

Climate Resilience for Communities (CRMC) in Jeruksari Village, Tirto District, Pekalongan Regency



2024



Mercy Corps Indonesia

 The Climate Resilience
Measurement for
Communities (CRMC)

CONTENTS

CONTENTS	i
TABLES	iii
FIGURES	iv
CHAPTER I Brief Description of CRMC	1
1.1 Background	1
1.2 Definition, Objectives, and Benefits of CRMC	1
CHAPTER II Overview of Jeruksari Village and the Community	3
2.1 Jeruksari Village	3
2.1.1 Administration Context	3
2.1.2 Physical, Environmental, and Disaster Context	3
2.1.3 Demographic Context	5
2.1.4 Socio-Cultural	6
2.1.5 Economics	7
2.1.6 Infrastructure Context	7
2.2 Jeruksari Community	8
CHAPTER III Collecting Field Data Process	9
3.1 Climate Resilience Measurement for Communities (CRMC) Tools Training	9
3.2 Study Setup	10
3.3 Enumerator Training and Simulation	10
3.4 Determine Community, Sample and Focus Data Collection Designs	11
3.4.1 Sample Size Determination and Detailed Map	11
3.4.2 Key Informant Interview Design	12
3.4.3 Focus Group Discussion Design	12
3.5 Permit Process and Field Observation	12
3.6 Data Collection	13
3.6.1 Household Surveys	13
3.6.2 Key Informant Interviews	13
3.6.3 Focus Group Discussions	14
3.6.4 Secondary Data	20
3.7 Grading Process	20
CHAPTER IV Interpreting Grading Results	22
4.1 GAID Perspectives on Resilience Sources	26
4.1.1 Profile of Respondents Disaggregated by GAID	26
4.1.2 Interrelation between GAID and Certain Resilience Sources	28
4.2 Identifying the SO-WN of Community Resilience Sources	35
4.3 Grouping Intervention Priority	42
CHAPTER V Action Plan to Implement Prioritized Interventions	45
5.1 Formulation of Action Plans to Implement Prioritized Interventions for Jeruksari Community	45
5.2 Action Plans for Priority 1	47
5.3 Action Plans for Priority 2	48
5.4 Action Plans for Priority 3	50
Appendix 1: Comparison of Intervention Before and After Pre-Feasibility Study	51
Appendix 2: World Cafe Materials for Ranking of Interventions and Program Executor Selection	59
Appendix 3: A Comprehensive Commentary to CRMC Tools	67
Appendix 4: Translation of Household Surveys Questions in Bahasa Indonesia	73
Appendix 5: Translation of Key Informant Interview Questions in Bahasa Indonesia	84
Appendix 6: Translation of Focus Group Discussion Questions in Bahasa Indonesia	95

TABLES

Table II.1 Physical Environment Conditions of Jeruksari	4
Table II.2 Land Use of Jeruksari	4
Table II.3 Vulnerability Condition of Jeruksari	5
Table II.4 Demographic Context of Jeruksari	5
Table II.5 Demographic Context of Jeruksari	5
Table II.6 Institutions in Jeruksari	6
Table II.7 Social Security Condition in Jeruksari	6
Table II.8 Occupations in Jeruksari	7
Table II.9 Infrastructure Condition in Jeruksari	7
Table III.1 Flood Sources of Resilience	9
Table III.2 Enumerator Assignments on the CRMC Application	11
Table III.3 Key Informant Interview Participants of Jeruksari Community	13
Table III.4 FGD Participants of Jeruksari Community	15
Table III.5 Focus Group Discussion Dynamics of Jeruksari Community	17
Table IV.1 CRMC Grading Scale	22
Table IV.2 Details of CRMC Grading Results	24
Table IV.3 Respondents by Gender	27
Table IV.4 Numbers of Female-Headed Households in Jeruksari	27
Table IV.5 Respondent by Age	28
Table IV.6 Household Members Identify as a Minority or Marginalized Groups	28
Table IV.7 Household Members with Disabilities	28
Table IV.8 GAID-Specific Resilience Sources	29
Table IV.9 Measures Taken to Keep Property and Assets Safe	31
Table IV.10 Relevance and Identification of Resilience Sources	35
Table IV.11 SO-WN Analysis of Resilience Sources in Different Lenses	40
Table IV.12 Description of Intervention Priority Score	42
Table IV.13 Grouping Proposed Intervention Priorities	43
Table V.1 World Café Mechanism for Ranking Interventions and Selecting Program Executors	46
Table V.2 Priority 1 of Jeruksari Community Action Plans	47
Table V.3 Priority 2 of Jeruksari Community Action Plans	48
Table V.4 Priority 3 of Jeruksari Community Action Plans	50

FIGURES

Figure II.1 Administrative Map of Jeruksari	3
Figure II.2 Neighborhood Environment of Jeruksari Community	8
Figure III.1 Enumerator Training and Simulation	11
Figure III.2 Jeruksari Community Detailed Map	12
Figure III.3 Jeruksari Community Grading Process	21
Figure IV.1 Grading Score of Five Capitals Jeruksari Community	23
Figure IV.2 Distribution of A to D Grade of Five Capitals Lenses	24
Figure IV.3 First Aid Knowledge	30
Figure IV.4 Knowledge of Areas Most Affected by Flooding	30
Figure IV.5 Safe Access to Health Services during Disaster	31
Figure IV.6 Equal Financial Support by Government	32
Figure IV.7 Inter-Community Equal Educational Opportunities	33
Figure IV.8 Inter-Community Equal Employment Opportunities	33
Figure V.1 Flowcharts of Formulating Action Plans to Implement Prioritized Interventions ...	45
Figure V.2 World Cafe Condition for Ranking Interventions and Selectiong Program Executors	47

CHAPTER I

Brief Description of CRMC

1.1 Background

The Zurich Flood Resilience Alliance ('the Alliance') is a cross-sector collaboration between Zurich Insurance Group, NGOs, and academia. Zurich Insurance Group works with the humanitarian and civil society organizations Concern Worldwide, the International Federation of the Red Cross and Red Crescent Societies (IFRC), Mercy Corps, Plan International, and Practical Action, as well as research partners the International Institute for Applied Systems and Analysis (IIASA), the London School of Economics, and the Institute for Social and Environmental Transition-International (ISET). The Alliance was originally launched in 2013 with the goal of shifting focus from flood response and recovery to pre-event risk reduction. Since 2013, the Zurich Flood Resilience Alliance has successfully been developing and implementing the Flood Resilience Measurement for Communities (FRMC) process, which has been used in over 400 communities globally. In 2020, Alliance members decided to explore the possibility of updating the FRMC and adding new hazards to the framework, and in 2021 a team of Alliance members and other experts developed the content and functionality of the CRMC.

The CRMC is the next evolution of the FRMC, meeting the increasing demand to measure resilience to multiple hazards in order to accelerate climate-change adaptation. The CRMC currently covers flood and heatwave hazards but can be extended to other climate-related hazards. The Z Zurich Foundation's Climate Change Adaptation Program is piloting this in several communities, including the Jeruksari community in Pekalongan Regency.

CRMC is piloted through the Z Zurich Climate Resilience Alliance (ZCRA) Foundation. In early 2024, the ZCRA program entered its third phase. Mercy Corps Indonesia is currently conducting a CRMC assessment as a basis for program implementation in the third phase and drawing lessons learned from the second phase. This profiling and strategy development activity is a collaboration between IKUPI (Inisiatif Kota untuk Perubahan Iklim) and Mercy Corps Indonesia which will take place in stages in May 2024 – May 2025.

1.2 Definition, Objectives, and Benefits of CRMC

The Climate Resilience Measurement for Communities (CRMC) is a framework for measuring community resilience to climate-related hazards, with an associated process and tool for implementing the framework in practice. The CRMC has been designed using a systems-based approach. The CRMC framework is holistic and integrated, and also facilitates the exploration of the interconnections between results. The framework consists of ex-ante indicators or 'sources of resilience' measured in normal/non-disaster times and post-event variables measured after a disaster event occurs. The CRMC is based on the Flood Resilience Measurement for Communities (FRMC) originally developed by the Zurich Flood Resilience Alliance. It includes an approach for testing and empirically validating the framework, and a technology-based data-gathering and evaluation tool for measuring and assessing community resilience to certain climate-related hazards such as heatwaves and floods. The tool is a practical 'hybrid' software application consists of online web-based platform for setting up the process and analyzing results and a smartphone- or tablet-based app that can be used offline in the field for data collection.

CRMC focuses on the community level, where climate change impacts are most damaging, and where much action on improving resilience needs to be taken. Also, many humanitarian

and civil society organizations (including our Alliance members) primarily work at the community level. In CRMC, a 'community' could be defined geographically (perhaps in rural contexts) or by administrative boundaries (which may work in more urban situations). However, no single community will 'feel' like another and there may be cultural aspects to consider too. As a result, we have concluded that, in reality, a community largely defines itself. No matter how the community is defined, the study must be inclusive for all members including diverse genders, ages, and abilities, as well as for ethnic and cultural groups.

It is important to note that measurement at the community level can support decision-making and advocacy at higher levels. Furthermore, community resilience measurement can be an input for programs and initiatives in the community. The CRMC has been designed with more urban perspectives, such as density (population, buildings, infrastructure, etc.), diversity (of actors, infrastructure, and space), and dynamics (population growth, industry, commerce, etc.).

CHAPTER II

Overview of Jeruksari Village and the Community

2.1 Jeruksari Village

2.1.1 Administration Context

Jeruksari is one of the villages in the Tirto District of Pekalongan Regency, Central Java Province. The village covers an area of 2.18 hectares, and is divided into 7 RW (community units) and 22 RT (neighborhood units), with the following boundaries:

North : The Java Sea
South : Padukuhan Kraton Subdistrict, North Pekalongan District
West : Mulyorejo Village, Tirto District & Pecakaran Village, Wonokerto District
East : Bandengan Subdistrict, North Pekalongan District

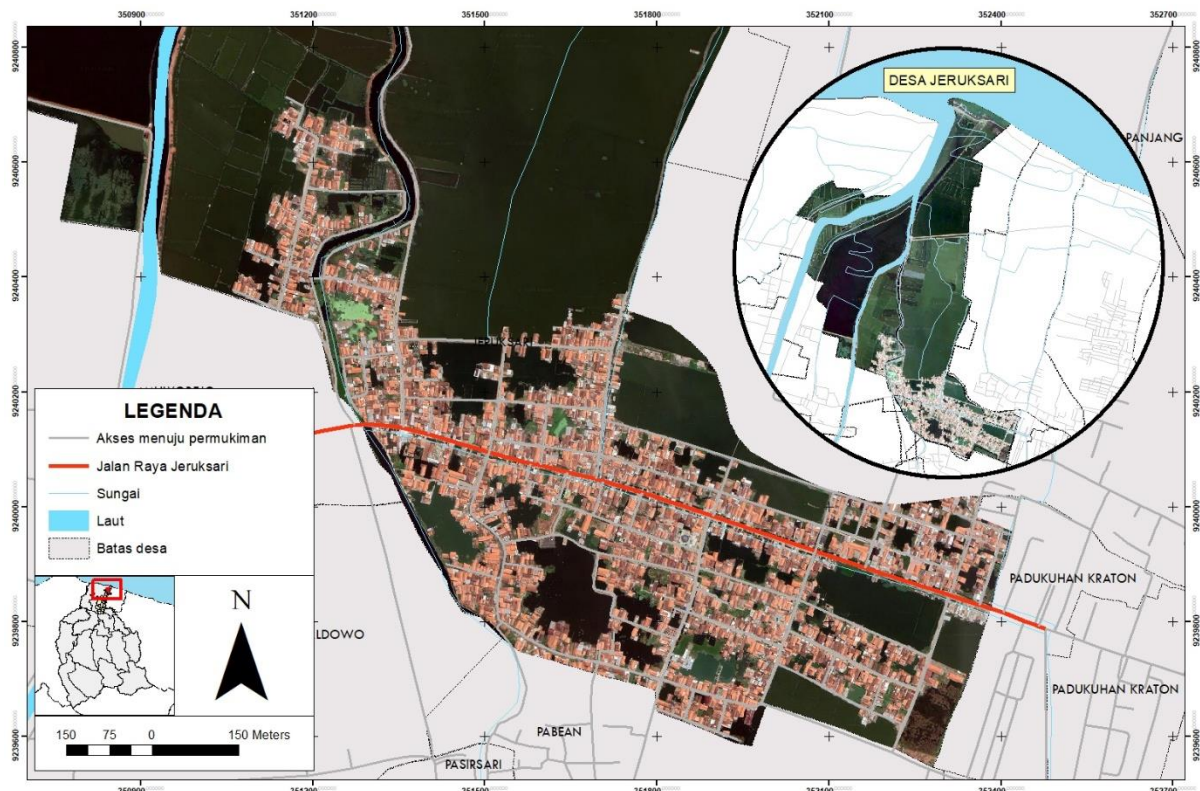


Figure II.1 Administrative Map of Jeruksari
Source: SAS Planet Satellite Imagery Processed (2024)

2.1.2 Physical, Environmental, and Disaster Context

- Physical Environment
According to the 2022 data from the Central Java Public Works Water Resource and Spatial Planning (Pusdataru Jawa Tengah), the following is several aspects of the physical environment conditions of Jeruksari Village:

Table II.1 Physical Environment Conditions of Jeruksari

No	Physical Environment Conditions	Description	Area (Ha)	Percentage
1	Hydrology	Productive aquifers with extensive distribution	208,19	60,76%
2		Productive aquifers with medium productivity	18,76	5,47%
3		Brackish areas	115,7	33,77%
4	Soil Type	Hydromorphic alluvial	342,65	100%
5	Land Suitability	Cultivation area	342,65	100%
6	Rainfall	1750-2250 mm/year	342,65	100%
7	Slope	0-8%	342,65	100%
8	Water Catchment Area	-	0	0%

Source: Pusdataru Jawa Tengah (2022)

The hydrological condition is dominated by productive aquifers with an extensive distribution of 60,76%. This is relatively high, indicating that the Jeruksari Village soil contains water that provides significant water needs through wells or springs. The role of aquifers for human life and ecosystems is to maintain a stable and reliable water supply. In addition, approximately 33,77% of Jeruksari Village consists of brackish areas (a mixture of fresh and saline water). Furthermore, the soil type in Jeruksari Village is entirely hydromorphic alluvial, formed from marine and terrestrial sediments, and is considered fertile. However, the plants suitable in this area are those that can grow well on land intruded by saline water. This soil condition aligns with the land suitability in Jeruksari Village, which is entirely part of a cultivation area to support local community activities. While rainfall of Jeruksari is categorized as low to medium, with 1750-2250 mm/year. Additionally, the village is classified as a flat area with a slope of 0-8%. Jeruksari does not have any water catchment areas, indicating no limitations for building development.

- Land Use

Table II.2 Land Use of Jeruksari

No	Description	Area (Ha)	Percentage
1	Residential	48,69	14,21%
2	Paddy Fields	97,76	28,53%
3	Brackish Water Ponds	179,41	52,36%
4	River	16,79	4,90%
5	Industrial	0	0%
6	Plantation	0	0%
7	Grasslands	0	0%
8	Drylands	0	0%

Source: Pusdataru Jawa Tengah (2022)

Brackish water ponds are the dominant type of land use at 52,36% in Jeruksari, based on land use data reported by Pusdataru Central Java in 2022. This reflects the geographical condition of Jeruksari, which is located in the coastal area of Pekalongan.

Paddy fields account for 28,53%, making it the second largest land use in the village, followed by 14,21% residential land use.

- Disasters

Table II.3 Vulnerability Condition of Jeruksari

No.	Components of Vulnerability	Index
1	Sensitivity	3,62
2	Exposure	3,49
3	Capacity	3,35
Vulnerability Score		3,91

Source: Climate Risk and Impact Assessment of Kupang Watershed (2022)

The Climate Risk and Impact Assessment in Kupang River Basins by Mercy Corps Indonesia (2022) shows that in 2020, Jeruksari Village dominated very high flood hazard levels. Based on the 2021-2035 projection, the entire area of Jeruksari Village is categorized as a very high hazard. Not only is categorized as a very high hazard, but the vulnerability is very high. This is in line with the high level of exposure and sensitivity, while the adaptive capacity tends to be low to moderate. Therefore, this combination of very high hazard and vulnerability causes the level of flood risk to be dominated by the very high category in Jeruksari Village.

2.1.3 Demographic Context

Table II.4 Demographic Context of Jeruksari

Category	Sum of People
Male	3566
Female	3562
Age 0-15 Years	1654
Age 15-65 Years	5197
Age >65 Years	277
Total Population	7128
Number of Households	1869

Source: Jeruksari Village Monograph (2024)

According to the Jeruksari Village Monographic Data of 2024, the population of Jeruksari Village is 7128 people, consisting of 1.869 households. The sex ratio of Jeruksari Village is 100,11, indicating that the population of men and women is approximately equal. Regarding age group categories, 73% of the population is of productive age, while the remaining 27% is of non-productive age.

- Education

Table II.5 Demographic Context of Jeruksari

No	Education Level	Numbers of People
1	Kindergarten	247
2	Elementary School	789
3	Junior High School	494
4	Senior High School	298

No	Education Level	Numbers of People
5	Diploma (D1-D3)	49
6	Bachelor's Degree (S1)	33
7	Master's Degree (S2)	6
8	Religious Education	21
9	Not Graduated/Not Attending School	216

Source: Jeruksari Village Monograph (2024)

The majority of the population in Jeruksari (36,65%) has completed elementary school. This is followed by 22,94% of the population having completed the junior high school level and 13,84% of the population having graduated from high school. However, there are still 10.03% of the population in Jeruksari has not graduated or does not attend school.

2.1.4 Socio-Cultural

- Institutional

Table II.6 Institutions in Jeruksari

No	Organizations	Board of Managers	Sum of Member
1	Community Empowerment Agency (LPM)	4	6
2	Family Welfare Movement (PKK)	6	16
3	Village-Owned Enterprises (BUMDes)	N/A	N/A
4	Youth Organization (Karang Taruna)	6	34

Source: Jeruksari Village Monograph (2024)

The institutions in Jeruksari Village are diverse enough to illustrate the socio-cultural conditions in the village. Starting from the Youth Organization (Karang Taruna), which stands as the institution with the most members, followed by the Family Empowerment and Welfare (PKK), Community Empowerment Agency (LPM), and Village-Owned Enterprises (BUMDes).

- Social Security

Table II.7 Social Security Condition in Jeruksari

No	Security Type	Quantity	Unit
1	Community Protection Units (Linmas)	22	Person
2	Neighborhood Security Posts	15	Units
3	Disaster Monitoring Posts	7	Units

Source: Jeruksari Village Monograph (2024)

Jeruksari Village has a Community Protection Unit (Linmas) that serves to protect the community from any disturbances, as well as to assist in disaster management. In addition, there are 15 units of neighborhood security posts and 7 units of disaster monitoring posts available, demonstrating a commitment to safeguarding local order and security.

2.1.5 Economics

According to the 2022 Monograph Data of Jeruksari Village, the occupations recognized in Jeruksari include garment workers, traders, batik workers, construction workers, fishermen and crew members, fish farmers, civil servants, entrepreneurs or self-employed individuals, cycle rickshaw (*becak*) drivers, and retirees. Among these occupations, garment workers account for 15% of the population, making it the most dominant occupation. It is also notable that a significant portion of the Jerusari people are employed as daily laborers. However, about 50% of the population works out of the identifiable lists below. Additionally, the local economic activities occurs at the village market in Jeruksari.

Table II.8 Occupations in Jeruksari

No	Occupation	Percentage
1	Garment Workers	15%
2	Batik Workers	9%
3	Traders	9%
4	Construction Workers	6%
5	Fishermen and Crew Members	5%
6	Fish Farmers	4%
7	Entrepreneurs	1%
8	Civil Servants	1%
9	Others	50%
Total		100%

Source: Data Monografi Desa Jeruksari (2022)

2.1.6 Infrastructure Context

Table II.9 Infrastructure Condition in Jeruksari

No	Facilities		Quantity
1	Government	Village Office	1
2	Health Services	Health Center (Puskesmas)	0
3		Village Health Post (Poskesdes)	1
4		Community-Based Healt Care (UKBM: Posyandu, Polindes)	7
5	Education	Village Library (Perpusdes)	1
6		Early Childhood Education (PAUD)	2
7		Kindergarten	2
8		Elementary School	1
9	Religious	Mosque	1
10	Facilities	Prayer House (Musholah)	18
11	WASH	Village Wells	7
12	Economic	Village Market	1

Source: Jeruksari Village Monograph (2024)

The village office is located on the main access in Jeruksari to support government activities. Jeruksari has a village health post with 7 UKBM (Community-Based Health Care) such as Posyandu and Polindes. Furthermore, the local community can access

education services through the village library, early childhood education (PAUD), kindergarten, and elementary school. In terms of religious needs, Jeruksari has a mosque and 18 prayer houses (Musholah) spread in neighborhoods. Some village wells support sanitation and clean water services. Jeruksari Village has a village market that is accessible and support economic activities to the local community.

2.2 Jeruksari Community

The Jeruksari community is generally a densely populated area. In this research, the community are only RW (community units) 04, 05, and 06. The source of income are typically fishermen, fish farmers, batik artisans, and most commonly, housewives working in garment sectors to support the family income. The majority of the Jeruksari community has only completed elementary to junior high school education. Nevertheless, the community holds inherent values such as a culture of cooperation, helping each other, and strong family bonds, alongside a high sense of ownership within the community.

As a coastal area in Pekalongan Regency, the Jeruksari community is one of the areas most affected by the rising sea level, which has much of the land being submerged. To adapt, the community continually elevates their house floors and roofs to keep up with the rising water level and protects valuables by storing them in higher positions. Road elevation is also routinely undertaken. As a result, many public roads in Jeruksari Village are now higher than the floors of the houses. Public sanitation facilities (MCK) are also available to support local sanitation needs during floods and for those who do not have private sanitation in their homes. The Jeruksari community is not only dealing with tidal floods (banjir rob) but also flooding from the overflow of the Meduri River in RW 06.



Figure II.2 Neighborhood Environment of Jeruksari Community

Source: Photo by IKUPI (2024)

CHAPTER III

Collecting Field Data Process

3.1 Climate Resilience Measurement for Communities (CRMC) Tools Training

On 17 November 2024, the IKUPI team attended the Training of Trainers (TOT) held by Mercy Corps Indonesia to help the team understand the key concepts and principles of the Climate Resilience Measurement for Communities, learned running the application (assign roles and responsibilities for the entire data collection process). David Nash conducted the training from the Z Zurich Foundation. Attendances are from IKUPI, Mercy Corps Indonesia, Mercy Corps Nepal, and the Regional Program and Advocacy Manager of the Zurich Climate Resilience Alliance. The topics range from the overview of CRMC including its update from the last version (FRMC), key concepts and principles, 5C-4R framework as the basis of CRMC framework, grading process of the sources of resilience, and introduction to CRMC tools and simulation.

