Structure or organization of the village DRR team

After being recognized as UNESCO-IOC Tsunami Ready Communities, 13 villages stated that there were no change in the structure or organization of the village DRR team, while 9 villages reported there are changes due to one or more of the following reasons:

- **Expiration of the previous structure** based on a Decree/Organizational Structure with a defined term or period.
- Changes in management, **turnover of community organization members**, and/or **regeneration with new members** and leaders.
- **Updating of the structure**, for example, integration of the *Destana* (Disaster Resilient Village) Team; **Name changes** (e.g., from KSB at the *Kapanewon* level to KSB at the *Kalurahan* level); the **establishment of a new FPRB** (Village Disaster Risk Reduction Forum).
- **Strengthening of village institutions**, indigenous village structure, or replacement of the village leaders.

Disaster Risk Reduction Budget

After being recognized as UNESCO-IOC Tsunami Ready Community, 11 villages stated there were no changes in DRR Budget, 8 villages reported a slight increase, and 3 villages noted a significant increase.

Some explanations for “no change” include:

- The village has **never had a specific DRR budget**.
- The budget is **adjusted according to the village's financial capacity**, resulting in no increase allocation for DRR from the village funds.
- Village funds are limited due to **dependency on the regional government budget** (APBD).
- **Budget efficiency measures** are in place.
- Implementation of **national programs that must be realized**, such as food security initiatives.

Disaster Risk Reduction Budget

Villages that “experienced changes” explained:

- Increased **budget allocation for the preparation of TEA** (Final Tsunami Evacuation Areas) as part of preparedness measures.
- Increase in **budget for the development of green open spaces and the need for additional evacuation routes and information boards**.
- More **disaster management activities** being conducted.
- The need to **support FPRB (Village Disaster Risk Reduction Team)** activities, such as purchasing a laptop for administrative purposes.
- Enhanced **community preparedness initiatives**, more activities being carried out after the recognition.
- Additional and **improved infrastructure facilities** in the village area,
- Expanded **outreach to schools and surrounding communities**.

Some additional remarks on the benefits felt from the recognition:

- Through the Tsunami Ready, the village now has a **clearer understanding of what actions to take, enhancing the safety of residents to a greater extent.**
- The village has **become more well-known** as a prepared community.
- People have become **more aware of tsunamis**; whenever a strong earthquake occurs, regardless of its magnitude, people immediately carry out self-evacuation as the result of awareness-raising activities conducted through village programs.
- Regular **tsunami drills in communities and schools** have increased.
- Residents can **understand steps to take and the location of the TES** (Temporary Tsunami Shelter), TEA (Final Tsunami Evacuation Areas), and the implementation of earthquake and tsunami drills and awareness campaigns from an early stage.
- More **institutions have come to collaborate** with the village.

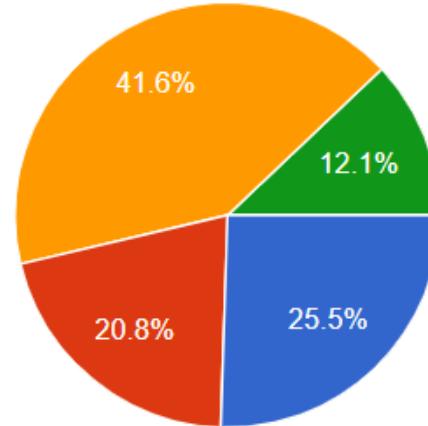
Example DRR Team and Members

Since the recognition, have there been any changes or additions to policies (for example, a Village Head Decree) in your village related to Disaster Risk Reduction?

12. Apakah ada perubahan atau penambahan kebijakan (misalnya SK Kepala desa) di desa Bapak/Ibu terkait dengan pengurangan Risiko Bencana?

149 responses

 Copy chart



- Ya, ada perubahan kebijakan terkait PRB di Desa
- Ya, ada penambahan kebijakan terkait PRB di Desa
- Tidak ada perubahan
- Desa tidak punya kebijakan PRB

Yes, there has been a policy change related to DRR in the village

Yes, there has been an additional policy related to DRR in the village

No change

The village does not have a DRR policy

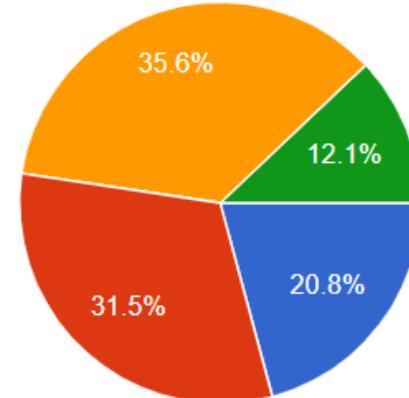
Example DRR Team and Members

Has there been any change in the disaster risk reduction budget in your village after being recognized as a Tsunami Ready Community by UNESCO-IOC?

14. Apakah ada perubahan anggaran pengurangan risiko Bencana di desa Bapak / Ibu setelah diakui sebagai Masyarakat Siaga Tsunami oleh UNESCO-IOC

149 responses

 Copy chart



- Ya, ada peningkatan anggaran PRB yang cukup tinggi
- Ya, ada peningkatan anggaran PRB tetapi tidak besar
- Tidak ada perubahan
- Terjadi penurunan anggaran PRB di desa

Yes, there has been a significant increase in the DRR budget

Yes, there has been an increase in the DRR budget, but not large

No change

There has been a decrease in the DRR budget in the village



THANK YOU