There are 76 indicators or sources of resilience in total (a combination of heat wave and flood sources of resilience), 52 indicators or sources of resilience for flood-specific hazards, and 50 indicators or sources of resilience for heat wave-specific hazards. As agreed during the training, this research focuses on flood-specific hazards which consists of 52 sources of resilience. This research will be conducted in the Pekalongan coastal area. The 52 sources of resilience are listed below:

Table III.1 Flood Sources of Resilience

No	Five Capitals	Indicators/ Sources of Resilience
1	Human	Secondary school attendance
2		Food availability
3		First aid knowledge
4		Awareness of need for climate change action
5		Awareness of climate change risk
6		Awareness of how nature mitigates risk
7		Hazard exposure awareness
8		Evacuation and safety knowledge
9		Unsafe water awareness
10	Social	Mutual support
11		Social inclusiveness of disaster risk management
12		Community safety
13		Local leadership
14		Disaster response personnel
15		Healthcare accessibility
16		Trust in local authorities
17		Intra-community equity
18		Inter-community equity
19		Risk reduction planning
20		Response planning
21		Family violence and response planning
22		Stakeholder engagement in risk management
23		Risk mapping

No	Five Capitals	Indicators/ Sources of Resilience
24	Physical	Disaster impact data collection and use
25		Energy supply continuity
26		Transportation system continuity
27		Communications system continuity
28		Early warning
29		Continuity of education
30		Emergency infrastructure and supplies
31		Continuity of healthcare during disaster
32		Forecasting
33		Household protection and adaptation
34		Availability of clean, safe water
35		Waste management and risk
36		Large scale flood protection
37	Natural	Tree cover
38		Permeable surfaces
39		Land use planning
40		Resource Management
41		Land/water interface health
42		Ecological management for disaster risk reduction
43	Financial	Household access to discretionary funds
44		Community financial health
45		Local government financial capacity
46		Public infrastructure maintenance budget
47		Climate change adaptation planning and investment
48		Business continuity
49		Household income continuity
50		Risk reduction investments
51		Disaster insurance
52		Disaster recovery budget

Source: Website-Based CRMC Application (2024)

3.2 Study Setup

The study setup was prepared from May to July 2024. The IKUPI team translated the 12 modules, questions, and all components of the CRMC application to run in Bahasa Indonesia for both the website and mobile versions. The IKUPI team then submitted the translations to Mercy Corps Indonesia for review and to ensure that the questions were adapted to the local context without losing the focus of the questions. Mercy Corps Indonesia did the editing, which took about a month. Based on the translated modules, the IKUPI team then developed CRMC training tools in Bahasa Indonesia.

3.3 Enumerator Training and Simulation

On 24-26 September 2024, IKUPI and Mercy Corps Indonesia conducted a training for enumerators. The IKUPI team conducted the training to provide briefings on data collection, information gathering, introduction to the concepts and principles of CRMC, and practice using

the CRMC mobile application in the demo version. The enumerators downloaded the CRMC application from Playstore and Appstore and chose the demo version. Enumerators did simulation by role-playing with the Mercy Corps Indonesia team which would assist in the data collection process. This simulation included a discussion regarding issues that are likely to happen during a household survey. This activity ensures enumerators have the same understanding and agreement on the survey procedures according to the protocol.



Figure III.1 Enumerator Training and Simulation

Source: Photo by IKUPI (2024)

After completing this series of training sessions, the enumerators' email addresses will be registered and assigned to the CRMC application. There are a total of eight enumerators, with four of them assigned to the Jeruksari community. The following is the distribution:

Table III.2 Enumerator Assignments on the CRMC Application

No	Jeruksari Community
1	MercyCorpsIndonesiaFieldWorker01
2	MercyCorpsIndonesiaFieldWorker03
3	MercyCorpsIndonesiaFieldWorker06
4	MercyCorpsIndonesiaFieldWorker07

Source: Website-Based CRMC Application (2024)

3.4 Determine Community, Sample and Focus Data Collection Designs

The study area was referenced from the Participatory Land Use Plan (PLUP) in the Pekalongan Document, a collaboration between Earthworm Foundation Indonesia and Mercy Corps Indonesia. Therefore, it did not take long to define the community. This stage was also done during the enumerator training and simulation. The sample size was set smaller than the village scale, CRMC focuses on the neighborhoods most affected by the flood. The sample was calculated with a margin of error of 1%. Household sampling was done using systematic random sampling (SRS). This means that each population has an equal chance of being surveyed. A detailed map showing transect lines and sample point locations is visualized using Google Earth. Systematization was done by calculating the distance between house sample points by dividing the total population by the sample size, taking into account the average family size. This map served as a reference for enumerators working in the field.

3.4.1 Sample Size Determination and Detailed Map

The Jeruksari community is located in RW 04, 05, and 06. The total number of households in this community is 780 with an average family size of five persons. After calibration, the

resulting sample size was 114 samples. The interval or distance between houses is 6-7 houses per sample point. The following is a detailed map of the Jeruksari community:

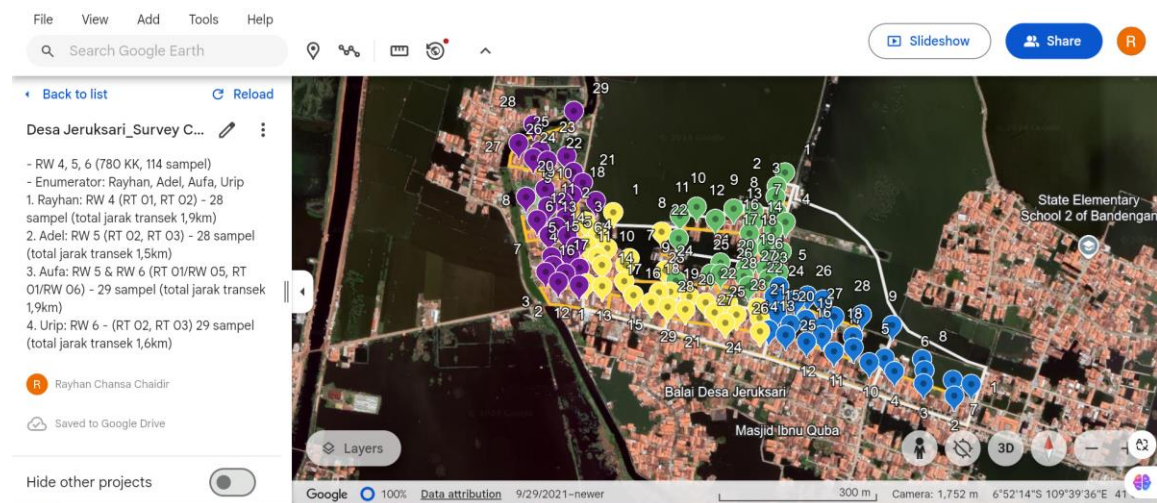


Figure III.2 Jeruksari Community Detailed Map
Source: Data Visualized Using *Google Earth* (2024)

3.4.2 Key Informant Interview Design

- Participants: community leader, community health worker, community council member, local response services, headteacher, local business person, women/gender official, development/planning official, DRR/CC official, health official, and public works official.
- Expected findings: the community's macro and micro context and each five capitals.
- Method: interview
- Time allocation: 30 minutes-1 hour

3.4.3 Focus Group Discussion Design

- Participants: civil protection group, youth groups, council of elders, savings group, local government representatives, village governments, religious representatives, local government committee, women's group, society, community productive users group, and community council.
- Expected results: each group provides information related to the five capitals according to the questions provided.
- Method: Focus Group Discussion
- Time allocation: 5-6 hours

3.5 Permit Process and Field Observation

In the first week of October 2024, Mercy Corps Indonesia and IKUPI visited Jeruksari community on the coast of Pekalongan Regency. This activity also met and approached the community leader as well as neighborhood leaders as a form of request to observe and collect data in the village. Field observations were conducted to identify environmental conditions such as settlement type, land use, flood severity, and human interaction with the coast. In addition, the team reviewed detailed maps showing transect lines and sampling points to facilitate data collection. Field observations were also used to ensure that sampling points were not empty houses or non-residential buildings.

3.6 Data Collection

Pengumpulan data diambil melalui survei rumah tangga, wawancara informan kunci, diskusi grup terfokus, dan data sekunder telah dilakukan sesuai jadwalnya, yaitu mulai dari 07 Oktober hingga 05 November 2024, dengan rincian sebagai berikut:

3.6.1 Household Surveys

The total number of respondents in Jeruksari community was 114. Household data collection was conducted in the form of interviews between enumerators and household respondents. The survey was conducted during four days from October 7 to 10, 2024. In general, there were no significant difficulties, although there were refusals from some households, but this was the right of the respondents. The enumerators were able to look for other respondents in the house immediately. There were many questions that were repeated, but in a scattered order. The use of terms that are not yet commonplace also makes it difficult for enumerators to explain them to respondents.

3.6.2 Key Informant Interviews

The Jeruksari community had a total of 11 key informants. The key informant interviews were conducted from October 16 to 17, 2024. These key informants represent stakeholders from the village to the district level. The key informant interviews provided in-depth insights from those with specific knowledge of the Jeruksari community. Below is the list of the key informants:

Table III.3 Key Informant Interview Participants of Jeruksari Community

No	Key Informants	Represented by:
1	Community Leader	• Name: Budiharto • Gender: Male • Position: Head of Jeruksari Village • Year of experience(s): 5 years
2	Community Health Worker	• Name: Tika Mimin Hartati • Gender: Female • Position: Village Health Worker in Jeruksari • Year of experience(s): 6 years
3	Community Council	• Name: Zamroni • Gender: Male • Position: Member of Jeruksari Community Empowerment (LPMD Jeruksari) • Year of experience(s): 6 years
4	Local Response Services	• Name: Dzikrul Chasani • Gender: Male • Position: Member of KSB (Disaster Unit Group) • Year of experience(s): 2 years
5	Headteacher	• Name: Ahmad Husein • Gender: Male • Position: Headteacher of MIS Jeruksari • Year of experience(s): 28 years
6	Local Business Person	• Name: Kusnaeni • Gender: Male

No	Key Informants	Represented by:
		- Position: Business owner (batik and building materials stores) - Year of experience(s): 15 years
7	Women/Gender Official	- Name: Ifa - Gender: Female - Position: Staff of Mentoring, Empowerment, and Women's Protection Department at DP3AP2KB - Year of experience(s): 7 years
8	Development/ Planning Official	- Name: Widi - Gender: Male - Position: Head of Economy and Infrastructure Department at BAPPERIDA - Year of experience(s): 12 years
9	DRR/CC Official	- Name: Mail - Gender: Male - Position: Head of Rehabilitation and Reconstruction Department at BPBD - Year of experience(s): <1 year
10	Health Official	- Name: Ratna Susanti - Gender: Female - Position: Kepala Bidang Layanan Kesehatan Head of Health Services Department at Dinas Kesehatan - Year of experience(s): 5 years
11	Public Works Official	- Name: Ahmad Jamaludin - Gender: Male - Position: Staff of Natural Resources Management - Year of experience(s): 17 years

Source: Discussion Outcomes from IKUPI & Mercy Corps Indonesia & Website-Based CRMC Application (2024)

There were no significant challenges in conducting the key informant interviews. However, the questions available for the key informant interviews kept the interviews short, and interviewers had to improvise to delve deeper into community-related information based on their respective areas of expertise. For example, the questions for the health office were only about 2-3 questions. This is not worth the effort and time spent by both the department head and the enumerator to collect the data. Some local officials were also difficult to interview in the midst of their busy schedules, such as from BAPPERIDA Pekalongan Regency, so the team had to come back a second time to meet with the relevant parties.

3.6.3 Focus Group Discussions

IKUPI and Mercy Corps Indonesia conducted a series of Focus Group Discussions (FGDs) on November 4-5, 2024. On the first day, the FGD sessions were reserved for representatives of the local community in Jeruksari village, while on the second day, the FGD participants were representatives of the local government, namely the Pekalongan district government and the Central Java provincial government. The separation of the sessions between the local community and government representatives was made

because IKUPI and Mercy Corps Indonesia agreed that the government representatives needed to invite representatives from each of the relevant technical offices according to the area of the questions asked. Both FGD sessions were led by two facilitators from IKUPI, supported by two co-facilitators from IKUPI and four MCI staff members in each focus group. The following is an overview of the FGD conditions for the Jeruksari community:

- FGD Participants

Table III.4 FGD Participants of Jeruksari Community

No	Category	FGD Participants	Details
1	Local government committee	Government of Central Java Province and Pekalongan Regency	Central Java Meteorological, Climatological, and Geophysical Agency (BMKG Stasiun Klimatologi Jawa Tengah)
			Regional Development Planning Agency (BAPPERIDA Kabupaten Pekalongan)
			Disaster Management Agency (BPBD Kabupaten Pekalongan) (absent)
			Public Works and Housing Agency (DPUPR Kabupaten Pekalongan)
			Settlement and Environment Agency (Disperkim LH Kabupaten Pekalongan)
			Women Empowerment and Child Protection Agency (DP3AP2KB Kabupaten Pekalongan)
			Marine and Fisheries Agency (Dinas Kelautan dan Perikanan Kabupaten Pekalongan)
			Food Security and Agriculture Agency (Dinas Ketahanan Pangan dan Pertanian Kabupaten Pekalongan)
2	Religious council	Religious group in Jeruksari	
3	Civil protection group	Civil Protection Unit & Firefighter (absent, the vote has been delegated to KSB – a disaster emergency response unit at the village level)	
4	Community council	Jeruksari Community Empowerment (LPMD Jeruksari)	
5	Savings group	Regular Social Gatherings (Arisan Urugan)	
6	Society	Parents of children with disabilities	
7	Youth group	Youth group (Karang Taruna)	
8	Council of elders	Elders' representative	
9	Local NGO/CBO	Village Owned Enterprises (BUMDes Jeruksari)	
		KSB Jeruksari (Disaster Unit Group)	
10	Community planning committee	Jeruksari village head	
		RW (community units) 04 representative	
		RW (community units) 05 representative	
		RW (community units) 06 representative	
11	Women's group	Family Welfare and Empowerment Group (PKK Jeruksari)	
12		Fish Cultivator Group (POKDAKAN Mina Sari)	

No	Category	FGD Participants	Details
	Community productive users' group	Fish Cultivator Group (POKDAKAN Ulam Sari)	
		Batik Business Group	

Source: Discussion Outcomes from IKUPI & Mercy Corps Indonesia & Website-Based CRMC Application (2024)

- Discussion Dynamics

Table III.5 Focus Group Discussion Dynamics of Jeruksari Community

No	Group	Overall observations during the discussion
1	Local government committee	The local government was represented by all representatives the disaster-related agencies. The representatives present were very representative. These agencies had been established before to the FGD and were active in their fields. In the discussion, the representatives were generally active in expressing different opinions, but tended to be in agreement. The entire community was represented through the discussion and all views were captured. Men and women also had the equal opportunities to speak in equal numbers in the discussions.
2	Religious council	The religious representatives present were reasonably representative. The religious groups had been formed before the FGDs and were active in their areas. During the discussion, the representatives had difficulties in understanding the context of the questions and therefore took a long time to answer. Some communities were represented through the discussion and one or more views dominated with men speaking more in the discussion because the representatives were men.
3	Civil protection group	The security unit, Satpol PP, was not present in the FGD and was represented by KSB so the representation was very unrepresentative. In addition, in the discussion, the representativeness of views and communities could not be known. The representatives who attended were groups that had been formed prior to the FGD and were active in their fields. Men spoke more in the discussion as the KSB representatives were male.
4	Community council	The community councils present were somewhat representative. In addition, the representatives did not actively participate because they came at the end of the FGD session although they understood the context of the discussion. In the discussion, the representatives adequately captured all views with men speaking more in the discussion as the representatives present were men. They have been formed before the FGD and are active in their fields.
5	Savings group	The arisan groups present were somewhat representative. The arisan groups had been formed before the FGD and were active in their fields. During the discussion, the representatives had difficulty in understanding the context of the questions and therefore took a long time to answer. Some communities were represented through the discussion and one or more views dominated with men speaking more in the discussion because the representatives were men.

No	Group	Overall observations during the discussion
6	Society	The community groups present were somewhat representative. They were gathered for the purpose of the FGD. In the discussion, the representative of disability had a companion who was present and answered due to cognitive limitations. The companion represented the community in general. Part of the community was represented through the discussion and one or a few views dominated with men speaking more in the discussion as the representatives were men.
7	Youth group	The youth group present was somewhat representative. The youth group had been formed before the FGD and is active in its field. In the discussion, the representatives understood the context of the questions, but were less active in participating. Part of the community was represented through the discussion and one or a few views dominated with men speaking more in the discussion as the representatives were men.
8	Council of elders	The elderly group present was somewhat representative. The elderly group was only gathered for the purpose of the FGD. During the discussion, the representatives had difficulty understanding the context of the questions and therefore took a long time to answer. Some communities were represented through the discussion and one or more views dominated with men speaking more in the discussion as the representatives were men.
9	Local NGO/CBO	The local communities present were somewhat representative. These communities had been established prior to the FGD and are active in their fields. In the discussion, the KSB representatives were quite active, but did not follow from the beginning of the FGD session. Meanwhile, the BUMDes representative understood the context of the questions, but was less active in participating. The entire community was represented through the discussion and adequately captured all views. Men dominated more of the discussion as the representatives were male.
10	Community planning committee	The village government present was somewhat representative. The village government had been established prior to the FGD and is active in its field. In the discussion, the lurah representatives tended to give their views from the government side and the overall safety of the community. Then, the heads of RW 4 and 6 tended to be active in the discussion. The whole community can be represented through the discussion and the discussion captures all views. Men spoke more in the discussion because the representatives were men.
11	Women's group	The women's representatives present were very representative. The women representatives had been established before the FGDs and were active in their fields. In the discussion, they were very active in giving their views, mastering the issues, and answering all questions. The entire community was

No	Group	Overall observations during the discussion
		represented through the discussion and the discussion adequately captured all views. This group also exclusively represents women.
12	Community productive users group	The business groups present were somewhat representative. The business group had been established before the FGD and is active in its field. In the discussion, the representatives answered all questions, but did not actively participate. When compared, the POKDAKAN representatives were more active than the batik entrepreneurs. The whole community could be represented through the discussion and one or a few views dominated with men speaking more in the discussion because the representatives were men.

Source: FGD Organized for Jeruksari Community (2024)

- Lessons learned from facilitating FGD are:

- In general, there were no significant obstacles during the two-day FGD. FGD participants were generally able to follow the discussion and express their opinions based on the topics discussed.
- In relation to the set of questions and answers provided by the CRMC system, there were several sentences of questions from the topics discussed that needed emphasis to ensure the understanding of the FGD participants in accordance with the direction of the discussion. In addition, there were also some answers that were not accommodated by the options presented by the system. The closed answer options caused a little confusion among FGD participants in answering because their opinions were limited by the existing answer options.
- IKUPI applied some adjustments to the FGD questions (e.g. combining similar questions, rearranging the order of questions, grouping questions according to FGD participants, etc.) without changing the substance of the questions. These adjustments were made because the FGD questions were designed based on themes so that if the questions were delivered directly to the participants according to the CRMC application, the questions that arose would be repetitive. This was done to make the FGD more effective and to make the process of entering the FGD discussion results easier.
- It is important to remind participants to represent the voice of the group, not their personal voice.
- For community groups that seek to invite people with disabilities, there are two options that can answer the problem of biased answers, the first is to invite institutions/communities engaged in disability issues and/or still invite people with disabilities but carry out additional stages, namely triangulation with family members of people with disabilities or by observation.

3.6.4 Secondary Data

IKUPI and Mercy Corps Indonesia used secondary data sources as one of the methods of collecting baseline data, which can then be used as a reference for collecting end line data.

- *Google Earth* Satellite Imagery
- The 2022 Dataset from Central Java Public Works Water Resource and Spatial Planning (Pusdataru)
- The 2024 Document of Pekalongan Regency's Regional Action Plan for Climate Change Adaptation (RAD API)
- Participatory Land Use Planning (PLUP) Document of Jeruksari Village
- Disaster Risk Assessment Document of Pekalongan Regency Disaster Management Board (BPBD)
- The 2022 Climate Risk and Impact Assessment in Kupang River Basins
- Tirta District in Figures 2019-2023
- Summary of Pekalongan Regency's Revenue and Expenditure Budget (APBD) by Group and Type of Income, Expenditures, and Financing for the 2024 Budget Year
- Local mass media coverage

3.7 Grading Process

Grading activity was conducted by Mercy Corps Indonesia team, which consisted of four people, and the IKUPI team, which consisted of three people: Rukuh Setiadi, Rayhan Chansa Chaidir, and Purnomo Dwi Sasongko. The grading activity was also attended by Mr. Widi (Pekalongan Regency Development and Planning Agency) as the representative of the local government, also Mr. Budiharto (Head of Jeruksari Village) and Ms. Jazilah (member of Jeruksari Family Welfare Movement) as the representative of local community. The grading result was reviewed by Ranggi Laksiya Wengi, as the ZCRA MCI Program Consultant. Grading activity was held on November 12, 2024, at Hotel Santika Pekalongan.

The grading considered joint discussions, including reflection on the framework of the CRMC tool, consistency of information from the various data sources collected, emphasis on the most reliable and trusted information, whether selecting information from household surveys, key informant interview, focus group discussions, secondary data, or new information agreed upon during the grading process. Reviewing all information and including opinions from each grading participant was always done for every question. Additionally, recalling the data collection process could strengthen the confidence level in choosing a value. For instance, information obtained during the FGD process that supports answers from household surveys will lead the grading to align with the household survey responses.

During the grading process, sometimes the information displayed as a result of data collection were not sufficient to determine the grade, so that the team had to look for additional information to better determine the grade and increase the confidence level. This additional information had been recorded in the rationale box. In addition, there are several notes in the grading process, such as descriptions of answers that appear in each grading answer but are not found in all data collection methods. Some answer choices which do not reflect the community's condition but still require one of the answer options to be selected. This reduces the team's confidence in answering such questions. Therefore, the team selected "No" for the

question box "Are you confident in the assessment of this source?" and the reasons for the lack of confidence are outlined in the comments box.

There are also cases where the answers from household surveys, key informant interviews, FGD, and secondary data cannot address the grading, making the rationale box very useful for accommodating such questions. During the grading process, answers are also manually recorded, then re-entered and final checks are done the following day. This is because the rationale box and comments must be in English. The findings of the grading can be seen in the next chapter.

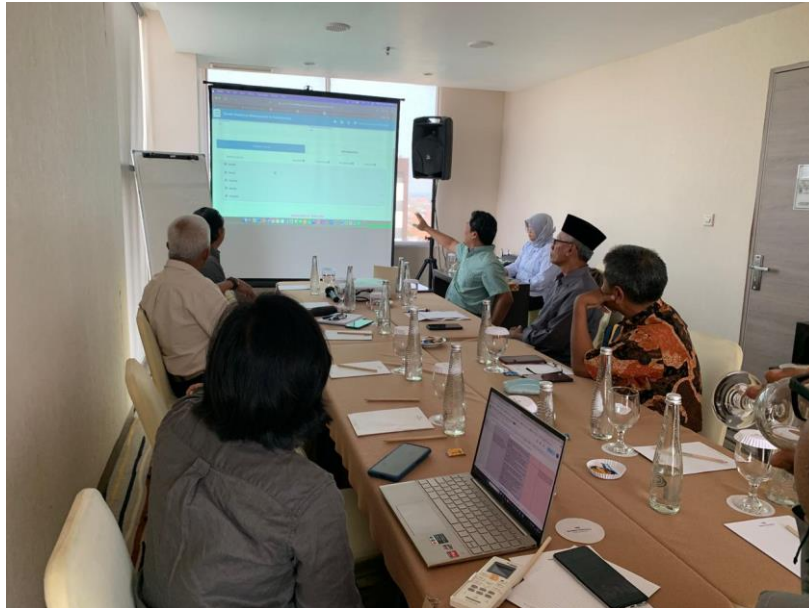


Figure III.3 Jeruksari Community Grading Process
Source: Photo by Mercy Corps Indonesia (2024)

CHAPTER IV

Interpreting Grading Results

The CRMC is a decision-support tool, which means it provides one set of inputs into the wider process of designing resilience-building interventions and development work. The CRMC results can be viewed in the data cockpit, accessed on the Website-Based CRMC Application, when the grading process is set to a completed status. When the grading process has been completed, the application will show a "results" menu on the screen. The results page will show the overall score of the selected hazards in the community, in this case, the Jeruksari community has a flood hazard. Scores are sorted based on certain lenses such as the five capitals (5C), resilience index, community context, disaster risk management cycle, politics, 4R, 7 themes, and based on GAID (Gender, Age, Inequality, Disability). The data cockpit displays a visualization of the results obtained with various graphs sorted and also displays the same lenses as in the "results" window. As this research is a T0 or baseline study, the cockpit data only displays the T0 study. Community studies can be presented in aggregate or disaggregated data. For example, comparing the Jeruksari community with other communities or only showing one of them.

Table IV.1 CRMC Grading Scale

Grade	Definitions
A	Best practice for managing the risk
B	Good industry standard, no immediate need for improvement
C	Deficiencies, room for improvement
D	Significantly below good standard, potential for imminent loss

Source: CRMC Project and Study Set Up, Data Collection, and Grading Document (2023)

The table above shows the level rating scale used in the CRMC tool. The CRMC tool assesses each source of resilience on an A-D letter scale. A indicates the best and D indicates the worst. Not all A's are strengths and not all D's are weaknesses. Questions that are not relevant to the community will automatically receive a bad grade. Therefore, there is a need for context and understanding regarding the community, not only seen from the lens of the five capitals, but there are many lenses that help in the analysis stage such as the community context lens, plan management cycle, 4R or 4 resilience, 7 themes, city resilience index, and so forth. The lenses in this CRMC tool refer to sources of resilience from five capitals a total of 52 indicators. The assessment process that has been carried out provides the following information.

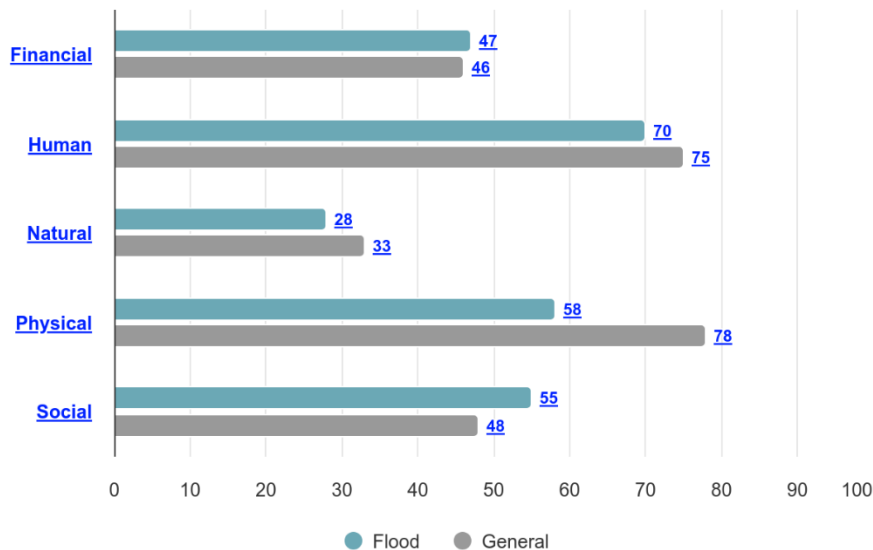


Figure IV.1 Grading Score of Five Capitals Jeruksari Community

Source: Website-Based CRMC Application (2024)

The graph above shows the assessment scores of financial, human, natural, physical, and social capital differentiated from flood-specific hazards and general hazards. The highest scores obtained were (1) human capital with a score of 70 on specific flood hazards and a score of 75 on general hazards, followed by (2) physical capital with a score of 58 (specific flood hazards) and a score of 78 (general hazards), (3) capital social with a score of 55 (specific danger of flooding) and a score of 55 (general danger), and (4) financial capital with a score of 47 (specific danger of flooding) and a score of 46 (general danger), and (5) capital nature with a score of 28 (specific flood hazard) and a score of 33 (general hazard). Human capital is related to the knowledge, education, skills and health inherent in the people in the Jeruksari community.

High exposure to flooding over decades, informally, forms community capacity so that the community capital score is the highest. Natural capital relates to the abiotic components of an ecosystem. The Jeruksari community area is known as a coastal area with very high vulnerability, one of which is environmental vulnerability. The high rate of land subsidence, rising water levels, land changes, and so on cause poor natural conditions in the Jeruksari community. This is one of the reasons why the natural capital score is the lowest.

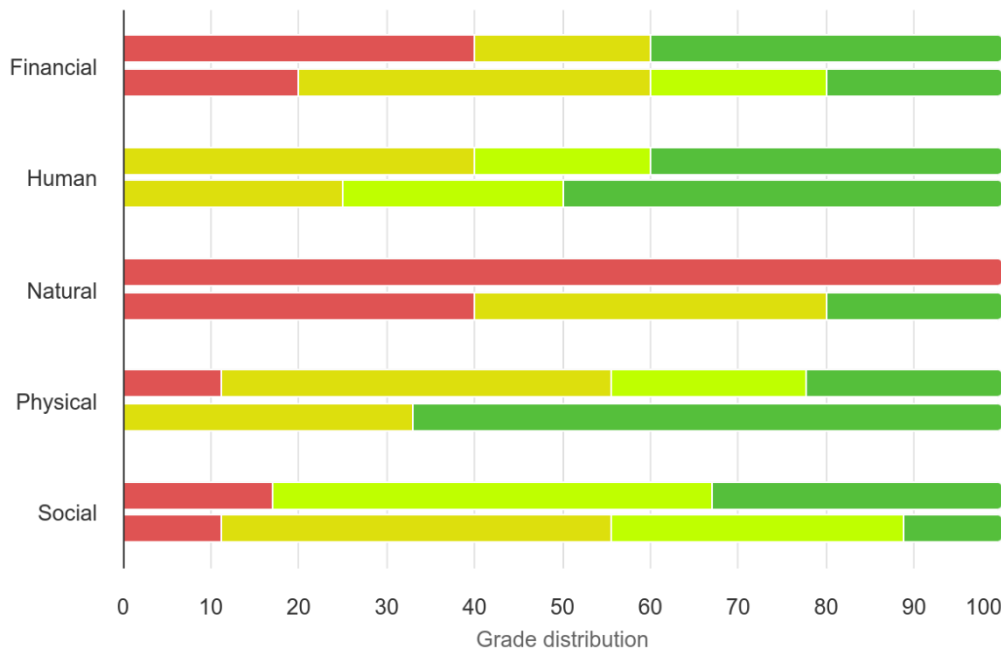


Figure IV.2 Distribution of A to D Grade of Five Capitals Lenses
Source: Website-Based CRMC Application (2024)

The bar diagram above shows the results of assessing the sources of resilience of the five capitals of the Jeruksari community. The top bar in each capital shows flood-specific hazard resilience sources, while the bottom bar represents general resilience sources. Red indicates Grade D, yellow indicates Grade C, light green indicates Grade B, and dark green indicates Grade A. The X axis shows the proportion of each value in percent (%) while the Y axis shows the five capital components.

For the flood-specific hazard, (1) financial capital gets 40% of the Grade D, 20% of the Grade C, and 40% of the Grade A. (2) Human capital consists of 40% of the Grade D, 20% of the Grade B, and 40% of the Grade A. (3) Natural capital is the biggest weakness of all capital analyzed, namely 100% of the Grade D. (4) Physical capital consists of 11% of the Grade D, 44% of the Grade C, 22% of the Grade B, and 22% of the A Grade. Finally, (5) social capital consists of 17% of the Grade D, 50% of the Grade B, and 33% of the Grade A.

For general (generic) hazards, (1) financial capital gets 20% of the Grade B, and 20% of the Grade A. (2) Human capital consists of 25% of the Grade C, 25% of the Grade B, and the remaining 50% grade is A. (3) Natural capital consists of 40% the Grade D, 40% the Grade C, and 20% of the Grade A. (4) Physical capital is dominated by Grade A, the remainder is Grade C as much 33%. (5) Social capital consists of 11% the Grade D, 44% of the Grade C, 33% of the Grade B, and 11% of the Grade A. For more details, below is a breakdown of the Grades of each source of resilience for the five capitals from the graph above:

Table IV.2 Details of CRMC Grading Results

No	Code	Resilience Sources	Hazard	Grade
1	H01	Secondary school attendance	GENERIC	A
2	H02	Food availability	GENERIC	C
3	H03	First aid knowledge	GENERIC	A
4	H04	Awareness of need for climate change action	GENERIC	B

No	Code	Resilience Sources	Hazard	Grade
5	H05	Awareness of climate change risk	FLOOD	B
6	H06	Awareness of how nature mitigates risk	FLOOD	A
7	H07	Hazard exposure awareness	FLOOD	A
8	H09	Evacuation and safety knowledge	FLOOD	C
9	H10	Unsafe water awareness	FLOOD	C
10	S01	Mutual support	GENERIC	B
11	S02	Social inclusiveness of disaster risk management	GENERIC	C
12	S03	Community safety	GENERIC	B
13	S04	Local leadership	GENERIC	C
14	S05	Disaster response personnel	GENERIC	A
15	S06	Healthcare accessibility	GENERIC	B
16	S07	Trust in local authorities	GENERIC	C
17	S08	Intra-community equity	GENERIC	C
18	S09	Inter-community equity	GENERIC	D
19	S10	Risk reduction planning	FLOOD	A
20	S11	Response planning	FLOOD	B
21	S12	Family violence and response planning	FLOOD	D
22	S13	Stakeholder engagement in risk management	FLOOD	B
23	S14	Risk mapping	FLOOD	B
24	S15	Disaster impact data collection and use	FLOOD	A
25	P01	Energy supply continuity	GENERIC	A
26	P02	Transportation system continuity	GENERIC	C
27	P03	Communications system continuity	GENERIC	A
28	P04	Early warning	FLOOD	C
29	P05	Continuity of education	FLOOD	C
30	P06	Emergency infrastructure and supplies	FLOOD	C
31	P07	Continuity of healthcare during disaster	FLOOD	A
32	P08	Forecasting	FLOOD	B
33	P09	Household protection and adaptation	FLOOD	A
34	P10	Availability of clean, safe water	FLOOD	B
35	P11	Waste management and risk	FLOOD	D
36	P12	Large scale flood protection	FLOOD	C
37	N01	Tree cover	GENERIC	D
38	N02	Permeable surfaces	GENERIC	D
39	N03	Land use planning	GENERIC	A
40	N04	Resource Management	GENERIC	C
41	N05	Land/water interface health	GENERIC	C
42	N06	Ecological management for disaster risk reduction	FLOOD	D
43	F01	Household access to discretionary funds	GENERIC	D
44	F02	Community financial health	GENERIC	C
45	F03	Local government financial capacity	GENERIC	B
46	F04	Public infrastructure maintenance budget	GENERIC	C
47	F05	Climate change adaptation planning and investment	GENERIC	A
48	F06	Business continuity	FLOOD	C
49	F07	Household income continuity	FLOOD	D

No	Code	Resilience Sources	Hazard	Grade
50	F08	Risk reduction investments	FLOOD	A
51	F09	Disaster insurance	FLOOD	D
52	F10	Disaster recovery budget	FLOOD	A

Source: Website-Based CRMC Application (2024)

Description:

- H: *Human*
- S: *Social*
- P: *Physical*
- N: *Natural*
- F: *Financial*
- GAID: *Gender, Age, Inequity, Disability*

The table above shows the assessment results of 52 indicators or sources of resilience based on the lens of five capitals, namely human, social, physical, natural and financial capital. The number of indicators is determined by the selected hazard. If you choose flood, the indicator increases like that. These indicators are general and specific flood hazards with a value range ranging from A-D. A grade means good practice and a D means it is further below standard. After seeing the results above, it is necessary to analyze and understand further the strengths and weaknesses of the community based on the hazard resilience that has been measured through this CRMC tool. The analysis stage consists of identifying, prioritizing, and providing the most likely plan for intervention needs.

First, (1) identify the strengths and weaknesses of the community's sources of resilience. Second, (2) prioritize (priorities 1, 2, 3, and so on) which sources of resilience need to be focused on. Finally, (3) plan intervention needs by mapping sources of resilience that can be used to increase low scores to higher ones. It should be remembered that CRMC is one source of information that can be considered when deciding on an intervention, the most important thing is consideration of priority programs and ongoing development vision and mission, repeated experiences that occur in the community, risks, availability of funds, experts, and so on.

4.1 GAID Perspectives on Resilience Sources

GAID or Gender, Age, Inequity, Disability (gender, age, injustice, disability) influences disaster risk. Therefore, interventions that consider GAID elements are needed to achieve good resilience programs related to climate hazards. This stage includes looking at the profile of GAID in the community and analyzing the linkage of GAID to certain sources of resilience. This is done to enhance or improve interventions based on GAID. GAID data provides an opportunity to minimize marginalization of vulnerable groups, such as elderly women or children with disabilities. Interventions need to consider the needs of different groups of people to create resilience interventions that are gender specific, sensitive to age, inequality, disability and empower vulnerable groups. Power dynamics, ethnicity, religion, etc. can provide additional information regarding consideration of GAID-based programs and to identify gaps between community groups.

4.1.1 Profile of Respondents Disaggregated by GAID

The GAID profile consists of the context of gender, age, injustice and disability inherent in Jeruksari community respondents. The main respondent to see the profile of the Jeruksari

community is through collecting household surveys. The following is the GAID profile of the Jeruksari community:

- Gender Context

Data collection is not limited to one particular gender but is based on conditions in the field when conducting household surveys. It can be seen below that the majority of respondents are women. This happened because the majority of those who answered the question were housewives. This is in line with data that the majority of people (48%) work outdoors and the majority of family heads are men (82%). It is assumed that the majority of those who work outside are men so the majority of those at home are housewives or women.

Table IV.3 Respondents by Gender

Gender	Numbers	Percentage
Female	84	74%
Male	30	26%
Total	114	100%

Source: Household Surveys Data Processed (2024)

Table IV.4 Numbers of Female-Headed Households in Jeruksari

Female-Headed Households	Numbers	Percentage
Yes	20	18%
No	94	82%
Total	114	100%

Source: Household Surveys Data Processed (2024)

In this case, the head of the family is not only seen from the presence or absence of a husband in the household, but also based on the largest income. Regarding gender, the majority of respondents' family heads are men, 82%. This causes the survey results to be mostly represented by women or housewives. The majority of women's voices are considered good for capturing women's perceptions and understanding and increasing gender equality. The majority of the Jeruksari community are low-income communities with incomes of IDR 10 million-20 million/year (37%), IDR 20 million-30 million/year (23%), and IDR 30-40 million per year (20%). The biggest source of income comes from outdoor work such as fishermen, construction workers, porters, casual laborers, and others. As a result, women often bear the double burden of generating additional income, one of which is by working as convection workers at home. One housewife respondent said her husband was a fisherman who returned home once every 6 months to a year. It is not uncommon for not making money at all. Therefore, the respondent had to work as a convection worker at home who was paid according to the number of clothes produced.

- Age Context

The age categories in CRMC for respondents are 18-30 years, 31-65 years, and over 65 years. Disaggregation based on age is important to understand the gap in understanding flood risk, especially at vulnerable ages such as the elderly. Apart from that, to more precisely target programming in covering the generation gap that occurs. In this age range of respondents there is no age range for children and teenagers. Based on the survey results, the majority of respondents were in the productive group or 31-65 years old. There were only 2 elderly people when conducting the household survey. There are differences in the grouping of elderly people in the CRMC tool and based on the Indonesian Central Statistics Agency. BPS states that elderly people are in the age group of 60 years and over, while CRMC uses a reference of 65 years and over. There are obstacles when conducting surveys with the elderly, including

language barriers, understanding the questions, and when accompanied by a companion, the elderly tend to direct and/or be guided by the companion for their answers.

Table IV.5 Respondent by Age

Age	Numbers	Percentage
Age of 18-30	18	16%
Age of 31-65	94	82%
More than 65	2	2%
Total	114	100%

Source: Household Surveys Data Processed (2024)

- Inequity Context

These inequities include whether households identify as a minority or marginalized group. In the Jeruksari community, almost no one identifies as a minority group. There is one respondent who has a disability so the respondent answered "Yes". According to this respondent, people with disabilities experience different treatment.

Table IV.6 Household Members Identify as a Minority or Marginalized Groups

Identify as Minority	Numbers	Percentage
Yes	1	1%
No	107	94%
I don't know	6	5%
It's better not to say	0	0%
Total	114	100%

Source: Household Surveys Data Processed (2024)

- Disabilities

People with disabilities who are asked about in this CRMC tool are deaf or have serious hearing difficulties, blind or have difficulty seeing, cognitive impairments, and physical disabilities that interfere with daily mobility. There are also people with multiple or more disabilities, such as those who are deaf and mute. This question is asked to identify the number of people with disabilities in the household. People with disabilities often experience discrimination and are left behind in their communities, such as having difficulty getting jobs, health services and education. There are 10% or 11 individuals in the family who have one or more types of disabilities.

Table IV.7 Household Members with Disabilities

Household Members with Disabilities	Numbers	Percentage
No	103	90%
Yes, one or more	11	10%
Total	114	100%

Source: Household Surveys Data Processed (2024)

4.1.2 Interrelation between GAID and Certain Resilience Sources

Data based on GAID is inclusive for all community groups. It is said to be inclusive if it includes everyone, ensures that there are no biases and vulnerable groups are excluded, and returns the results of this process to society to empower and articulate the needs of all groups more clearly. CRMC provides 19 of 52 GAID-specific indicators or sources of resilience. The following is a disaggregation of resilience sources based on GAID.

Table IV.8 GAID-Specific Resilience Sources

No	Code	Resilience Sources	Grade
1	H01	Secondary school attendance	A
2	H03	First aid knowledge	A
3	H07	Hazard exposure awareness	A
4	P07	Continuity of healthcare during disaster	A
5	P09	Household protection and adaptation	A
6	S03	Community safety	B
7	S06	Healthcare accessibility	B
8	S11	Response planning	B
9	S13	Stakeholder engagement in risk management	B
10	S14	Risk mapping	B
11	H02	Food availability	C
12	H09	Evacuation and safety knowledge	C
13	H10	Unsafe water awareness	C
14	S02	Social inclusiveness of disaster risk management	C
15	S07	Trust in local authorities	C
16	S08	Intra-community equity	C
17	P06	Emergency infrastructure and supplies	C
18	S09	Inter-community equity	D
19	S12	Family violence and response planning	D

Source: Website-Based CRMC Application (2024)

GAID specific sources of resilience include human, physical, social capital only. In the assessment, there are five sources of resilience that have Grade, namely attendance at secondary school, knowledge of first aid, awareness of exposure to danger, continuity of health services during a disaster, and protection and adaptation at the household level. The sources of resilience that have Grade D, are justice between communities and violence within the family and emergency response planning. The following section describe, several key findings in terms of good practice (Grade A) and practice well below standard (Grade D).

- Best Practices of GAID-Specific Resilience Resource

1. School Attendance

In general, in Indonesia, there is no discrimination in school attendance based on gender, so it is an A or is good practice in the context of education in Indonesia. Based on the results of interviews with the principal of MIS Jeruksari, 60% were female students and 40% were male students.

2. First Aid Knowledge

This resilience resource asks about whether adults in the household received first aid training in the past 5 years. Compositionally, first aid training is almost equal between women and men, with the percentage being received more by men, 23% or 7 people, while women receive 19% or 16 people. Judging from the age composition, there are 6% who still do not know about first aid training and the rest have never received such training. First aid training is provided by the age group 31-65 years and over 65 years. In the 31-65 year age group, 23% had received training while 77% had never received training. The answer from the age group over 65 years will always be significant

because there are only 2 elderly people, there are 50% or 1 elderly person who received first aid training. Even though according to the Health Service there is no first aid training program, it is possible that people receive first aid training informally (without training) or learn it themselves or from other institutions so that there are people who state that they have received first aid training.

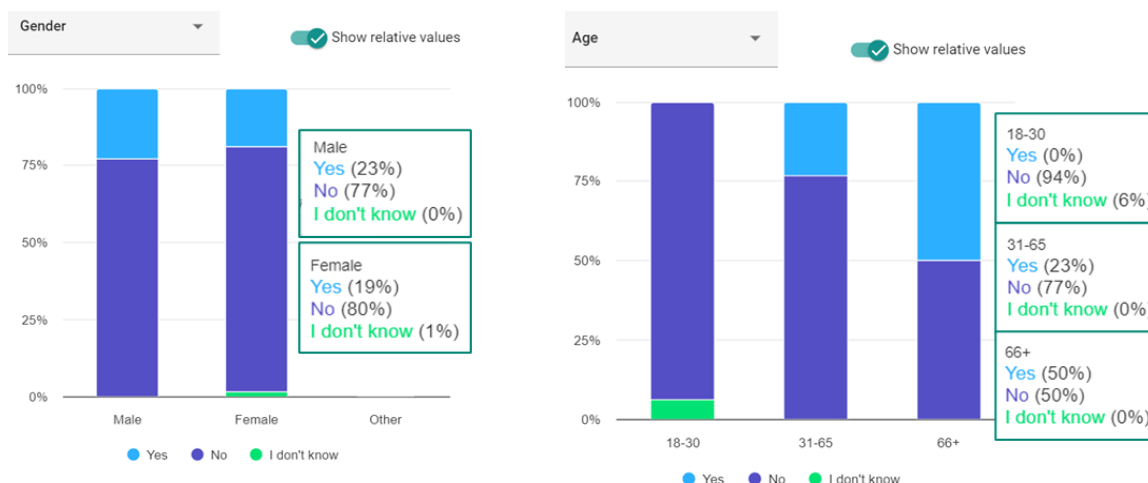


Figure IV.3 First Aid Knowledge
Source: Website-Based CRMC Application (2024)

3. Hazard Exposure Knowledge

This resilience source asks which areas are most likely to be affected by flooding. Almost all respondents from men to women and certain age groups have an understanding of which areas are affected by flooding. However, there are still respondents who don't know (strongly & disagree) as many as 4% or 3 people and 5% have no opinion or 4 people. This ignorance factor is possible due to rarely leaving the house or joining community gatherings which usually invite men. Respondents who disagreed and had no opinion were in the age range 18-30 years and 31-65 years. The elderly know all the areas affected by the flood.

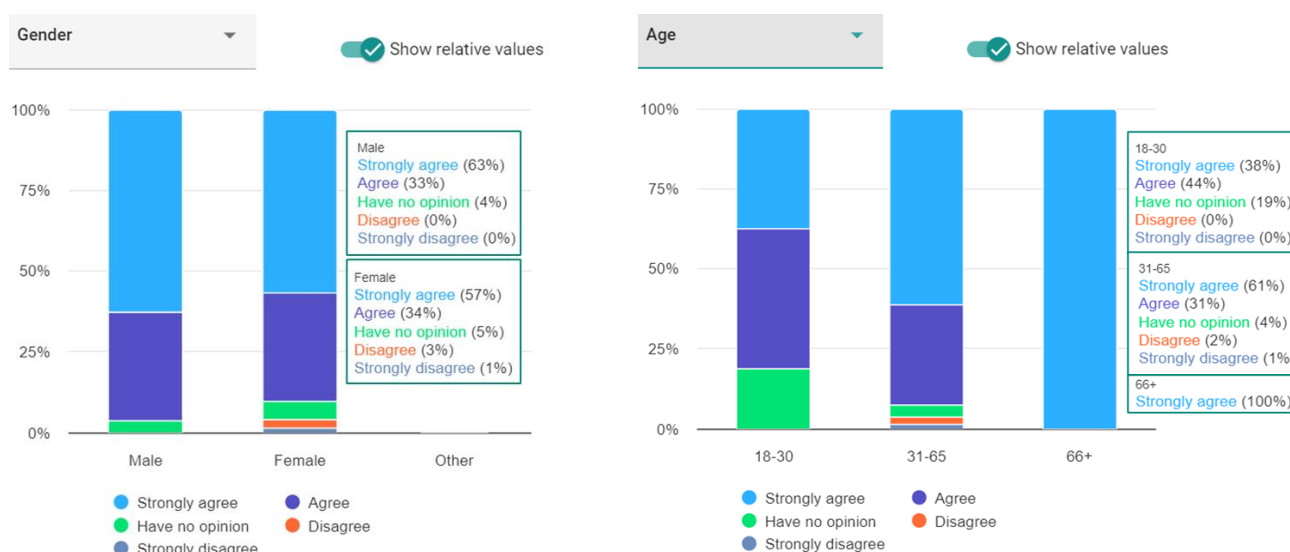


Figure IV.4 Knowledge of Areas Most Affected by Flooding
Source: Website-Based CRMC Application (2024)

4. Continuity of Healthcare during Disaster

This source of resilience aims to determine safe access to health services when floods occur. The majority of men, women and the 18-30 and 31-65 year age groups answered that they could access safe health services during floods. This is because when a disaster occurs, the health team will be on standby at a certain point, usually at the village hall, to provide health services. It is not uncommon for health services to use the "pick up the ball" method. Apart from that, 81% of women answered that they were able to access health services because they had been exposed to access to maternal and child health such as at Posyandu. This causes information related to women's health to be better than men.

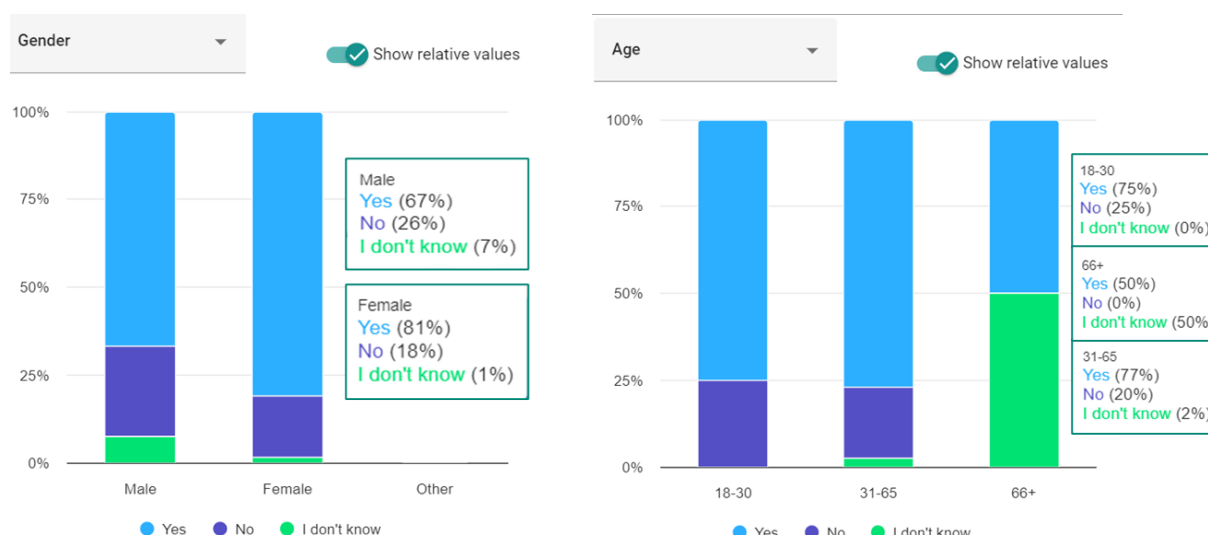


Figure IV.5 Safe Access to Health Services during Disaster

Source: Website-Based CRMC Application (2024)

5. Household Protection and Adaptation

The following are actions to protect property and assets carried out by households. The actions below can be selected more than once by respondents. The author does not see any specific GAID aspects carried out in the act of safeguarding property and assets either by gender or by age group. This is because the scale of protection is at the household level. All the protection carried out can protect all family members and help maintain the safety of family members from the dangers of flooding.

Table IV.9 Measures Taken to Keep Property and Assets Safe

No	Measurements	Percentage
1	Flood barrier or sand bags	15%
2	Wall around house	6%
3	Raised house	49%
4	Raised floors inside house	87%
5	Raised plinth/doorway	48%
6	Divert flood water around house (e.g. diversion channel, berms or similar)	12%
7	Use upper floor for storage	1%
8	Flood proofed building	7%
9	Flood proofed storage/contents	2%
10	Built or upgraded to latest building code	2%

No	Measurements	Percentage
11	Protected, waterproof or moved critical systems like wiring or mechanical systems	19%

Source: Website-Based CRMC Application (2024)

- Below Standard GAID-Specific Resilience Sources

1. Inter-Community Equity

One of the questions asked about the source of justice between communities is whether financial support from the government is the same as other neighboring communities. A pattern can be seen in the answers between men and women. 40% of men feel that financial support from the government between communities is fair, while only 36% of women feel.

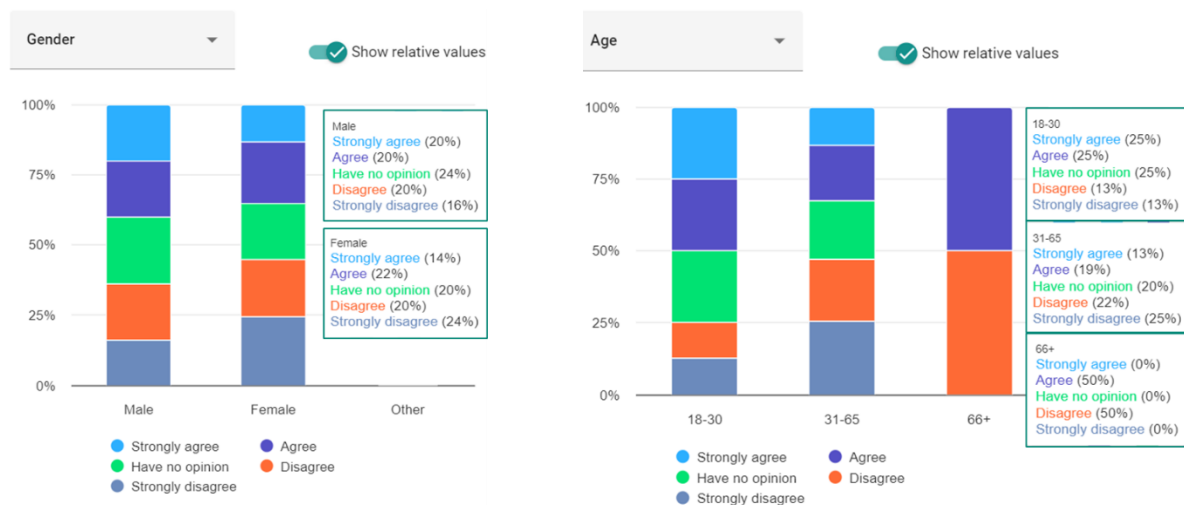


Figure IV.6 Equal Financial Support by Government

Source: Website-Based CRMC Application (2024)

This source of resilience discusses equal educational opportunities between communities. Respondents are no longer among school children who could be parents. It can be seen that there are similarities between male and female answers as well as age groups. In this question, more women answered that children's educational opportunities are the same, namely 92% think that educational opportunities are the same between communities, while for men it is 82%. There are 11% of men and 4% of women who do not agree that children have equal educational opportunities. Generally, female parents know more about their children's education than male parents. Meanwhile, based on age group, it appears that the majority answered that they strongly agree and agree that educational opportunities are equal between communities with the age group 31-65 years being 90%, 18-30 years being 87%, and over 65 years being 100% or 2 people. There is no educational discrimination experienced in Pekalongan Regency and specifically in Jeruksari Village regarding GAID. However, there is difficulty accessing the nearest school because of the zoning system that applies throughout Indonesia. The nearest school for middle and high school levels is in Pekalongan City. This causes students to have to travel longer distances to attend school.

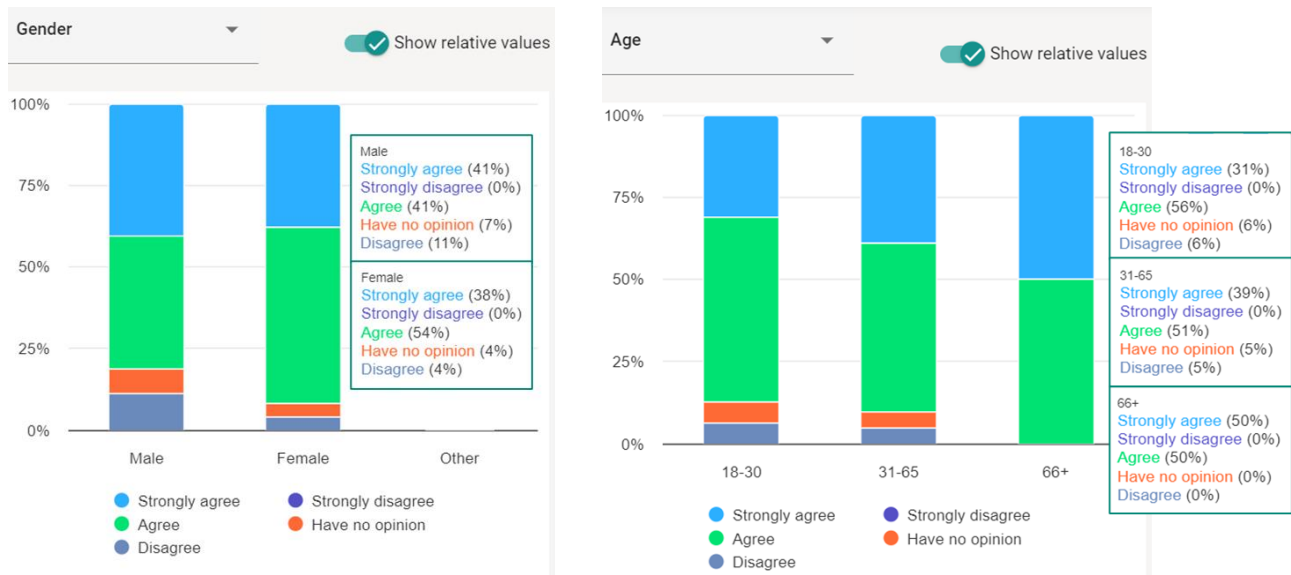


Figure IV.7 Inter-Community Equal Educational Opportunities
Source: Website-Based CRMC Application (2024)

This source of resilience discusses employment opportunities. It can be seen that there are similarities between men's and women's answers, where men answered strongly and agreed at 75% and women at 72%. Some responses related to this question depend on the type of job applied for and suitability to the skills possessed and it is easier to get a job outside Jeruksari Village. This source of resilience also discusses educational opportunities. Apart from that, there were quite similar answers in the age groups 18-30 years and 31-65 years. Meanwhile, all respondents in the age group of 65 years answered that they agreed that work opportunities were equal.

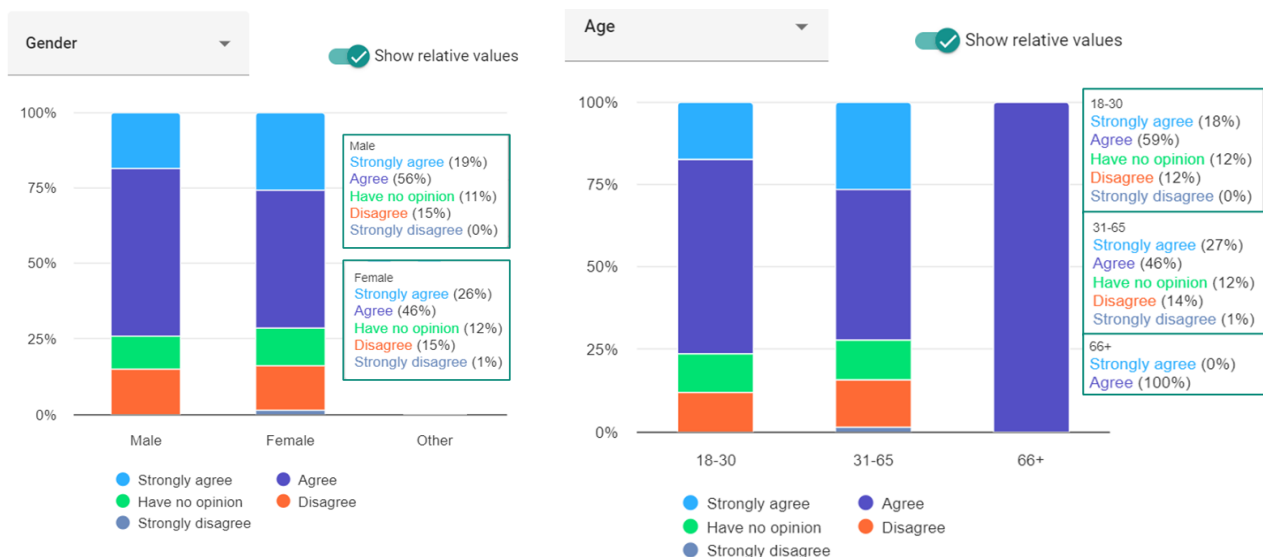


Figure IV.8 Inter-Community Equal Employment Opportunities
Source: Website-Based CRMC Application (2024)

2. Family Violence and Response Planning

So far, there is no flood emergency response plan that includes preventing domestic violence in Indonesia, including Pekalongan Regency, neither from BPBD nor from DP3AP2KB Pekalongan Regency there is a plan related to protection against family violence that is connected to emergency response planning. However, DP3AP2KB

stated that the agency was actively involved if necessary in bringing in counselors to assist with post-disaster trauma assistance.

4.2 Identifying the SO-WN of Community Resilience Sources

This stage analyzes the strengths-opportunities (SO) and weaknesses-needs (WN) of all the lenses being assessed. Later, each source of resilience will be reviewed from various lenses and identified according to the strength (SO) or weakness (WN) of the source of resilience. Before going into the SO-WN matrix of various lenses, the table below shows the relevance of sources of resilience in the community as well as the identification of SO-WN from the lens of five capitals consisting of 52 sources of resilience. From the results of observations, it was found that the source of resilience with a value of A is a source of strength (S) and not all values of B, C and D are weaknesses (W). The following is the explanation.

Table IV.10 Relevance and Identification of Resilience Sources

No	Code	Resilience Sources	Grade	Contextual Relevance	SO-WN	Description
1	H01	Secondary school attendance	A	Yes	S	Minimum attendance of 90% in a year and 100% student participation rate. There are disaster mitigation trainings held by BPBD in schools.
2	H03	First aid knowledge	A	No	-	There is no first aid training held by BPBD and the Health Service. However, the experience of frequent flooding can increase a community's capacity to deal with flooding, even without formal training. However, health workers are standing by at the disaster monitoring post and adopting the "going door-to-door" method (direct outreach to flood-affected residential area).
3	H06	Awareness of how nature mitigates risk	A	Yes	S	The community understands the importance of a healthy natural environment to reduce the risk of flooding.
4	H07	Hazard exposure awareness	A	Yes	S	The entire Jeruksari area was affected by flooding, generally, the northern Jeruksari is most affected.
5	S05	Disaster response personnel	A	Yes	S	The community, particularly KSB members takes emergency response actions rapidly.
6	S10	Risk reduction planning	A	Yes	S	An EWS tool and hazard maps are available at Jeruksari, there is an evacuation route at RW 06. There was a simulation conducted in Jeruksari.

No	Code	Resilience Sources	Grade	Contextual Relevance	SO-WN	Description
7	S15	Disaster impact data collection and use	A	Yes	S	BPBD collects a post-event data recap, the data utilized by relevant agencies and informed to the mass media.
8	P01	Energy supply continuity	A	Yes	S	Floods do not affect the energy supplies (electricity, fuel, LPG, etc.).
9	P03	Communications system continuity	A	Yes	S	Flooding does not affect the quality of communication networks.
10	P07	Continuity of healthcare during disaster	A	Yes	S	Health services respond quickly with sufficient equipment for first aid and emergencies. Health workers are standing by at the disaster monitoring post and adopting the "going door-to-door" method (direct outreach to flood-affected residential area).
11	P09	Household protection and adaptation	A	Yes	S	Almost all houses in the Jeruksari community have raised floors, doors, and windows, and some have raised roofs. Raising the roof costs more than landfilling (raising the floor).
12	N03	Land use planning	A	Yes	S	The distribution of land use allocation is outlined in the Spatial Plan (RTRW).
13	F05	Climate change adaptation planning and investment	A	Yes	S	Budget tagging is in the RAD API (Regional Action Plan for Climate Change Adaptation).
14	F08	Risk reduction investments	A	Yes	S	Budget tagging is in the RAD API (Regional Action Plan for Climate Change Adaptation).
15	F10	Disaster recovery budget	A	Yes	S	Village funds include a budget allocation for disaster management.
16	H04	Awareness of need for climate change action	B	Yes	O	High awareness of the need for action on climate change due to prolonged exposure to floods.
17	H05	Awareness of climate change risk	B	Yes	O	High awareness of climate change risks due to prolonged exposure to floods.
18	S01	Mutual support	B	Yes	S	High social capital, social safety networks (such as community savings groups and rapid response), and low-intensity social conflict.
19	S03	Community safety	B	Yes	S	The low criminal case, high social connection.

No	Code	Resilience Sources	Grade	Contextual Relevance	SO-WN	Description
20	S06	Healthcare accessibility	B	Yes	S	Emergency healthcare services are always available.
21	S11	Response planning	B	Yes	O	An EWS tool and hazard maps are available at Jeruksari, there is an evacuation route at RW 06. There was a simulation conducted in Jeruksari.
22	S13	Stakeholder engagement in risk management	B	Yes	N	The majority of key stakeholders have actively participated.
23	S14	Risk mapping	B	Yes	W	There has been flood hazards participatory mapping at the village level, while the risk maps from the BPBD are only available at the district level.
24	P08	Forecasting	B	Yes	O	BMKG disseminated information about 1-3 hours before adverse weather conditions, yet the information does not reach the community.
25	P10	Availability of clean, safe water	B	Yes	W	The clean water supply from Pamsimas is not disrupted during disasters, but some leaks result in water contamination.
26	F03	Local government financial capacity	B	Yes	N	The budget is sufficient, but prioritization is needed.
27	H02	Food availability	C	Yes	W	The majority are low-income households.
28	H09	Evacuation and safety knowledge	C	Yes	W	The community knows how to evacuate, but they choose not to and instead prefer staying in their homes.
29	H10	Unsafe water awareness	C	Yes	N	Pamsimas (clean water supply) pipes leak and are contaminated with floodwater, and the water used for sanitation is limited.
30	S02	Social inclusiveness of disaster risk management	C	Yes	N	Only a few community groups are involved in decision-making related to disaster risk management.

No	Code	Resilience Sources	Grade	Contextual Relevance	SO-WN	Description
31	S04	Local leadership	C	Yes	N	Some people in this community believe the village government is still unfair or favors certain groups or neighborhoods.
32	S07	Trust in local authorities	C	Yes	N	The regency government has prioritized development in Jeruksari, and its emergency services are relatively good compared to other villages. However, there are still disparities when compared to the city bordering Jeruksari.
33	S08	Intra-community equity	C	Yes	W	The education zoning system makes it difficult for students to access the nearest educational services from their homes (schools located in Pekalongan City).
34	P02	Transportation system continuity	C	No	-	There is no public transportation in Jeruksari Village. When the main access is disrupted due to flooding, it is common to use boats.
35	P04	Early warning	C	Yes	W	The authorities have disseminated information to other departments or village officials, but it failed to reach the community level; the EWS (Early Warning System) tools are no longer operating.
36	P05	Continuity of education	C	Yes	W	The learning process is disrupted depending on the severity of the flood. Online learning is a non-interactive setting, with teachers only assigning tasks with no engagement in actual teaching activities.
37	P06	Emergency infrastructure and supplies	C	Yes	W	The emergency equipment is poor maintenance.
38	P12	Large scale flood protection	C	Yes	W	Community assets are not protected from floods.
39	N04	Resource Management	C	Yes	N	Private cultivation land is being utilized unsustainably.
40	N05	Land/water interface health	C	Yes	W	The river is unprotected, and the coastline has disappeared due to erosion and land subsidence.

No	Code	Resilience Sources	Grade	Contextual Relevance	SO-WN	Description
41	F02	Community financial health	C	Yes	W	The majority are low-income households.
42	F04	Public infrastructure maintenance budget	C	Yes	W	The majority relies on the state budget (APBN) to fulfill the infrastructure development needs.
43	F06	Business continuity	C	Yes	N	The majority are affected by flooding.
44	S09	Inter-community equity	D	Yes	W	Unintegrated development between the city and the regency of Pekalongan (Jeruksari).
45	S12	Family violence and response planning	D	No	-	The issue of domestic violence has not yet been incorporated into emergency response planning in Indonesia.
46	P11	Waste management and risk	D	Yes	W	The downstream area, where the river carries waste from the upstream and midstream regions.
47	N01	Tree cover	D	Yes	W	Less than 5% of the area is covered with vegetation, due to seawater intrusion that makes the soil saline, and the proportion of mangroves is negligible.
48	N02	Permeable surfaces	D	Yes	W	The environmental carrying capacity is deteriorating due to the high surface weight caused by paved infrastructure and elevated buildings constructed each year.
49	N06	Ecological management for disaster risk reduction	D	No	-	This is not relevant to this community, as a coastal area. The context of this resilience source is located in highland regions.
50	F01	Household access to discretionary funds	D	Yes	W	The majority of the community is low-income households. Jeruksari is one of the priority villages for welfare improvement in the Pekalongan Regency.
51	F07	Household income continuity	D	Yes	O	Most of the people are working outdoors, such as fishermen, laborers, and vendors. Flooding will impact the sustainability of their livelihoods.

No	Code	Resilience Sources	Grade	Contextual Relevance	SO-WN	Description
52	F09	Disaster insurance	D	No	-	The majority of the community is low-income households. They struggle to meet their daily needs, let alone pay for insurance premiums.

Source: Analysis by IKUPI (2024)

There are five sources of resilience that are not relevant for the Jeruksari community, namely, Knowledge of first aid (H03), Sustainability of the transportation system (P02), Family violence and emergency response planning (S12), Ecological management for disaster risk reduction (N06), and Insurance disaster (F09). All sources of resilience with Grade A are opportunities (O) or strengths (S). In contrast to sources of resilience which have Grade B and C, they have a varied distribution starting from opportunities (O), needs (N), and weaknesses (W). So, from the SO-WN mapping of the five capitals, it can be reduced to a SO-WN matrix of resilience sources from various lenses consisting of the five capital lenses themselves, community context, disaster management cycle, 4R, 7 themes, city resilience index, and specific GAID. The following is the explanation.

Table IV.11 SO-WN Analysis of Resilience Sources in Different Lenses

SO/WN	Five Modals	Community Context	DRM Cycle	Resilience – 4Rs	7 Theme	City Resilience Index	GAID-Specific
Strength/ Opportunities	Strength: 1. Human (Grade A: H01, H06, H07) 2. Social (Grade A: S05, S10, S15; Grade B: S01, S03, S06, S14) 3. Physical (Grade A: P01, P03, P07, P09) 4. Natural (Grade A: N03) 5. Financial (Grade A: F05, F08, F10) Opportunities: 1. Human (Grade B: H04, H05)	Enabling Environment	1. Prospective Risk Reduction 2. Recovery 3. Response	1. Robustness 2. Rapidity 3. Redundancy	1. Governance 2. Livelihoods 3. Social Norms 4. Lifelines	1. Resourceful 2. Reflective 3. Integrated	The majority does not consider GAID.

SO/WN	Five Modals	Community Context	DRM Cycle	Resilience – 4Rs	7 Theme	City Resilience Index	GAID-Specific
	2. Social (Grade B: S11) 3. Physical (Grade B: P08)						
Need/ Weaknesses	Needs: 1. Human (Grade C: H10) 2. Social (Grade B: S13; Grade C: S02, S07)) 3. Physical (Grade B: P10; Grade C: P04, P05, P06) 4. Natural (Grade C: N04) 5. Financial (Grade B: F03; Grade C: F06; Grade F07) Weaknesses: 1. Human (Grade C: H02, H09) 2. Social (Grade C: S08; Grade D: S09) 3. Physical (Grade C:	Community Level	1. Preparedness 2. Corrective Risk Reduction	1. Resourcefulness 2. Redundancy	1. Assets 2. Life and Health 3. Natural Environment 4. Livelihoods 5. Social Norms 6. Lifelines	1. Redundant 2. Flexible 3. Inclusive 4. Robust	The majority does not consider GAID.

SO/WN	Five Modals	Community Context	DRM Cycle	Resilience – 4Rs	7 Theme	City Resilience Index	GAID-Specific
	P12; Grade D: P11) 4. Natural (Grade C: N05; Grade D: N01, N02) 5. Financial (Grade C: F02, F04; Grade D: F01)						

Source: Analysis by IKUPI (2024)

4.3 Grouping Intervention Priority

Intervention prioritization is carried out by eliminating sources of resilience that are already strong (S) and sources of resilience that are not relevant to the community. Intervention priorities only focus on sources of resilience that can be added or strengthened (W and O), and their level value improved or increased (N). Priorities are divided into three classes, namely priority 1, priority 2, and priority 3. Priority 1 means increasingly prioritized. Priority analysis is the accumulation of scores from the lens of the five capitals; community context, and the disaster management cycle only. The five-modal lens using a Likert scale (5 classes) will be explained below, the community context is given a score of 5 for the community level, meaning it shows a very big impact on the community, and a score of 4 shows a quite big impact on the community. The disaster management cycle lens prioritizes the initial stage with the highest value (5) and the last stage of the cycle has a value of 1. The following is a description of each lens score description.

Table IV.12 Description of Intervention Priority Score

Score	Contextual Impact of Resilience Sources	Community Context	DRM Cycle
5	It has a huge impact and affects many people.	Community level	Prospective Risk Reduction
4	It has a significant impact and affects many people.	Enabling environment	Preparedness
3	Approximately 50% impacted the community.		Response
2	Minimum impact to the community.		Recovery
1	Negligible impact to the community.		Corrective Risk Reduction

Source: Analysis by IKUPI (2024)

After eliminating strengths and irrelevance sources to the Jeruksari community, the total score from the three lenses was obtained. The greater the total score indicates the higher the priority in establishing interventions. The highest total scores are 15 and 10, so priority 1 is obtained with a total score range of 14-15, priority 2 with a total score range of 12-13 and priority 3 with a total score range of 10-11. So, the following priorities are obtained:

Table IV.13 Grouping Proposed Intervention Priorities

No	Code	Resilience Sources	Community Context	DRM Cycle	Total Score	Priority
1	S02	Social inclusiveness of disaster risk management	Community Level	Prospective Risk Reduction	15	Priority 1
2	H05	Awareness of climate change risk	Community Level	Prospective Risk Reduction	15	Priority 1
3	F02	Community financial health	Community Level	Preparedness	14	Priority 1
4	F04	Public infrastructure maintenance budget	Enabling Environment	Prospective Risk Reduction	14	Priority 1
5	F07	Household income continuity	Community Level	Preparedness	14	Priority 1
6	F06	Business continuity	Community Level	Preparedness	14	Priority 1
7	H04	Awareness of need for climate change action	Enabling Environment	Prospective Risk Reduction	14	Priority 1
8	S11	Response planning	Community Level	Prospective Risk Reduction	14	Priority 1
9	F01	Household access to discretionary funds	Community Level	Response	13	Priority 2
10	H09	Evacuation and safety knowledge	Community Level	Preparedness	13	Priority 2
11	H10	Unsafe water awareness	Community Level	Response	13	Priority 2
12	S04	Local leadership	Community Level	Preparedness	13	Priority 2
13	P04	Early warning	Enabling Environment	Preparedness	13	Priority 2
14	P06	Emergency infrastructure and supplies	Enabling Environment	Preparedness	13	Priority 2
15	F03	Local government financial capacity	Enabling Environment	Preparedness	13	Priority 2
16	P08	Forecasting	Enabling Environment	Preparedness	13	Priority 2

No	Code	Resilience Sources	Community Context	DRM Cycle	Total Score	Priority
17	P10	Availability of clean, safe water	Enabling Environment	Response	12	Priority 2
18	N04	Resource Management	Enabling Environment	Prospective Risk Reduction	12	Priority 2
19	S13	Stakeholder engagement in risk management	Community Level	Preparedness	12	Priority 2
20	S07	Trust in local authorities	Community Level	Response	12	Priority 2
21	S09	Inter-community equity	Community Level	Corrective Risk Reduction	11	Priority 3
22	P11	Waste management and risk	Enabling Environment	Response	11	Priority 3
23	H02	Food availability	Enabling Environment	Response	11	Priority 3
24	N01	Tree cover	Enabling Environment	Corrective Risk Reduction	10	Priority 3
25	N02	Permeable surfaces	Enabling Environment	Corrective Risk Reduction	10	Priority 3
26	S08	Intra-community equity	Community Level	Corrective Risk Reduction	10	Priority 3
27	P12	Large scale flood protection	Enabling Environment	Corrective Risk Reduction	10	Priority 3
28	N05	Land/water interface health	Enabling Environment	Corrective Risk Reduction	10	Priority 3
29	P05	Continuity of education	Enabling Environment	Recovery	10	Priority 3

Source: Analisis by IKUPI (2024)

CHAPTER V

Action Plan to Implement Prioritized Interventions

This section outlines a set of activities or interventions to build community resilience to climate change. Interventions can take the form of infrastructure, tools, technology, methods or approaches, or systems. Interventions can relate to other sources of resilience, more than one theme or other capital. The results of the assessment can be used to explore and identify sources of resilience or themes which have the greatest resilience needs and opportunities that can be intervened. This is done by looking at strong and weak areas, interactions between sources of resilience, and opportunities to overcome problems of concern in the Jeruksari community. Not all strengths are opportunities and not all weaknesses need intervention. The follow-up to this intervention is developing action plan. There are sources of resilience that are not relevant in the Jeruksari community, such as one source of natural resilience, namely regarding ecological management for disaster risk reduction. In addition, slope management is no longer relevant in this community because the study area is a coastal which has no a significant slope.

5.1 Formulation of Action Plans to Implement Prioritized Interventions for Jeruksari Community

Interventions are arranged based on priority sources of resilience through the CRMC review process. Priorities and interventions based on this CRMC study are in columns 2 and 3 (Appendix 1). Then a pre-feasibility study was carried out with the Mercy Corps Indonesia team which was carried out on December 19 2024. This agenda was carried out to align interventions based on the CRMC study with the ZCRA program. In this stage, new priorities and interventions appear in columns 4 and 5 in Appendix 1. The new priority is to seek interventions that can be followed up by Mercy Corps Indonesia and other actors. Other actors make it possible to follow up on interventions that are both relevant and irrelevant to the ZCRA program but important for the community context.

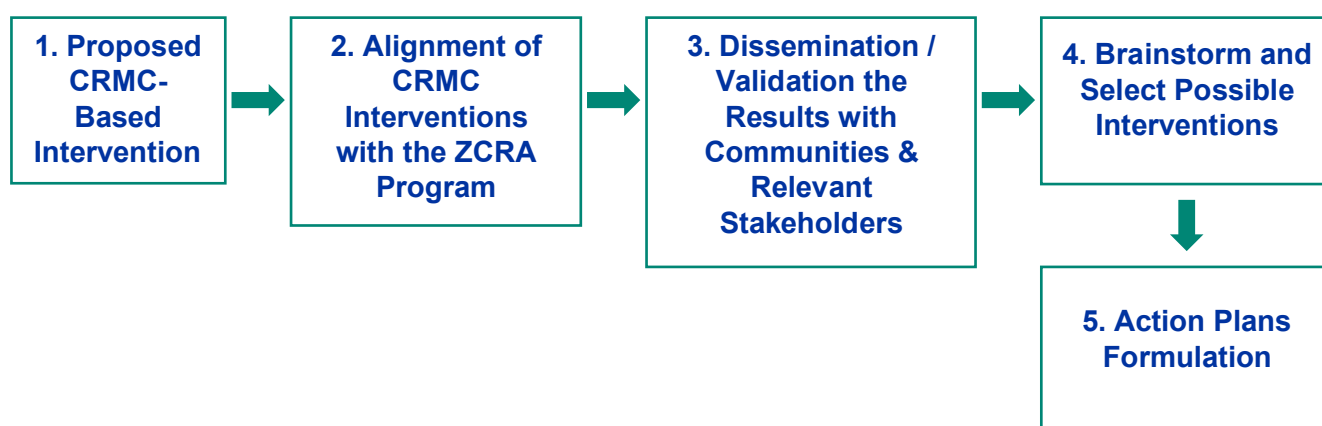


Figure V.1 Flowcharts of Formulating Action Plans to Implement Prioritized Interventions

Source: Analysis by IKUPI, Adapted from the "From Results Analysis to Intervention Planning" CRMC Document (2025)

The benefits of CRMC are providing information for decision making, and helps to identify the possible areas for interventions supported by discussions among the community and stakeholders such as government, academics, the private sector and others. Stages 1 and 2

in Figure V.1 have been carried out and prioritized interventions can be seen in Appendix 2. On January 16 2025, dissemination events were carried out with the community and related stakeholders in three stages, that are, (1) deliver the CRMC results to having the common agreement and understanding of the weaknesses and strengths of community resilience sources, (2) discuss the interventions offered. This stage opens up opportunities to explore new ideas for interventions that are more suitable for resilience resources that need to be improved or enhanced as well as selecting interventions that have the greatest impact and are feasible to implement based on the available list. Finally (3) formulate action plans by selecting the responsible actors to execute each intervention. The mechanism in stages (2) and (3) can be described as follows:

Table V.1 World Café Mechanism for Ranking Interventions and Selecting Program Executors

Stage 2 Discuss the Interventions Offered	Criteria to Rank Interventions
	Participants rank interventions using the criteria below: - Level of urgency, impact, benefit, and ability to solve the problem; - Availability of resources (technical, financial, actor capacity); - Quick wins (can be accomplished rapidly – short to mid-term).
	Ranking Process of Interventions - Participants are divided into three groups using participative discussion methods “World Café”. - Those groups are sorted by “Post” Priority 1, 2, and 3 that are attached in Appendix 2. - Each group will move to different post and fill or vote the new priority on the available list. Individuals can vote for 1 intervention only.
Tahap 3 Formulate Action Plans	Selecting Process for Action Plan Executor(s)
	- This activity is parallel with the ranking interventions. - Each individual can list more than one executor or collaborator and can fill in the blank area. - Based on the composition of the number of interventions in Priorities 1, 2, and 3, the CRMC team will select the top 5 votes for Priority 1, 10 votes for Priority 2, and 5 votes for Priority 3 with executors written by participants. This result is the final action plan of the series of CRMC activities.

Source: Analysis by Mercy Corps Indonesia and IKUPI (2025)

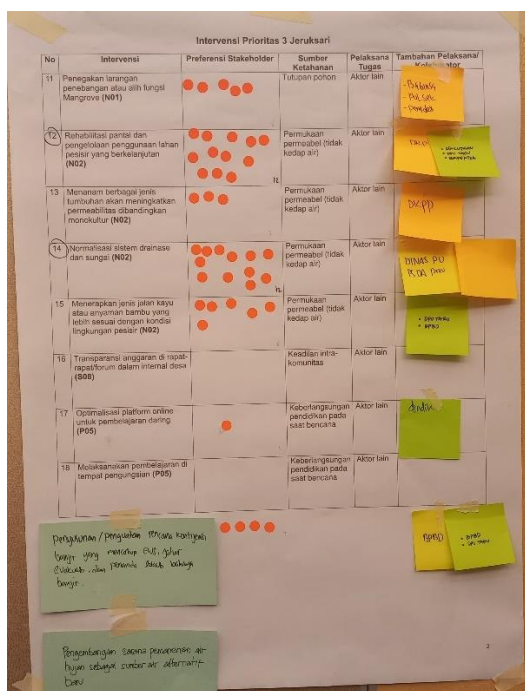


Figure V.2 World Cafe Condition for Ranking Interventions and Selection of Program Executors
Source: Photo by IKUPI and Mercy Corps Indonesia (2025)

5.2 Action Plans for Priority 1

Here are prioritized interventions that transformed into action plans.

Table V.2 Priority 1 of Jeruksari Community Action Plans

No	Interventions	Resilience Sources	Program Executors	Rank
1	Facilitating local stakeholders in accessing alternative funding sources for implementing community-based climate resilience actions (F03)	Local government financial capacity	Mercy Corps Indonesia	1
2	The development of local product branding is facilitated by Moya Bahari Perdana (F06)	Business continuity	Mercy Corps Indonesia, NGO providing fundings such as LAZISMU, DPMD	2
3	Developing collaboration between city, regency, and provincial governments in addressing tidal flooding through the development of cross-regional flood management strategies (S07)	Trust in local authorities	Mercy Corps Indonesia	2
4	Diversifying livelihoods to increase household income (strengthening livelihoods) (H02)	Food availability	Mercy Corps Indonesia	3
5	Enhancing community skills and access to economic opportunities based on technology (freelance, online shop, and content creations) and gender (tailoring and batik painting courses) (F07)	Household income continuity	Mercy Corps Indonesia, Disperindag, Dinkopukmdannaker, Diskominfo, academics	4

No	Interventions	Resilience Sources	Program Executors	Rank
6	Socializing the use of early warning data at the community level, especially for fishing and fish farming groups (related to AWS - Automatic Weather Station and wave height monitoring devices planned for installation in Jeruksari, initiatives by Mercy Corps and IPB) (P04)	Early warning	Mercy Corps Indonesia, BMKG	4
7	Developing a flood risk management model using a pentahelix approach or cross-sectoral approach by emphasizing the integration of various sectors within the Mercy Corps Indonesia Strategic Alliance (disasters, climate change, economic and community development) (S07)	Trust in local authorities	Mercy Corps Indonesia, BAPPERIDA, BPBD	5

Source: Action Plans for Priority 1 Formed from World Cafe (2025)

5.3 Action Plans for Priority 2

Here are prioritized interventions that transformed into action plans.

Table V.3 Priority 2 of Jeruksari Community Action Plans

No	Interventions	Resilience Sources	Program Executors	Rank
1	Elevating the Brengi River embankment (P12)	Large scale flood protection	DPUTARU, BBWS, Pusdatu Jawa Tengah	1
2	Normalization of drainage and river systems (P12)	Large scale flood protection	DPUTARU, village officials, youth organization	2
3	Allocating Village Funds for disaster risk reduction programs (procurement of logistics, infrastructure, and equipment maintenance) (S04)	Local leadership	Village officials	3
4	The acceleration of establishing Disaster-Resilient Villages involves a pentahelix approach (S02)	Social inclusiveness of disaster risk management	BPBD, village officials, DPMD	4
5	Construction of retention basin (P12)	Large scale flood protection	DPUTARU, Pusdatu Jawa Tengah, Kementerian PU	5
6	Developing the waste bank program (H04)	Awareness of need for climate change action	Environmental NGO, DisperkimLH, village officials, BUMDES, BPBD	6

No	Interventions	Resilience Sources	Program Executors	Rank
7	Improvement of facilities in shelters (clean water and sanitation, food, proper bedding, and special room for pregnant women, the elderly, people with disabilities, and children) (H09)	Evacuation and safety knowledge	DPUTARU, BPBD, Dinsos, Dinkes	6
8	Repairing water gate (P12)	Large scale flood protection	DPUTARU, BBWS	6
9	Development and maintenance of EWS (improvement of existing EWS, identification of its failures, and integrated with digital applications or platforms) (S11)	Response planning	BPBD	7
10	Periodic restoration of true mangroves, monitored intensively during the first 3 months (N04)	Resource Management	DLHK Provinsi Jawa Tengah, village officials, DisperkimLH, CDK, DKP Provinsi Jawa Tengah	7
11	Installation of EWS (Early Warning System) in rivers to detect the risk of levee breaches or flooding (N05)	Land/water interface health	BPBD, NGO/LSM, DPUTARU	7
12	*Management of organic and non-organic waste for SMEs (N04)	Resource Management	DPUTARU, village officials	8
13	River rehabilitation of industrial (SMEs) waste (N05)	Land/water interface health	DPUTARU, village officials	8
14	Procurement of pond water monitoring technology (temperature, pH, salinity, etc.) to improve milkfish production (F06)	Business continuity	DisperkimLH, Labkesda, DKP	9
15	Utilizing Village Funds effectively to enhance sustainable and environmentally friendly flood infrastructure (F03)	Local government financial capacity	Village officials	9
16	Providing additional clean water supply at certain places during floods (P10)	Availability of clean, safe water	DPUTARU	9
17	Routine maintenance of the water piping network (P10)	Availability of clean, safe water	DPUTARU	9
18	*Development of rainwater harvesting tools as an alternative water source (P10)	Availability of clean, safe water	DPUTARU, academics	9
19	Strengthening KSB by involving members from all sectors of the community, including vulnerable groups, youth, women, business actors, religious leaders, and others (S13)	Stakeholder engagement in risk management	KSB	10

Source: Action Plans for Priority 2 Formed from World Cafe (2025)

**No 12 and 18: Newly added interventions during stage (2) discussion*

5.4 Action Plans for Priority 3

Here are prioritized interventions that transformed into action plans.

Table V.4 Priority 3 of Jeruksari Community Action Plans

No	Interventions	Resilience Sources	Program Executors	Rank
1	Soil quality rehabilitation with associative mangrove plants (e.g., Ketapang, Sea Pine, Legundi, Sea Hibiscus, and others) (N01)	Tree cover	CDK-4, DisperkimLH, CSR, village officials	1
2	Coastal rehabilitation and sustainable coastal land use management (N02)	Permeable surfaces	DKP, DPUTARU, BAPPERIDA	2
3	Normalization of drainage and river systems (N02)	Permeable surfaces	DPUTARU, PSDA Provinsi Jawa Tengah	2
4	Access to nutritious food for pregnant women and toddlers at Posyandu (H02)	Food availability	Puskesmas, village officials, DKPP, CSR	3
5	Community training on self-water treatment for flood-contaminated water (H10)	Unsafe water awareness	DPUTARU, PDAM	4
6	Identifying the availability of functioning emergency equipment (P06)	Emergency infrastructure and supplies	KSB, village officials	4
7	Utilization of house yard (hydroponic farming) (H02)	Food availability	DKPP, CSR, village officials, Baznas, LSM	4
8	Adopting the latest national education zoning scheme, which will be more flexible, starting in February 2025 (S09)	Inter-community equity	Dinas Pendidikan	5
9	Application of bamboo and wood roads in coastal area (N02)	Permeable surfaces	DPUTARU, BPBD	5

Source: Action Plans for Priority 3 Formed from World Cafe (2025)

Appendix 1: Comparison of Intervention Before and After Pre-Feasibility Study

No	Proposed Priority	Proposed Intervention	Priority After Pre-Feasibility Study	Intervention After Pre-Feasibility Study
1	Priority 1	Strengthening the Disaster Unit Group (KSB) by involving member from all sectors of the community (vulnerable groups, youth, women, business actors, religious groups, and others) (S02)	-	-
2	Priority 1	The acceleration of establishing Disaster-Resilient Villages involves a pentahelix approach (S02)	Priority 2	The acceleration of establishing Disaster-Resilient Villages involves a pentahelix approach (S02)
3	Priority 1	Regular training on participatory flooding risk mapping (including using GPS, digital applications, and platforms like PetaBencana.id) (H05)	Priority 2	Regular training on participatory flooding risk mapping (including using GPS, digital applications, and platforms like PetaBencana.id) (H05)
4	Priority 1	Disseminating real-time climate risk information to neighborhoods WhatsApp groups (H05)	Priority 1	Disseminating real-time climate risk information to neighborhoods WhatsApp groups (H05)
5	Priority 1	Preserving local knowledge for reading the natural signs (H05)	Priority 1	Preserving local knowledge for reading the natural signs, contextualize with CIS (H05)
6	Priority 1	Leveraging information technology to support local enterprises. (F02)	Priority 1	Leveraging information technology to support local enterprises (processed milk fish, CIS, KJA) (F02)
7	Priority 1	Building an industrial cluster in Jeruksari (processing of milkfish and batik) (F02)	Not feasible	Building an industrial cluster in Jeruksari (processing of milkfish and batik) (F02)
8	Priority 1	Utilizing non-conventional funding such as PPP (Public-Private Partnership) and Special Allocation Funds for financing and maintaining flood management infrastructure (F04)	Not feasible	Utilizing non-conventional funding such as PPP (Public-Private Partnership) and Special Allocation Funds for financing and maintaining flood management infrastructure (F04)
9	Priority 1	Leveraging cost-effective Nature-Based Solutions instead of high-cost hard infrastructure (F04)	Priority 2	Leveraging cost-effective Nature-Based Solutions instead of high-cost hard infrastructure (F04)
10	Priority 1	Diversifying livelihoods with seasonal jobs (for example, boat rentals during floods). (F07)	Priority 1	Diversifying livelihoods with seasonal jobs (for example, milk process training). (F07)

No	Proposed Priority	Proposed Intervention	Priority After Pre-Feasibility Study	Intervention After Pre-Feasibility Study
11	Priority 1	Enhancing community skills and access to technology-based economic opportunities (freelance, online shop, and content creations) (F07)	Priority 1	Enhancing community skills and access to technology-based economic opportunities (freelance, online shop, and content creations) (F07)
12	-	-	Priority 1	Revitalization/optimization of brackish water ponds (F07)
13	Priority 1	Encouraging online-based business activities (such as orders via WhatsApp and <i>door to door selling</i>) (F06)	Priority 1	Encouraging online-based business activities (such as orders via WhatsApp and <i>door to door selling</i>) (F06)
14	Priority 1	Developing an emergency transportation system, such as boats, for logistics distribution (F06)	Priority 2	Developing an emergency transportation system, such as boats, for logistics distribution (F06)
15	Priority 1	Procurement of pond water monitoring technology (temperature, pH, salinity, etc.) to improve milkfish production (F06)	Priority 2	Procurement of pond water monitoring technology (temperature, pH, salinity, etc.) to improve milkfish production (F06)
16	Priority 1	The development of local product branding is facilitated by BUMDes (Village-Owned Enterprise). (F06)	Priority 1	The development of local product branding is facilitated by Moya Bahari Perdana (F06)
17	Priority 1	Providing incentives to community groups engaged in environmental conservation actions (funding sources: village funds, CSR, etc.) (H04)	Priority 2	Providing incentives to community groups engaged in environmental conservation actions (funding sources: village funds, CSR, etc.) (H04)
18	-	-	Priority 2	Developing the waste bank program (H04)
19	-	-	Priority 1	Socialization/training on efforts for disaster adaptation (resource mobilization, PLUP, cultivation, CIS) (H04)
20	Priority 1	Development and maintenance of EWS (improvement of existing EWS, identification of its failures, and integrated with digital applications or platforms) (S11)	Priority 2	Development and maintenance of EWS (improvement of existing EWS, identification of its failures, and integrated with digital applications or platforms) (S11)
21	Priority 1	Training KSB to utilize and maintain the EWS (S11)	Priority 2	Training KSB to utilize and maintain the EWS (S11)
22	Priority 1	Monitoring and evaluation of participatory flood risk maps and evacuation routes (S11)	Priority 2	Monitoring and evaluation of participatory flood risk maps and evacuation routes (S11)

No	Proposed Priority	Proposed Intervention	Priority After Pre-Feasibility Study	Intervention After Pre-Feasibility Study
23	Priority 1	Implementing post-event recapitulation, documentation, and evaluation system (S11)	Priority 2	Implementing post-event recapitulation, documentation, and evaluation system (S11)
24	Priority 2	Utilizing community savings groups (arisan urugan) to provide emergency funds for households affected by disasters (F01)	Priority 2	Utilizing community savings groups (arisan urugan) to provide emergency funds for households affected by disasters (F01)
25	Priority 2	Empowering community savings groups (arisan urugan) as a "platform" for external funding sources, such as from NGOs or donors (F01)	Priority 2	Empowering community savings groups (arisan urugan) as a "platform" for external funding sources, such as from NGOs or donors (F01)
26	Priority 2	Regularly disseminating information in the form of videos or posters about the benefits of evacuation, evacuation mechanisms, and visualizations of shelters and their facilities through WhatsApp groups (H09)	Priority 2	Regularly disseminating information in the form of videos or posters about the benefits of evacuation, evacuation mechanisms, and visualizations of shelters and their facilities through WhatsApp groups (H09)
27	Priority 2	Improvement of facilities in shelters (clean water and sanitation, food, proper bedding, and special room for pregnant women, the elderly, people with disabilities, and children) (H09)	Priority 2	Improvement of facilities in shelters (clean water and sanitation, food, proper bedding, and special room for pregnant women, the elderly, people with disabilities, and children) (H09)
28	Priority 2	Improving accessibility of evacuation routes to assembly points (H09)	Priority 2	Improving accessibility of evacuation routes to assembly points (H09)
29	Priority 2	Community training on self-water treatment for flood-contaminated water (H10)	Priority 3	Community training on self-water treatment for flood-contaminated water (H10)
30	Priority 2	Facilitating public discussions involving various community groups to develop flood management solutions (S04)	Priority 1	Facilitating participatory public discussions involving various community groups, including vulnerable groups (women, children, elderly, etc.), to formulate gender-sensitive flood mitigation solutions through Participatory Land Use Planning (PLUP) document, which will be incorporated into policy recommendations for the region (S04)
31	Priority 2	Building a participatory monitoring system, allowing the community to report the condition of their area directly or online to the local authorities (S04)	Priority 1	Building the Climate Information System, a participatory monitoring system allows communities to report the condition of their area directly or online to the local authorities (S04)

No	Proposed Priority	Proposed Intervention	Priority After Pre-Feasibility Study	Intervention After Pre-Feasibility Study
32	Priority 2	Allocating Village Funds for disaster risk reduction programs (procurement of logistics, infrastructure, and equipment maintenance) (S04)	Priority 2	Allocating Village Funds for disaster risk reduction programs (procurement of logistics, infrastructure, and equipment maintenance) (S04)
33	Priority 2	Transparency in Village Funds management and the distribution of community aid (S04)	Priority 2	Transparency in Village Funds management and the distribution of community aid (S04)
34	Priority 2	Training KSB and village government to disseminate information to the community, including through door-to-door communication, using loudspeakers, and WhatsApp groups (P04)	Priority 2	Training KSB and village government to disseminate information to the community, including through door-to-door communication, using loudspeakers, and WhatsApp groups (P04)
35	Priority 2	Socializing the use of early warning data at the community level, especially for fishing and fish farming groups (P04)	Priority 1	Socializing the use of early warning data at the community level, especially for fishing and fish farming groups (related to AWS - Automatic Weather Station and wave height monitoring devices planned for installation in Jeruksari, initiatives by Mercy Corps and IPB) (P04)
36	Priority 2	Utilizing KSB members to maintain emergency equipment and flood management infrastructure (P06)	Priority 3	Utilizing KSB members to maintain emergency equipment and flood management infrastructure (P06)
37	Priority 2	Identifying the availability of functioning emergency equipment (P06)	Priority 3	Identifying the availability of functioning emergency equipment (P06)
38	Priority 2	Actively submitting and receiving program proposals to and from national and international organizations or donors (F03)	Priority 1	Actively assisting local stakeholders in submitting and receiving program proposals to and from national and international institutions or donors, through collaborative efforts between Mercy Corps Indonesia and relevant strategic collaborators, including government and NGOs with aligned visions (F03)
39	Priority 2	Utilizing Village Funds effectively to enhance sustainable and environmentally friendly flood infrastructure (F03)	Priority 2	Utilizing Village Funds effectively to enhance sustainable and environmentally friendly flood infrastructure (F03)

No	Proposed Priority	Proposed Intervention	Priority After Pre-Feasibility Study	Intervention After Pre-Feasibility Study
40	Priority 2	Developing a warning system that sends emergency messages to the public via SMS (P08)	Priority 3	Developing a warning system that sends emergency messages to the public via SMS (P08)
41	Priority 2	Installing real-time digital information boards monitored directly by BMKG in specific areas (P08)	Priority 1	Installing real-time digital information boards monitored by community representative team, supported by experts. A development of Climate Information system initiated by Mercy Corps Indonesia (P08)
42	Priority 2	Providing additional clean water supply at certain places during floods (P10)	Priority 2	Providing additional clean water supply at certain places during floods (P10)
43	Priority 2	Routine maintenance of the water piping network (P10)	Priority 2	Routine maintenance of the water piping network (P10)
44	Priority 2	Installation of emergency or portable water filtration systems at shelter (P10)	Priority 2	Installation of emergency or portable water filtration systems at shelter (P10)
45	Priority 2	Educating the community to store water in sealed containers during disasters to prevent water contamination (P10)	Priority 2	Educating the community to store water in sealed containers during disasters to prevent water contamination (P10)
46	Priority 2	Providing portable toilets at certain places or shelter (P10)	Priority 3	Providing portable toilets at certain places or shelter (P10)
47	Priority 2	Periodic restoration of true mangroves, monitored intensively during the first 3 months (N04)	Priority 2	Periodic restoration of true mangroves, monitored intensively during the first 3 months (N04)
48	Priority 2	Developing village regulations to restrict unsustainable land use (e.g., prohibiting chemicals feed and treatment, and waste disposal into rivers) (N04)	Priority 1	Developing village regulations to restrict unsustainable land use (e.g., prohibiting chemicals feed and treatment, and waste disposal into rivers) related to the development of climate-resilient villages (N04)
49	Priority 2	Monitoring water salinity to help identify ecosystem health (N04)	Priority 2	Monitoring water salinity to help identify ecosystem health (N04)
50	Priority 2	Management of waste (N04)	Priority 2	Management of waste (N04)
51	Priority 2	Innovation in simple community-scale waste processing (N04)	Priority 2	Innovation in simple community-scale waste processing (N04)
52	Priority 2	Enhancing stakeholder capacity through training, workshops, and study visits (S13)	Priority 1	Enhancing the capacity of stakeholders, particularly those involved in the Policy Dialogue

No	Proposed Priority	Proposed Intervention	Priority After Pre-Feasibility Study	Intervention After Pre-Feasibility Study
				Strategic Alliance or other key actors in the climate change field, through training, workshops, and study visits (S13)
53	Priority 2	Providing financial and non-financial incentives for KSB (S13)	Priority 3	Providing financial and non-financial incentives for KSB (S13)
54	Priority 2	Strengthening the role of stakeholders at the village level (S13)	Priority 1	Strengthening the role of stakeholders at the village level through participatory planning activities such as the integration of PLUP and CRMC into village-level policies (S13)
55	-	-	Priority 2	Strengthening KSB by involving members from all sectors of the community, including vulnerable groups, youth, women, business actors, religious leaders, and others (S13)
56	Priority 2	Developing collaboration between city, regency, and provincial governments in addressing tidal flooding (S07)	Priority 1	Developing collaboration between city, regency, and provincial governments in addressing tidal flooding through the development of cross-regional flood management strategies (S07)
57	Priority 2	Integrating infrastructure development between the regency and city along the Pekalongan coastline (S07)	Priority 1	Develop recommendation for integration of infrastructure development between the regency and city along the Pekalongan coastline through the Integrated Coastal Zone Management development (S07)
58	Priority 2	Developing a flood risk management model using a pentahelix approach (S07)	Priority 1	Developing a flood risk management model using a pentahelix approach or cross-sectoral approach by emphasizing the integration of various sectors within the Mercy Corps Indonesia Strategic Alliance (disasters, climate change, economic and community development) (S07)
59	Priority 3	Adopting the latest national education zoning scheme, which will be more flexible, starting in February 2025 (S09)	Priority 3	Adopting the latest national education zoning scheme, which will be more flexible, starting in February 2025 (S09)
60	Priority 3	Transparency of the regency and village budget in village meetings/forums (S09)	Priority 2	Transparency of the regency and village budget in village meetings/forums (S09)

No	Proposed Priority	Proposed Intervention	Priority After Pre-Feasibility Study	Intervention After Pre-Feasibility Study
61	Priority 3	Developing the waste bank program (P01)	-	-
62	Priority 3	Access to nutritious food for pregnant women and toddlers at Posyandu (H02)	Priority 3	Access to nutritious food for pregnant women and toddlers at Posyandu (H02)
63	Priority 3	Diversifying livelihoods to increase household income (H02)	Priority 1	Diversifying livelihoods to increase household income (strengthening livelihoods) (H02)
64	-	-	Priority 3	Utilization of house yard (hydroponic farming) (H02)
65	Priority 3	Soil quality rehabilitation with associative mangrove plants (e.g., Ketapang, Sea Pine, Legundi, Sea Hibiscus, and others) (N01)	Priority 3	Soil quality rehabilitation with associative mangrove plants (e.g., Ketapang, Sea Pine, Legundi, Sea Hibiscus, and others) (N01)
66	Priority 3	Community training on sustainable land use practices (N01)	Priority 1	Community training on sustainable land use practices (development of conservation-based adaptive cultivation) (N01)
67	Priority 3	Restriction on mangrove deforestation or land conversion (N01)	Priority 3	Enforcement of restrictions on mangrove deforestation or land conversion (N01)
68	Priority 3	Coastal rehabilitation and sustainable coastal land use management (N02)	Priority 3	Coastal rehabilitation and sustainable coastal land use management (N02)
69	Priority 3	Planting various types of plants will improve permeability compared to monoculture (N02)	Priority 3	Planting various types of plants will improve permeability compared to monoculture (N02)
70	Priority 3	Normalization of drainage and river systems (N02)	Priority 3	Normalization of drainage and river systems (N02)
71	Priority 3	Application of bamboo and wood roads in coastal area (N02)	Priority 3	Application of bamboo and wood roads in coastal area (N02)
72	Priority 3	Village budget transparency in internal village meetings/forums (S08)	Priority 3	Village budget transparency in internal village meetings/forums (S08)
73	Priority 3	Introducing floating houses to the coastal communities of Pekalongan. Best practice: floating houses in Muara Angke and the Blok Empang area, Penjaringan, North Jakarta (P12)	Priority 2	Introducing floating houses to the coastal communities of Pekalongan. Best practice: floating houses in Muara Angke and the Blok Empang area, Penjaringan, North Jakarta (P12)
74	-	-	Priority 2	Elevating the Brengi River embankment (P12)
75	-	-	Priority 2	Repairing water gate (P12)
76	-	-	Priority 2	Normalization of drainage and river systems (P12)

No	Proposed Priority	Proposed Intervention	Priority After Pre-Feasibility Study	Intervention After Pre-Feasibility Study
77	-	-	Priority 2	Construction of retention basin (P12)
78	Priority 3	Planting salt-tolerant vegetation along the riverbanks (N05)	Priority 2	Planting salt-tolerant vegetation along the riverbanks (N05)
79	Priority 3	River rehabilitation of industrial waste (N05)	Priority 2	River rehabilitation of industrial waste (N05)
80	Priority 3	Controlling sedimentation around river embankments (N05)	Priority 2	Controlling sedimentation around river embankments (N05)
81	Priority 3	Installation of EWS (Early Warning System) in rivers to detect the risk of levee breaches or flooding (N05)	Priority 2	Installation of EWS (Early Warning System) in rivers to detect the risk of levee breaches or flooding (N05)
82	Priority 3	Periodic planting of mangroves along the Pekalongan coastline (N05)	Priority 2	Periodic planting of mangroves along the Pekalongan coastline (N05)
83	-	-	Priority 2	Removing invasive plants such as water hyacinth in the Brengi River (N05)
84	-	-	Priority 1	Observation and management of coastal ecosystems (ICZM and CIS) (N05)
85	Priority 3	Optimizing online platforms for e-learning (P05)	Priority 3	Optimizing online platforms for e-learning (P05)
86	Priority 3	Conducting teaching and learning in shelters (P05)	Priority 3	Conducting teaching and learning in shelters (P05)

Color Coding Description:

- Relevant, important, and aligned with ToC, Logframe, and ZCRA strategy
- Relevant, Important, but not aligned with ToC, Logframe and ZCRA strategy
- Not relevant to ZCRA, but important for the area (community/village level), potential followed up by other actors
- Not relevant to ZCRA and community context

Appendix 2: World Cafe Materials for Ranking of Interventions and Program Executor Selection

- Priority 1

No	Intervention	Stakeholders Preference	Resilience Sources	Program Executor	Additional Executor / Collaborator
1	Disseminating real-time climate risk information to neighborhoods WhatsApp groups (H05)		Awareness of climate change risk	Other actors	
2	Preserving local knowledge for reading the natural signs, contextualize with CIS (H05)		Awareness of climate change risk	Other actors	
3	Leveraging information technology to support local enterprises (processed milk fish, CIS, KJA) (F02)		Community financial health	Mercy Corps Indonesia	
4	Diversifying livelihoods with seasonal jobs (for example, milk process training). (F07)		Household income continuity	Mercy Corps Indonesia	
5	Enhancing community skills and access to technology-based economic opportunities (freelance, online shop, and content creations) (F07)		Household income continuity	Mercy Corps Indonesia	
6	Revitalization/optimization of brackish water ponds (F07)		Household income continuity	Mercy Corps Indonesia	
7	Encouraging online-based business activities (such as orders via WhatsApp and <i>door to door selling</i>) (F06)		Business continuity	Mercy Corps Indonesia	
8	The development of local product branding is facilitated by Moya Bahari Perdana (F06)		Business continuity	Mercy Corps Indonesia	
9	Socialization/training on efforts for disaster adaptation (resource mobilization, PLUP, cultivation, CIS) (H04)		Awareness of need for climate change action	Mercy Corps Indonesia	
10	Facilitating participatory public discussions involving various community groups, including vulnerable groups (women, children, elderly, etc.), to formulate gender-sensitive flood mitigation solutions through Participatory Land Use Planning (PLUP) document, which will be		Local leadership	Mercy Corps Indonesia	

No	Intervention	Stakeholders Preference	Resilience Sources	Program Executor	Additional Executor / Collaborator
	incorporated into policy recommendations for the region (S04)				
11	Building the Climate Information System, a participatory monitoring system allows communities to report the condition of their area directly or online to the local authorities (S04)		Local leadership	Mercy Corps Indonesia	
12	Socializing the use of early warning data at the community level, especially for fishing and fish farming groups (related to AWS - Automatic Weather Station and wave height monitoring devices planned for installation in Jeruksari, initiatives by Mercy Corps and IPB) (P04)		Early warning	Mercy Corps Indonesia	
13	Actively assisting local stakeholders in submitting and receiving program proposals to and from national and international institutions or donors, through collaborative efforts between Mercy Corps Indonesia and relevant strategic collaborators, including government and NGOs with aligned visions (F03)		Local government financial capacity	Other actors	
14	Installing real-time digital information boards monitored by community representative team, supported by experts. A development of Climate Information system initiated by Mercy Corps Indonesia (P08)		Forecasting	Mercy Corps Indonesia	
15	Developing village regulations to restrict unsustainable land use (e.g., prohibiting chemicals feed and treatment, and waste disposal into rivers) related to the development of climate-resilient villages (N04)		Resource Management	Mercy Corps Indonesia	
16	Enhancing the capacity of stakeholders, particularly those involved in the Policy Dialogue Strategic Alliance or other key actors in the climate change field, through training, workshops, and study visits (S13)		Stakeholder engagement in risk management	Mercy Corps Indonesia	
17	Strengthening the role of stakeholders at the village level through participatory planning activities such as		Stakeholder engagement in risk management	Mercy Corps Indonesia	

No	Intervention	Stakeholders Preference	Resilience Sources	Program Executor	Additional Executor / Collaborator
	the integration of PLUP and CRMC into village-level policies (S13)				
18	Developing collaboration between city, regency, and provincial governments in addressing tidal flooding through the development of cross-regional flood management strategies (S07)		Trust in local authorities	Mercy Corps Indonesia	
19	Develop recommendation for integration of infrastructure development between the regency and city along the Pekalongan coastline through the Integrated Coastal Zone Management development (S07)		Trust in local authorities	Mercy Corps Indonesia	
20	Developing a flood risk management model using a pentahelix approach or cross-sectoral approach by emphasizing the integration of various sectors within the Mercy Corps Indonesia Strategic Alliance (disasters, climate change, economic and community development) (S07)		Trust in local authorities	Mercy Corps Indonesia	
21	Diversifying livelihoods to increase household income (strengthening livelihoods) (H02)		Food availability	Mercy Corps Indonesia	
22	Community training on sustainable land use practices (development of conservation-based adaptive cultivation) (N01)		Tree cover	Mercy Corps Indonesia	
23	Observation and management of coastal ecosystems (ICZM and CIS) (N05)		Land/water interface health	Mercy Corps Indonesia	

- **Priority 2**

No	Intervention	Stakeholders Preference	Resilience Sources	Program Executor	Additional Executor / Collaborator
1	The acceleration of establishing Disaster-Resilient Villages involves a pentahelix approach (S02)		Social inclusiveness of disaster risk management	Other actors	
2	Regular training on participatory flooding risk mapping (including using GPS, digital applications, and platforms like PetaBencana.id) (H05)		Awareness of climate change risk	Other actors	
3	Leveraging cost-effective Nature-Based Solutions instead of high-cost hard infrastructure (F04)		Public infrastructure maintenance budget	Other actors	
4	Developing an emergency transportation system, such as boats, for logistics distribution (F06)		Business continuity	Other actors	
5	Procurement of pond water monitoring technology (temperature, pH, salinity, etc.) to improve milkfish production (F06)		Business continuity	Other actors	
6	Providing incentives to community groups engaged in environmental conservation actions (funding sources: village funds, CSR, etc.) (H04)		Awareness of need for climate change action	Other actors	
7	Developing the waste bank program (H04)		Awareness of need for climate change action	Other actors	
8	Development and maintenance of EWS (improvement of existing EWS, identification of its failures, and integrated with digital applications or platforms) (S11)		Response planning	Other actors	
9	Training KSB to utilize and maintain the EWS (S11)		Response planning	Other actors	
10	Monitoring and evaluation of participatory flood risk maps and evacuation routes (S11)		Response planning	Other actors	
11	Implementing post-event recapitulation, documentation, and evaluation system (S11)		Response planning	Other actors	
12	Utilizing community savings groups (arisan urugan) to provide emergency funds for households affected by disasters (F01)		Household access to discretionary funds	Other actors	
13	Empowering community savings groups (arisan urugan) as a "platform" for external funding sources, such as from NGOs or donors (F01)		Household access to discretionary funds	Other actors	

No	Intervention	Stakeholders Preference	Resilience Sources	Program Executor	Additional Executor / Collaborator
14	Regularly disseminating information in the form of videos or posters about the benefits of evacuation, evacuation mechanisms, and visualizations of shelters and their facilities through WhatsApp groups (H09)		Evacuation and safety knowledge	Other actors	
15	Improvement of facilities in shelters (clean water and sanitation, food, proper bedding, and special room for pregnant women, the elderly, people with disabilities, and children) (H09)		Evacuation and safety knowledge	Other actors	
16	Improving accessibility of evacuation routes to assembly points (H09)		Evacuation and safety knowledge	Other actors	
17	Allocating Village Funds for disaster risk reduction programs (procurement of logistics, infrastructure, and equipment maintenance) (S04)		Local leadership	Other actors	
18	Transparency in Village Funds management and the distribution of community aid (S04)		Local leadership	Other actors	
19	Training KSB and village government to disseminate information to the community, including through door-to-door communication, using loudspeakers, and WhatsApp groups (P04)		Early warning	Other actors	
20	Utilizing Village Funds effectively to enhance sustainable and environmentally friendly flood infrastructure (F03)		Local government financial capacity	Other actors	
21	Providing additional clean water supply at certain places during floods (P10)		Availability of clean, safe water	Other actors	
22	Routine maintenance of the water piping network (P10)		Availability of clean, safe water	Other actors	
23	Installation of emergency or portable water filtration systems at shelter (P10)		Availability of clean, safe water	Other actors	
24	Educating the community to store water in sealed containers during disasters to prevent water contamination (P10)		Availability of clean, safe water	Other actors	
25	Periodic restoration of true mangroves, monitored intensively during the first 3 months (N04)		Resource Management	Other actors	

No	Intervention	Stakeholders Preference	Resilience Sources	Program Executor	Additional Executor / Collaborator
26	Monitoring water salinity to help identify ecosystem health (N04)		Resource Management	Other actors	
27	Management of waste (N04)		Resource Management	Other actors	
28	Innovation in simple community-scale waste processing (N04)		Resource Management	Other actors	
29	Strengthening KSB by involving members from all sectors of the community, including vulnerable groups, youth, women, business actors, religious leaders, and others (S13)		Stakeholder engagement in risk management	Other actors	
30	Transparency of the regency and village budget in village meetings/forums (S09)		Inter-community equity	Other actors	
31	Introducing floating houses to the coastal communities of Pekalongan. Best practice: floating houses in Muara Angke and the Blok Empang area, Penjaringan, North Jakarta (P12)		Large scale flood protection	Other actors	
32	Elevating the Brengi River embankment (P12)		Large scale flood protection	Other actors	
33	Repairing water gate (P12)		Large scale flood protection	Other actors	
34	Normalization of drainage and river systems (P12)		Large scale flood protection	Other actors	
35	Construction of retention basin (P12)		Large scale flood protection	Other actors	
36	Planting salt-tolerant vegetation along the riverbanks (N05)		Land/water interface health	Other actors	
37	River rehabilitation of industrial waste (N05)		Land/water interface health	Other actors	
38	Controlling sedimentation around river embankments (N05)		Land/water interface health	Other actors	
39	Installation of EWS (Early Warning System) in rivers to detect the risk of levee breaches or flooding (N05)		Land/water interface health	Other actors	
40	Periodic planting of mangroves along the Pekalongan coastline (N05)		Land/water interface health	Other actors	

No	Intervention	Stakeholders Preference	Resilience Sources	Program Executor	Additional Executor / Collaborator
41	Removing invasive plants such as water hyacinth in the Bremla River (N05)		Land/water interface health	Other actors	

- **Priority 3**

No	Intervention	Stakeholders Preference	Resilience Sources	Program Executor	Additional Executor / Collaborator
1	Community training on self-water treatment for flood-contaminated water (H10)		Unsafe water awareness	Other actors	
2	Utilizing KSB members to maintain emergency equipment and flood management infrastructure (P06)		Emergency infrastructure and supplies	Other actors	
3	Identifying the availability of functioning emergency equipment (P06)		Emergency infrastructure and supplies	Other actors	
4	Developing a warning system that sends emergency messages to the public via SMS (P08)		Forecasting	Other actors	
5	Providing portable toilets at certain places or shelter (P10)		Availability of clean, safe water	Other actors	
6	Providing financial and non-financial incentives for KSB (S13)		Stakeholder engagement in risk management	Other actors	
7	Adopting the latest national education zoning scheme, which will be more flexible, starting in February 2025 (S09)		Inter-community equity	Other actors	
8	Access to nutritious food for pregnant women and toddlers at Posyandu (H02)		Food availability	Other actors	
9	Utilization of house yard (hydroponic farming) (H02)		Food availability	Other actors	
10	Soil quality rehabilitation with associative mangrove plants (e.g., Ketapang, Sea Pine, Legundi, Sea Hibiscus, and others) (N01)		Tree cover	Other actors	
11	Enforcement of restrictions on mangrove deforestation or land conversion (N01)		Tree cover	Other actors	

No	Intervention	Stakeholders Preference	Resilience Sources	Program Executor	Additional Executor / Collaborator
12	Coastal rehabilitation and sustainable coastal land use management (N02)		Permeable surfaces	Other actors	
13	Planting various types of plants will improve permeability compared to monoculture (N02)		Permeable surfaces	Other actors	
14	Normalization of drainage and river systems (N02)		Permeable surfaces	Other actors	
15	Application of bamboo and wood roads in coastal area (N02)		Permeable surfaces	Other actors	
16	Village budget transparency in internal village meetings/forums (S08)		Intra-community equity	Other actors	
17	Optimizing online platforms for e-learning (P05)		Continuity of education	Other actors	
18	Conducting teaching and learning in shelters (P05)		Continuity of education	Other actors	

Appendix 3: A Comprehensive Commentary to CRMC Tools

Climate Resilience Measurement for Communities: A Commentary

Rukuh Setiadi¹, Rayhan Chansa Chaidir¹

¹Inisiatif Kota untuk Perubahan Iklim (IKUPI)

*Penulis utama/kontak: rukuh.setiadi@pwk.undip.ac.id

This brief note aims to highlight some of the potentials and weaknesses of implementing the Climate Resilience Measurement Tool for Communities (CRMC). This brief note refers to the implementation of CRMC in Pekalongan, Central Java, Indonesia.

The Climate Resilience Measurement Tool for Communities has proven effective in guiding climate hazard resilience analysis. This tool is useful for organizing analysis output and producing a resilience score for each community, which can be viewed through seven lenses, namely five capitals, community context, disaster risk management cycle, 4 resilience (4R), 7 themes, city resilience index, and specific GAID. CRMC results are also visualized per lens and can be compared with other communities, this information is useful for the community for decision making.

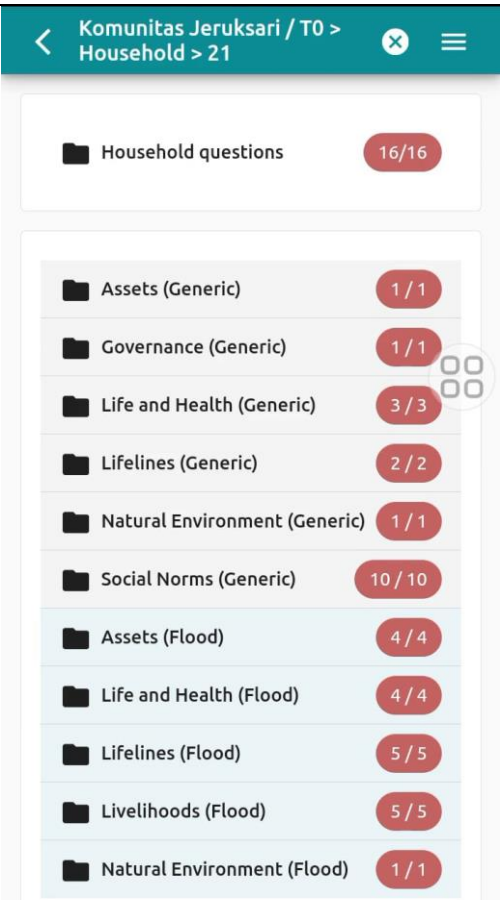
Our team found the five-modal lens score the most useful of these tools. Information from this lens helps analysts to have a holistic view of sectors that require immediate attention. In addition, the description of sources of resilience can provide general clarification regarding the selection of interventions. Interventions are not limited to weaknesses alone, but opportunities that can be improved as well. This means that not only D grades or most of the C grades, but also B grades have the potential to be prioritized in intervention. Apart from the five capital lens, the 4R lens and the disaster risk management cycle need to be shared with the community because they provide information that reflects the current condition of community resilience and in particular the disaster risk management cycle can provide an idea of which cycle or stage this community has weaknesses or strengths. . This can be a trigger for society to take collective action. Despite some of its advantages, we also found some inherent disadvantages of this tool. The following are the shortcomings we encountered:

- Overview for CRMC Tools

1. The list of questions is disordered.

Explanation: The household survey questions, key informant interviews, and FGDs are not in sequence so that respondents feel they have answered the same questions before but it turns out these are similar questions but the questions are far apart. This is because the system in the application displays a list of questions per general hazard and then to specific floods, starting from *Household questions, Assets (Generic), Governance (Generic), Life and Health (Generic), Lifelines (Generic), Natural Environment (Generic), Social Norms (Generic), Assets (Flood), Life and Health (Flood), Lifelines (Flood), Livelihoods (Flood), dan Natural Environment (Flood)*.

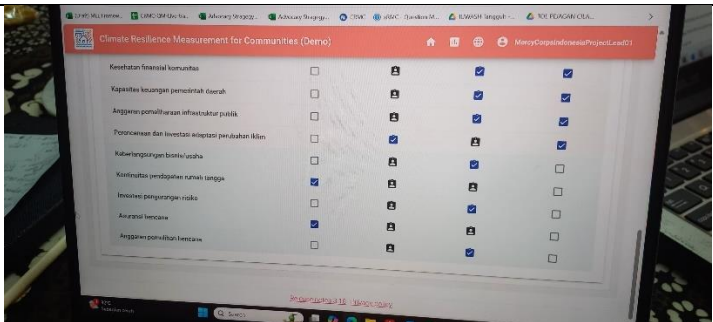
Suggestion: It would be better to group the list of questions by category, for example Assets (Generic) and Assets (Flood) are grouped together or close together because the questions that appear will be similar.

Current situation	Ekspected condition
	Grouped into: Assets (Generic) and Assets (Flood) Or All questions of the same category (for example Assets) are combined.

2. A limited set of Key Informant Interview Questions.

Explanation: There is no information regarding the number of questions that will appear across data collection methods during the study preparation phase. We highlight that when we enter the data collection method, Key Informant Interviews, there are very few questions for certain key informants, for example for the Health Service and DP3AP2KB there are only 2 questions. This is not commensurate with the efforts made by enumerators and related agencies to conduct interviews. So, enumerators need to improvise to get additional information.

Suggestion: It is necessary to have information on the number of questions that will be asked when choosing a data collection method (in the study preparation stage) for a particular source of resilience.

Current condition	
	

Expected condition	Before completing the data collection method stage, there is information regarding the number of questions that will be generated using each method.
---------------------------	--

3. The list of Key Informant Interview and FGD questions does not provide space for obtaining in-depth information.

Explanation: This tool provides questions in the form of closed questions so that it does not allow respondents to explore the answers. The "Additional Comments" box helps to provide additional information but not when, with closed questions, the enumerator only sticks to the answer chosen by the respondent without asking the reasons behind choosing that answer.

Suggestion: There are no suggestions for applications. Enumerators need to be reminded to explore the answers chosen by respondents before going into the field to ensure all the required information is captured.

4. Difficulties in understanding the language used.

Explanation: The use of translated sentences is difficult to understand. This not only makes things difficult for the team, but also for respondents or sources. The team was also unsure about changing sentences when the translation process became easier to understand for fear of changing the context of the question. As a result, enumerators and even resource persons experienced misunderstandings in interpreting a question. Apart from that, there are questions whose context is not appropriate to community conditions. An example is "How many households in the community have income or wealth above the national median income?". Indonesia itself does not use national median income data.

Suggestion:

No	Translated questions	Suggested improvement
Household Surveys		
1	Is anyone in this household: deaf or have serious difficulty hearing ; blind or have serious difficulty seeing even when wearing glasses ; cognitively impaired or have serious difficulty concentrating, remembering, or making decisions ; disabled or have serious difficulty walking or climbing stairs ?	Is anyone in this household: deaf, blind, cognitively impaired, or physically disabled?
2	Local leaders in this community act in the best interests of the whole community rather than only some groups	Village/subdistrict
3	The local government in this community is trustworthy.	Village/subdistrict
4	This community is financially supported by government to the same extent as in other neighboring communities.	Contextual according to community scale. In this case the surrounding neighborhood.
5	Children in this community have equal educational opportunities with children in other neighboring communities.	Contextual according to community scale. In this case the surrounding neighborhood.

No	Translated questions	Suggested improvement
6	People in this community have equal employment opportunities with people in other neighboring communities .	Contextual according to community scale. In this case the surrounding neighborhood.
Focus Group Discussion		
7	The flood risk reduction plan includes both prospective and corrective risk reduction .	There is a brief explanation regarding the definition of Prospective Risk Reduction and corrective questions.
8	Are the community and its communal assets protected through a combination of structural and non-structural flood protection measures?	There is a brief explanation regarding of structural and non-structural flood protection in the question.
9	Are flood forecasts generated for this area ?	Clarify that this area is at the district/city or village/sub-district level.
Key Informant Interviews		
10	Has a flood risk map been developed for this community in the last five years?	Village level (if the community is village/neighborhood scale)/
11	Is there a system in place for collecting data on direct and indirect flood impacts in this community ?	Village level (if the community is village/neighborhood scale)/
12	Do flood risk reduction investments equitably benefit all residents, both within this community and as compared with other communities ?	Village level (if the community is village/neighborhood scale)/

5. List of questions are not translated after downloading.

Explanation: once all the data is collected, the data can be downloaded for analysis. Specific to "Method ID 12432", all translated questions in Bahasa Indonesia that have been inputted during setting up study stage remain in English.

Suggestion: save automatically the translation inputted on each questions, not only at the end of the input process.

- Overview CRMC tool for grading process

No	Code	Resilience Sources	Commentary	Explanation
1	P05	Continuity of education	The answer choices are very rigid, complicated, and not suitable for the community	Answer choice (in Jeruksari and Krapyak Community): C. Education is significantly impacted. School buildings are impacted by floods and can continue some but not all services OR (Only some children in the community will be able to reach their school safely)

No	Code	Resilience Sources	Commentary	Explanation
				AND Interruption to schooling for students who can't reach school safely will last longer than a week). Actual condition: Learning process affects significantly depends on the severity of the flood events.
2	N05	Land/water interface health	Options do not reflect the study area condition.	Answer choice (in Jeruksari and Krapyak Community): C. River and stream banks are not protected from adjacent development or cultivation. Small streams may be diverted or channelized into concrete drains OR Natural wetlands are rarely preserved or valued OR Coastal sites are relatively unprotected. Actual condition: The river is protected by a concrete embankment.
3	P09	Household protection and adaptation	There is no "not done yet" option. Answer choices force respondents and the grading team to answer the available measurements offered.	Answer choice (in Jeruksari and Krapyak Community): A. More than 80% of households have taken at least some type of protective measure to address flood risk. Actual condition: There are people who do not take action to overcome the risk of flooding.
4	P10	Availability of clean, safe water	Vulnerable groups are not asked about during the household surveys but those appear as an option during grading.	Answer choice (in Krapyak Community): C. The clean water supply is damaged and only partially operational (e.g. water needs to be treated for an extended time or other water sources are required) OR Sanitation systems are damaged and only partially operational OR

No	Code	Resilience Sources	Commentary	Explanation
				Flooding impacts the water supply or sanitation system for many community members. Actual condition: Options A and B related to vulnerable groups so when grading we chose C which is most representing the condition in Krapyak.
5	P11	Waste management and risk	The grading options do not match the data collected.	Answer choice (in Krapyak Community): B. Waste causes or intensifies some flood problems (e.g. by clogging drains). Actual condition: Household survey result 32% respondents chose "waste causes or intensifies some flood problems", 27% respondents chose "waste causes significant flood problems" 30% "waste causes major flood problems". Grading team found it difficult to choose the grade cause of almost equal answers.

We acknowledge the strength of this CRMC tool in the household questionnaire section. Other types of data collection such as key informants and focus groups are designed to complement household data. Unfortunately, this type of data is only converted from household type questionnaires. We found a number of open-ended questions for key informant interviews that required specific, closed-ended answers. Overall, CRMC is effective in assisting researchers in communicating resilience to policymakers and the public. There are only minor discrepancies or errors. We recommend simplifying the choice of questions both at the data collection stage and during the assessment.

Appendix 4: Translation of Household Surveys Questions in Bahasa Indonesia

No	Tema	Pertanyaan yang didiskusikan	Pilihan Jawaban
1	(Generic) : Context	Di antara kelompok usia berikut, Anda termasuk yang mana: 18-30, 31-65, atau lebih dari 65 tahun?	18-30 tahun / 31-65 tahun / Lebih dari 65 tahun
2		Apa jenis kelamin Anda?	Perempuan / Laki-laki / Lainnya
3		Apakah ini rumah tangga yang dikepalai perempuan?	Ya / Tidak / Lebih baik tidak mengatakan
4		Berapa lama anggota rumah tangga tersebut tinggal di komunitas ini?	Setidaknya satu anggota rumah tangga dewasa memiliki riwayat keluarga yang panjang di sini (yaitu beberapa generasi telah tinggal di komunitas tersebut) / Setidaknya satu anggota rumah tangga dewasa lahir di komunitas tersebut / Anggota rumah tangga pindah ke sini lebih dari 20 tahun yang lalu / Anggota rumah tangga pindah ke sini antara 5 dan 20 tahun yang lalu / Anggota rumah tangga pindah ke sini kurang dari 5 tahun yang lalu / Saya tidak tahu
5		Apa tingkat pendidikan tertinggi yang pernah Anda selesaikan?	Tidak pernah bersekolah / Pernah bersekolah di sekolah dasar, namun tidak tamat / Selesai sekolah dasar / Menghadiri pendidikan menengah, tetapi tidak menyelesaikannya / Menyelesaikan pendidikan menengah / Perguruan tinggi atau pelatihan / Sertifikat atau gelar kejuruan / Gelar universitas
6		Apakah ada orang di rumah ini yang: tuli atau mengalami kesulitan mendengar yang serius; buta atau mengalami kesulitan melihat meskipun memakai kacamata; gangguan kognitif atau mengalami kesulitan serius dalam berkonsentrasi, mengingat, atau	Ya untuk satu atau lebih / Tidak untuk semua / Saya tidak tahu / Lebih baik tidak mengatakan

No	Tema	Pertanyaan yang didiskusikan	Pilihan Jawaban
		mengambil keputusan; cacat atau mengalami kesulitan serius dalam berjalan atau menaiki tangga?	
7		Apakah ada orang dalam rumah tangga ini yang mengidentifikasi diri sebagai anggota dari satu atau lebih kelompok minoritas atau terpinggirkan, seperti minoritas etnis, agama, ras, LGBTQI+?	Ya / Tidak / Saya tidak tahu / Lebih baik tidak mengatakan
8		Silakan sebutkan kelompok minoritas atau terpinggirkan manakah yang berlaku untuk orang di dalam rumah tangga ini? Silakan centang semua opsi yang berlaku	Etnis / Keagamaan / Rasial / LGBTQI+ / Lainnya / Tidak ada / Lebih baik tidak mengatakan
9		Berapa pendapatan tahunan rata-rata rumah tangga tersebut?	
10		Apa sumber pendapatan terbesar rumah tangga ini?	Upah untuk pekerjaan yang sebagian besar dilakukan di luar ruangan (buruh tani, konstruksi, pertamanan, dll.) / Upah untuk pekerjaan semi-indoor (supir, buruh pabrik, buruh gudang) / Upah untuk pekerjaan yang sebagian besar di dalam ruangan (desk-job, pemerintahan, dll.) / Kiriman uang / Pembayaran kesejahteraan social dari pemerintah / Dukungan dari keluarga, gereja, atau LSM / Pendapatan dari aset seperti properti (sewa) atau investasi lainnya / Pensiun / Sumber pendapatan lainnya / Tidak ada sumber pendapatan / Saya tidak tahu
11		Berapa banyak orang yang tinggal di rumah ini pada sebagian besar waktunya?	
12		Bisakah semua orang di rumah yang berusia di atas 12 tahun membaca dan menulis?	Ya, semua orang bisa membaca dan menulis / Sebagian besar anggota rumah tangga dapat membaca dan menulis / Setidaknya satu orang di rumah bisa membaca dan menulis /

No	Tema	Pertanyaan yang didiskusikan	Pilihan Jawaban
			Setidaknya satu orang di rumah bisa membaca / Tidak seorang pun di rumah bisa membaca atau menulis / Lainnya / Lebih baik tidak mengatakan
13		Apakah anggota rumah tangga ini fasih dalam bahasa utama yang digunakan oleh pemerintah daerah?	Ya, semua orang fasih / Sebagian besar anggota rumah tangga fasih / Sebagian besar anggota rumah tangga cukup menguasai bahasa utama untuk berkomunikasi / Beberapa atau hanya satu anggota rumah tangga cukup menguasai bahasa utama untuk berkomunikasi / Tak seorang pun di rumah tangga ini cukup menguasai bahasa utama yang digunakan pemerintah setempat untuk berkomunikasi / Saya tidak tahu / Lebih baik tidak mengatakan
14		Siapa pemilik tempat tinggal ini?	Tempat tinggal dimiliki oleh seseorang yang tinggal di sini / Tempat tinggal disewa oleh seseorang yang tinggal di sini / Orang-orang yang tinggal di sini hidup bebas sewa dengan izin dari pemiliknya / Orang-orang yang tinggal di sini menghuni tempat tinggal ini tanpa izin dari pemiliknya / Lainnya / Saya tidak tahu
15		Selama Anda tinggal di sini, dalam 10 tahun terakhir berapa kali anggota rumah tangga mengalami kerusakan harta benda akibat banjir?	
16	(Flood): Context	Bayangkan banjir terparah yang pernah Anda alami selama tinggal di sini selama 10 tahun terakhir, berapa lama waktu yang Anda perlukan untuk pulih secara finansial (misalnya akibat perbaikan gedung atau hilangnya pendapatan)?	Saya belum pernah terkena dampak banjir di komunitas ini / Kurang dari satu bulan / Kurang dari tiga bulan / Kurang dari satu tahun / Lebih dari satu tahun / Saya tidak tahu

No	Tema	Pertanyaan yang didiskusikan	Pilihan Jawaban
17	(Generic): Assets	Jika Anda tiba-tiba mengalami kebutuhan keuangan, apakah Anda memiliki tabungan yang cukup untuk menutupi pengeluaran selama seminggu?	Ya / Tidak / Saya tidak tahu
18	(Generic): Governance	Pemimpin daerah di komunitas ini bertindak demi kepentingan terbaik seluruh komunitas dan bukan hanya kepentingan kelompok tertentu. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan ini?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
19	(Generic): Life and Health	Dalam 4 minggu terakhir, pernahkah Anda atau seseorang di rumah Anda tidur dalam keadaan lapar karena tidak memiliki cukup makanan untuk dimakan?	Ya / Tidak / Saya tidak tahu
20		Apakah ada orang dewasa di rumah tangga ini yang menerima pelatihan pertolongan pertama dalam 5 tahun terakhir?	Ya / Tidak / Saya tidak tahu
21		Saya khawatir menjadi korban kejahatan di daerah saya. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
22	(Generic): Lifelines	Sistem komunikasi apa yang dapat Anda akses? Silakan centang semua opsi yang berlaku.	Telepon seluler / Telepon rumah/kantor (non-seluler) / Internet / Televisi / Radio / Tetangga ke Tetangga / Radio 2 arah / Lainnya / Tidak ada sistem komunikasi
23		Apakah sistem komunikasi tersebut dapat diandalkan, termasuk selama dan setelah kejadian ekstrem?	Ya, sistem komunikasi sangat andal / Sistem komunikasi secara umum tetap berfungsi atau pulih dengan cepat / Sistem komunikasi hanya cukup dapat diandalkan / Sistem komunikasi

No	Tema	Pertanyaan yang didiskusikan	Pilihan Jawaban
			sangat tidak dapat diandalkan / Tidak ada sistem komunikasi yang berfungsi / Saya tidak tahu
24	(Generic): Natural Environment	Komunitas saya harus mengambil tindakan lebih besar untuk mengurangi risiko perubahan iklim. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
25	(Generic): Social Norms	Orang-orang dalam komunitas ini umumnya berusaha untuk saling membantu dan dapat mengandalkan satu sama lain untuk membantu mereka pada saat dibutuhkan. Misalnya, jika Anda terserang flu dan harus terbaring di tempat tidur selama beberapa hari, akan ada orang yang dapat Anda andalkan untuk membantu Anda melakukan tugas-tugas dasar rumah tangga dan mendapatkan makanan. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
26		Polisi di komunitas ini dapat dipercaya. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
27		Pemerintah daerah di komunitas ini dapat dipercaya.	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju

No	Tema	Pertanyaan yang didiskusikan	Pilihan Jawaban
		Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	
28		Layanan darurat di komunitas ini dapat dipercaya. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
29		Orang-orang yang bekerja di komunitas ini dibayar secara adil. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
30		Semua anak di komunitas ini mempunyai kesempatan pendidikan yang sama. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
31		Semua orang diperlakukan secara adil ketika melamar pekerjaan di komunitas ini. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
32		Komunitas ini mendapat dukungan finansial yang sama dari pemerintah seperti komunitas tetangga lainnya.	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju

No	Tema	Pertanyaan yang didiskusikan	Pilihan Jawaban
		Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	
33		Anak-anak di komunitas ini mempunyai kesempatan pendidikan yang sama dengan anak-anak di komunitas tetangga lainnya. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
34		Orang-orang di komunitas ini mempunyai kesempatan kerja yang setara dengan orang-orang di komunitas tetangga lainnya. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
35		Saya tahu daerah mana di komunitas yang kemungkinan besar akan terkena banjir. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
36	(Flood): Assets	Tindakan apa yang telah Anda ambil di sekitar rumah Anda untuk menjaga properti dan aset Anda aman dari air banjir? Silakan centang semua opsi yang berlaku.	Penghalang banjir atau karung pasir / Dinding di sekitar rumah / Rumah yang ditinggikan / Lantai yang ditinggikan di dalam rumah / Alas/pintu yang ditinggikan / Mengalihkan air banjir di sekitar rumah (misalnya saluran pengalihan, tanggul atau sejenisnya) / Menggunakan lantai atas untuk penyimpanan / Bangunan tahan

No	Tema	Pertanyaan yang didiskusikan	Pilihan Jawaban
			banjir / Penyimpanan/harta benda anti banjir / Dibangun atau ditingkatkan ke kode bangunan terbaru / Melindungi, membuat tahan air atau memindahkan sistem penting seperti sistem kabel atau mekanis
37		Apakah rumah Anda berada di dataran banjir atau pernah mengalami banjir sebelumnya?	Ya / Tidak / Saya tidak tahu
38		Apakah Anda memiliki asuransi banjir?	Ya / Tidak / Saya tidak tahu
39	(Flood): Life and Health	Saya tahu kapan harus mengevakuasi diri saya dan anggota rumah tangga saya dengan aman saat banjir. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
40		Saya tahu cara mengevakuasi diri saya dan anggota rumah tangga saya dengan aman saat terjadi banjir. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
41		Saya tahu tindakan yang benar yang harus diambil untuk melindungi diri saya dan rumah tangga saya dari air yang tidak aman setelah banjir. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
42		Jika Anda membutuhkan layanan kesehatan saat terjadi banjir, dapatkah Anda mengaksesnya dengan aman?	Ya / Tidak / Saya tidak tahu

No	Tema	Pertanyaan yang didiskusikan	Pilihan Jawaban
43	(Flood): Lifelines	Apakah ada peringatan dini banjir yang disebarluaskan oleh pemerintah, dinas terkait cuaca, atau sumber terpercaya lainnya?	Ya / Tidak / Peringatan dini banjir tidak tersedia di komunitas ini / Saya tidak tahu
44		Jika Anda menerima peringatan dini banjir, apakah Anda dapat menggunakan peringatan tersebut untuk mengambil tindakan perlindungan atau pencegahan? Silakan centang semua opsi yang berlaku.	Ya / Agak / Tidak, peringatan datang terlambat untuk membuatnya berguna / Tidak, peringatan tidak tersedia dalam bahasa saya / Tidak, peringatan membingungkan dan Saya tidak tahu apa yang harus saya lakukan ketika menerimanya / Saya tidak berharap menerima peringatan / Lainnya / Saya tidak tahu
45		Apakah pasokan air bersih Anda terdampak banjir?	Pasokan air tetap berfungsi dan air dapat digunakan dengan aman tanpa pengolahan / Pasokan air sedikit rusak atau terganggu, namun tetap berfungsi atau cepat pulih / Pasokan air rusak sedang atau hanya beroperasi sebagian / Tidak ada pasokan air bersih / Pasokan air mati total / Lainnya / Saya tidak tahu
46		Apakah sistem sanitasi Anda terkena dampak banjir?	Sistem sanitasi tidak rusak dan dapat terus digunakan / Sistem sanitasi terkena dampaknya, namun tetap dapat digunakan / Sistem sanitasi rusak dan hanya dapat digunakan sebagian / Sistem sanitasi gagal/rusak total / Tidak ada sistem sanitasi / Lainnya / Saya tidak tahu
47		Apakah sampah memperburuk banjir?	Tidak, sampah tidak menyebabkan atau memperparah masalah banjir / Ya, sampah menyebabkan atau memperburuk beberapa masalah banjir / Ya, sampah menyebabkan

No	Tema	Pertanyaan yang didiskusikan	Pilihan Jawaban
			masalah banjir yang signifikan / Ya, sampah menyebabkan masalah banjir besar
48	(Flood): Livelihoods	Perubahan iklim meningkatkan risiko banjir dan akan terus berlanjut di masa depan. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju
49		Bagaimana dampak banjir terhadap sekolah-sekolah di komunitas ini?	Sekolah tidak banjir / Sekolah terkena banjir dalam skala kecil sehingga tidak berdampak signifikan terhadap sekolah / Sekolah terkena dampak sedang dan dapat melanjutkan beberapa layanan, namun tidak semua layanan / Sekolah terkena banjir secara signifikan / Sekolah tidak terkena banjir, namun digunakan sebagai tempat perlindungan banjir atau sejenisnya yang mengganggu kegiatan sekolah / Tidak ada sekolah untuk komunitas kami / Saya tidak tahu
50		Jika banjir, apakah anak-anak Anda dapat sampai ke sekolah dengan aman?	Kami bisa sampai di sekolah dengan aman / Kami mungkin mengalami masalah dalam mencapai sekolah / Kami tidak akan bisa sampai ke sekolah / Kami tidak memiliki akses ke sekolah meskipun tidak terjadi banjir / Saya tidak punya anak usia sekolah / Saya tidak tahu
51		Jika sekolah rusak, tidak dapat diakses, digunakan sebagai tempat berlindung/mengungsi, atau tidak tersedia, apa yang akan terjadi pada kegiatan sekolah bagi anak-anak di rumah tangga ini?	Sekolah tidak terkena dampaknya / Ada rencana alternatif yang memungkinkan guru dan anak sekolah bertemu di tempat sementara yang aman / Gangguan apa pun akan berlangsung

No	Tema	Pertanyaan yang didiskusikan	Pilihan Jawaban
			kurang dari seminggu dan tidak akan berdampak signifikan pada kegiatan sekolah / Gangguan akan berlangsung lebih dari seminggu dan akan berdampak signifikan pada kegiatan sekolah / Tidak ada rencana alternatif untuk melanjutkan kegiatan sekolah / Tidak ada sekolah yang tersedia untuk komunitas ini / Saya tidak tahu
52		Jika terjadi banjir, apakah Anda dapat tetap bekerja dan/atau mempertahankan penghasilan?	Ya, pekerjaan atau penghasilan saya tidak terganggu ketika terjadi banjir / Ya, saya mempunyai sumber penghasilan alternatif atau pekerjaan alternatif yang bisa saya lakukan saat banjir / Tidak, pekerjaan dan penghasilan saya terganggu sampai banjir berakhir / Tidak, pekerjaan dan penghasilan saya akan terganggu tanpa batas waktu / Lainnya / Saya tidak tahu
53	(Flood): Narutal Environment	Lingkungan alam yang sehat mengurangi risiko banjir. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju

Appendix 5: Translation of Key Informant Interview Questions in Bahasa Indonesia

No	Tema	Pertanyaan yang didiskusikan	Key Informant (Stakeholders)	Pilihan Jawaban
1	(Generic): Context	Di antara kelompok usia berikut, manakah yang sesuai untuk Anda: 12-17, 18-30, 31-65, atau lebih dari 65 tahun?	• Community leader • Community council member • Community health worker • Local response services • Headteacher • Local business person • Women gender official • Development/planning official • DRR/CC official • Health official • Public works official	12-17 tahun / 18-30 tahun / 31-65 tahun / Lebih dari 65 tahun
2		Apa posisi atau peran Anda?		
3		Berapa tahun Anda mempunyai pengalaman dengan komunitas ini, baik dengan tinggal di sini atau bekerja dengan komunitas ini?		
4		Apa jenis kelamin Anda?		Perempuan / Laki-laki / Lainnya
5	(Generic): Assets	Berapa banyak rumah tangga di komunitas yang memiliki pendapatan atau kekayaan di atas garis kemiskinan nasional?	• Community council member	Hampir semuanya / Sebagian besar / Beberapa, sedikit atau tidak ada sama sekali / Saya tidak tahu
6		Berapa banyak rumah tangga di komunitas yang mempunyai pendapatan atau kekayaan di atas pendapatan median nasional?	• Community council member	Sebagian besar / Sekitar setengah / Sedikit atau tidak ada sama sekali / Saya tidak tahu
7	(Generic): Governance	Bisakah pemerintah daerah mengumpulkan uangnya sendiri?	• Community council member • Development/planning official	Ya, mereka memungut pajak daerah, mengenakan biaya untuk pemberian layanan, dan/atau dapat meminjam uang atau menerbitkan utang / Agak; mereka memiliki sejumlah pendanaan daerah selain pendanaan dari tingkat pemerintahan yang lebih tinggi /

				Tidak, mereka hanya memperoleh pendanaan dari tingkat pemerintahan yang lebih tinggi / Lainnya / Saya tidak tahu
8		Apakah pemerintah daerah mengelola keuangannya secara transparan dan akuntabel?	• Community council member • Development/planning official	Ya, keuangan pemerintah daerah dikelola secara transparan dan pengambil keputusan bertanggung jawab kepada komunitas / Agak; keuangan pemerintah daerah sebagian besar transparan dan pengambil keputusan sebagian besar akuntabel / Tidak, keuangan pemerintah daerah tidak transparan dan/atau pengambil keputusan tidak bertanggung jawab kepada komunitas / Lainnya / Saya tidak tahu
9		Siapa saja di komunitas yang terlibat dalam tanggap darurat (misalnya staf yang digaji, relawan)?	• DRR/CC official • Local response services	
10		Seberapa baik kebutuhan personel tanggap darurat bencana saat ini dipenuhi melalui pelatihan, sumber daya, dan dukungan lainnya?	• DRR/CC official • Local response services	Kebutuhan mereka terpenuhi dengan baik / Kebutuhan mereka sedikit banyak terpenuhi / Kebutuhan mereka tidak terpenuhi sama sekali
11		Manajer risiko secara aktif merencanakan bagaimana kebutuhan personel tanggap darurat bencana di	• DRR/CC official • Local response services	Sangat setuju / Setuju / Tidak punya pendapat / Tidak setuju / Sangat tidak setuju

		masa depan akan berubah akibat perubahan iklim. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?		
12	(Generic): Lifelines	Apakah pasokan bahan bakar tetap berkelanjutan selama kejadian ekstrem?	• Community council member • Community leader	Ya, komunitas telah sepenuhnya melindungi sumber pasokan bahan bakar / Akses terhadap bahan bakar sedikit terkena dampaknya, namun komunitas dapat melanjutkan kehidupan sehari-hari dengan gangguan yang terbatas / Akses bahan bakar sangat terkena dampaknya, sehingga menyebabkan gangguan selama beberapa hari / Tidak, pasokan bahan bakar tidak mencukupi dan/atau sangat tidak dapat diandalkan bahkan dalam kondisi normal / Lainnya / Saya tidak tahu
13		Apakah sistem pembangkit energi tetap beroperasi selama dan setelah kejadian ekstrem?	• Community council member • Community leader	Ya, sistem pembangkit energi tetap beroperasi / Sistem pembangkit energi sedikit terkena dampaknya, namun mampu tetap beroperasi dengan gangguan yang terbatas / Sistem pembangkit energi sangat terkena dampaknya, sehingga menyebabkan gangguan selama beberapa hari / Sistem pembangkit

				energi sangat tidak dapat diandalkan bahkan dalam kondisi normal / Lainnya / Saya tidak tahu
14		Apakah sistem energi siap menghadapi kejadian yang lebih ekstrem di masa depan?	• Community council member • Community leader	Ya / Mungkin / Tidak / Saya tidak tahu
15		Akankah komunitas tetap memiliki aksesibilitas, baik akses dan layanan darurat, maupun kelancaran fungsi pekerjaan, akses ke pasar, dan pemenuhan kebutuhan sehari-hari selama kejadian ekstrem?	• Community council member • Community leader • Public works official	Ya, semua wilayah komunitas tetap dapat diakses / Semua wilayah komunitas tetap dapat diakses untuk akses dan layanan darurat, namun di beberapa wilayah fungsi/kegiatan sehari-hari mungkin terganggu selama beberapa hari / Sebagian besar wilayah komunitas masih dapat diakses untuk akses dan layanan darurat, namun peralatan/kendaraan khusus mungkin diperlukan (perahu, kendaraan 4x4, dll.) / Jalur transportasi komunitas terkena dampak serius selama dan setelah bencana, yang mengakibatkan dampak serius terhadap kehidupan, kesehatan, atau ekonomi / Tidak ada sistem transportasi yang berfungsi / Saya tidak tahu
16		Dapatkah pengguna sistem transportasi umum menggunakan sistem transportasi	• Community council member • Community leader	Pengguna dapat menggunakan sistem transportasi umum dengan

		umum dengan aman dalam cuaca apa pun dan apakah sistem transportasi umum akan terus berjalan sesuai jadwal dan tidak membuat pengguna terlantar?	• Public works official	aman dalam cuaca apa pun / Pengguna dapat menggunakan sistem transportasi umum dengan aman di sebagian besar cuaca, namun saat terjadi peristiwa ekstrem akan terjadi gangguan dan/atau pengendara mungkin terkena cuaca berbahaya untuk sementara waktu. / Sistem transportasi umum menjadi sangat terganggu, sehingga membuat pengguna terpapar cuaca berbahaya dan/atau pengguna yang terdampar / Tidak ada sistem transportasi umum / Saya tidak tahu
17		Sistem komunikasi apa yang dapat diakses oleh anggota komunitas? Silakan centang semua opsi yang berlaku.	• Community council member • Community leader • DRR/CC official • Local response services	Telepon selular / Telepon rumah/kantor (non-seluler) / Internet / Televisi / Radio / Tetangga ke Tetangga / Radio 2 arah / Lainnya / Tidak ada sistem komunikasi / Saya tidak tahu
18		Apakah sistem komunikasi tersebut dapat diandalkan, termasuk selama dan setelah kejadian ekstrem?	• Community council member • Community leader • DRR/CC official • Local response services	Ya, sistem komunikasi sangat andal / Sistem komunikasi secara umum tetap berfungsi atau pulih dengan cepat / Sistem komunikasi hanya cukup dapat diandalkan / Sistem komunikasi sangat tidak dapat diandalkan / Tidak ada

				sistem komunikasi yang berfungsi / Saya tidak tahu
19		Apakah ada anggaran tahunan khusus untuk pemeliharaan infrastruktur publik?	• Community council member • Development/planning official	Ya / Tidak / Saya tidak tahu
20		Apakah anggaran cukup untuk memenuhi kebutuhan pemeliharaan?	• Community council member • Development/planning official	Ya, infrastruktur terpelihara dengan baik / Tidak, ada backlog pemeliharaan dan/atau kerusakan infrastruktur saat kejadian ekstrem / Saya tidak tahu
21		Apakah infrastruktur publik di komunitas ini dipelihara secara rutin dan dengan standar yang sama seperti infrastruktur di komunitas sekitar?	• Community council member • Development/planning official	Ya / Tidak / Saya tidak tahu
22	(Generic): Livelihoods	Berapa persentase anak perempuan di komunitas yang bersekolah secara rutin?	• Headteacher	
23		Berapa persentase anak laki-laki di komunitas yang bersekolah secara rutin?	• Headteacher	
24	(Generic): Life and Health	Berapa persentase orang dewasa di komunitas yang telah menerima pelatihan pertolongan pertama dalam 5 tahun terakhir?	• Health official • Local response services	
25	(Generic): Natural Environment	Apakah sungai dan tepi sungai secara proaktif dilindungi dengan vegetasi, infrastruktur hijau/ramah lingkungan, dan/atau rekayasa struktur penguat dan tanggul?	• Community council member	Ya / Sebagian besar / Sebagian besar tidak / Tidak / Tidak relevan untuk komunitas ini / Saya tidak tahu
26		Apakah lahan basah alami dilindungi dari kegiatan budidaya atau	• Community council member	Ya / Sebagian besar / Sebagian besar tidak / Tidak / Tidak relevan

		pembangunan dan ditingkatkan dengan rekayasa atau pengelolaan lahan basah?		untuk komunitas ini / Saya tidak tahu
27		Apakah komunitas pesisir terlindungi dari gelombang badai dengan adanya bukit pasir, lahan basah, hutan bakau yang lebat, terumbu karang lepas pantai, atau melalui tanggul, tembok penahan, atau struktur bangunan yang dibangun dengan baik dan terawat?	• Community council member	Ya / Sebagian besar / Sebagian besar tidak / Tidak / Tidak relevan untuk komunitas ini / Saya tidak tahu
28		Apakah perubahan iklim (dan kenaikan permukaan air laut jika relevan) dipertimbangkan secara aktif dalam pengelolaan area batas daratan-perairan?	• Community council member	Ya / Sebagian besar / Sebagian besar tidak / Tidak / Tidak relevan untuk komunitas ini / Saya tidak tahu
29	(Flood): Governance	Apakah peta risiko banjir telah dikembangkan untuk komunitas ini dalam lima tahun terakhir?	• Community council member • Community leader • DRR/CC official • Development/planning official	Ya / Tidak / Saya tidak tahu
30		Apakah pemetaan risiko banjir mencakup komponen kerentanan?	• Community council member • Community leader • DRR/CC official • Development/planning official	Ya / Tidak / Saya tidak tahu
31		Apakah peta risiko banjir digunakan dalam perencanaan dan tindakan manajemen risiko?	• Community council member • Community leader • DRR/CC official • Development/planning official	Ya / Tidak / Saya tidak tahu
32		Apakah ada rencana pengurangan risiko banjir untuk komunitas ini?	• DRR/CC official • Local response services	Ya / Tidak / Saya tidak tahu

33		Apakah rencana tersebut mencakup Prospective Risk Reduction dan korektif?	• DRR/CC official • Local response services	Ya / Tidak / Saya tidak tahu
34		Apakah rencana pengurangan risiko banjir ditinjau dan diperbarui secara berkala?	• DRR/CC official • Local response services	Ya / Tidak / Saya tidak tahu
35		Apakah ada sistem untuk mengumpulkan data mengenai dampak langsung dan tidak langsung dari banjir pada komunitas ini?	• Community council member • Development/planning official	Ya / Tidak / Saya tidak tahu
36		Apakah data ini banyak digunakan oleh pemangku kepentingan dan dinas utama untuk meningkatkan manajemen risiko banjir?	• Community council member • Development/planning official	Ya / Tidak / Saya tidak tahu
37		Apakah proyeksi iklim masa depan dan data layanan iklim banyak digunakan dalam pengambilan keputusan?	• Community council member • Development/planning official	Ya / Tidak / Saya tidak tahu
38		Apakah ada sumber pendanaan untuk mendukung pemulihan komunitas? Silakan centang semua opsi yang berlaku.	• Community council member • DRR/CC official • Development/planning official	Ya, ada anggaran pemerintah khusus untuk pemulihan banjir / Memang benar, terdapat pendanaan pemulihan banjir yang dapat diandalkan dari sumber-sumber non-pemerintah / Di masa lalu, komunitas kami menerima dana, namun dana tersebut hanya menutupi sebagian kebutuhan kami / Tidak, tidak ada anggaran khusus untuk pemulihan banjir / Lainnya / Saya tidak tahu

39		Apakah pendanaan yang tersedia mudah diakses dan diterima dengan cepat sehingga dapat digunakan?	• Community council member • DRR/CC official • Development/planning official	Pendanaan pemulihan mudah diakses dan tiba dengan cepat / Pendanaan sulit diakses tetapi tiba dengan cepat / Pendanaan mudah diakses tetapi lambat sampainya / Pendanaan tidak mungkin diakses atau tiba dengan terlambat sehingga tidak dapat digunakan / Tidak ada dana yang tersedia / Lainnya / Saya tidak tahu
40	(Flood): Life and Health	Apakah ada rencana untuk keberlangsungan layanan kesehatan saat banjir? Silakan centang semua opsi yang berlaku.	• Community council member • Community health worker • Health official	Ada rencana kontijensi untuk manajemen staf / Ada keberlangsungan rencana operasional / Ada keberlangsungan rencana perawatan untuk pasien / Ada daya cadangan untuk seluruh fasilitas / Terdapat daya cadangan yang terbatas untuk layanan-layanan penting, namun sebagian besar bangunan tidak akan mempunyai aliran listrik / Tidak ada daya cadangan / Tidak ada rencana untuk keberlangsungan layanan / Lainnya / Saya tidak tahu
41		Akankah fasilitas kesehatan tetap dapat diakses dengan aman ketika terjadi banjir?	• Community council member • Community health worker • Health official	Fasilitas layanan kesehatan akan tetap dapat diakses oleh semua orang, termasuk mereka yang menggunakan transportasi umum atau berjalan kaki / Fasilitas layanan kesehatan akan sulit diakses secara aman oleh

				sebagian kecil komunitas / Fasilitas layanan kesehatan akan sulit atau berbahaya untuk diakses oleh sebagian besar komunitas / Tidak ada fasilitas kesehatan yang tersedia untuk komunitas ini / Lainnya / Saya tidak tahu
42		Apakah rencana tanggap darurat banjir mencakup pencegahan kekerasan dalam keluarga?	• DRR/CC official • Local response services • Women/gender official	Ya / Tidak / Saya tidak tahu
43		Sejauh mana personel tanggap darurat bencana telah dilatih dalam perlindungan kekerasan dalam keluarga?	• DRR/CC official • Local response services • Women/gender official	Seluruh atau sebagian besar personel tanggap darurat bencana telah menerima pelatihan / Beberapa personel tanggap darurat bencana telah mendapatkan pelatihan / Hanya sedikit personel tanggap darurat bencana telah menerima pelatihan / Sangat sedikit atau bahkan tidak ada personel tanggap darurat bencana yang menerima pelatihan
44	(Flood): Lifelines	Apakah ada anggaran pengurangan risiko khusus dari mekanisme pendanaan lain yang secara aktif digunakan untuk melaksanakan prioritas pengurangan risiko banjir? Silakan centang semua opsi yang berlaku.	• Community council member • DRR/CC official • Development/planning official	Ya, ada anggaran tahunan pemerintah yang khusus / Ya, ada pendanaan khusus dari sumber non-pemerintah / Ada pendanaan, tapi tidak teratur atau tidak dapat diprediksi / Tidak ada anggaran pengurangan risiko / Bukan dari salah satu di atas / Saya tidak tahu
45		Apakah investasi pengurangan risiko banjir memberikan manfaat yang adil	• Community council member • DRR/CC official	Ya / Investasi agak tidak adil / Investasi sangat tidak adil / Tidak

		bagi seluruh penduduk, baik dalam komunitas ini maupun dibandingkan dengan komunitas lain?	• Development/planning official	ada anggaran pengurangan risiko / Lainnya / Saya tidak tahu
46		Apakah ada rencana tanggap darurat banjir untuk komunitas ini?	• DRR/CC official • Local response service	Ya / Tidak / Saya tidak tahu
47		Apakah rencana tanggap darurat banjir mempunyai rencana yang ditargetkan untuk memenuhi kebutuhan spesifik semua kelompok social termasuk semua kelompok rentan?	• DRR/CC official • Local response service	Ya / Tidak / Saya tidak tahu
48		Apakah rencana tersebut diuji dan diperbarui secara berkala dengan melibatkan semua organisasi yang berpartisipasi?	• DRR/CC official • Local response service	Ya / Tidak / Saya tidak tahu
49		Kira-kira berapa persentase pelaku usaha atau pemberi kerja di komunitas yang mempunyai rencana untuk meminimalkan kerugian dan tetap menjalankan usahanya jika terjadi banjir?	• Local business person	Lebih dari 80% / 50% - 80% / 20% - 50% / Kurang dari 20% / Saya tidak tahu
50	(Flood): Livelihoods	Sumber pembiayaan apa yang dimiliki dunia usaha ketika terjadi banjir? Silakan centang semua opsi yang berlaku	• Local business person	Asuransi banjir / Asuransi keberlangsungan usaha / Jalur kredit terbuka atau pinjaman yang telah disetujui sebelumnya dengan lembaga keuangan / Tabungan darurat / Lainnya / Bukan dari salah satu di atas / Saya tidak tahu

Appendix 6: Translation of Focus Group Discussion Questions in Bahasa Indonesia

No	Tema	Pertanyaan yang didiskusikan	Peserta FGD (Stakeholders)	Catatan
1	(Generic) : Governance	Siapa kelompok social utama, termasuk kelompok rentan dan terpinggirkan, dalam komunitas ini?	- Local government committee - Community council - Council of elders - Local NGO/CBO - Religious council - Society - Womens group - Youth group	Community council: masyarakat yang mempunyai aktivitas tersebut terabaikan saat bencana, sedangkan masyarakat rentan seperti masyarakat miskin memperoleh bantuan.
2		Berapa banyak dari kelompok social tersebut, termasuk kelompok rentan dan terpinggirkan, yang mempunyai atau memberi masukan aktif dalam pengambilan keputusan mengenai manajemen risiko bencana?	- Local government committee - Community council - Council of elders - Local NGO/CBO - Religious council - Society - Womens group - Youth group	- DP3KB: keterwakilan perempuan sedikit dalam musrenbang dan biasanya malam hari. - BAPPERIDA: anak-anak dan ibu hamil sulit diajak rapat. Kelompok miskin, petani, dll sulit berpikir keras dalam forum dan tidak aktif dalam manajemen risiko bencana. - BMKG: kelompok tani dan migran sulit diajak diskusi karena merasa wilayah kerja mereka bukan tempat tinggal mereka. Tidak memiliki sense of belongings.
3		Apakah ada proses perencanaan penggunaan lahan yang jelas dan transparan?	- Local government committee - Community council - Community planning committee - Community productive users group	BAPPERIDA: Perda Kabupaten Pekalongan 2020 (RTRW) sudah dipublikasi, sosialisasi sudah dilakukan sampai kecamatan oleh DPUPR, apabila ada perubahan lahan, notaris menyampaikan ke

No	Tema	Pertanyaan yang didiskusikan	Peserta FGD (Stakeholders)	Catatan
			Local NGO/CBO	individu. Dapat diakses melalui aisitaru.pekalongankab.go.id DKPP: karena langsung berkaitan dengan lahan jadi DKPP tahu jika ada alih fungsi dan akan disampaikan ke DPUPR.
4		Apakah Anda setuju bahwa perencanaan penggunaan lahan didasarkan pada peta bahaya dan risiko?	- Local government committee - Community council - Community planning committee - Community productive users group - Local NGO/CBO	
5		Apakah Anda setuju bahwa perencanaan penggunaan lahan didasarkan pada proyeksi perubahan iklim dan bagaimana perubahan iklim dapat mengubah lanskap risiko?	- Local government committee - Community council - Community planning committee - Community productive users group - Local NGO/CBO	- Lurah: Tidak perlu ditangani, dibiarkan saja. Jeruksari dijadikan pembelajaran untuk seluruh dunia, lembaga donor nasional dan internasional. Pemerintah tidak mampu menyelesaikan masalah tersebut. Masyarakat perlu beradaptasi dan bersahabat dengan air. - BMKG: ada warning stripe untuk mengidentifikasi peningkatan suhu. - BAPPERIDA: sudah ada direview RTRW, sudah ada RAD API, dan di dalam RAD API sudah ada kajian proyeksi hingga 20 tahun.

No	Tema	Pertanyaan yang didiskusikan	Peserta FGD (Stakeholders)	Catatan
6		Apakah sumber daya alam dipelihara sedemikian rupa sehingga bermanfaat bagi seluruh komunitas? silakan centang semua opsi yang berlaku.	• Local government committee • Community council • Community planning committee • Community productive users group • Council of elders • Local NGO/CBO • Society • Womens group • Youth Group	• Local government committee: kata "tanpa masukan dari komunitas" diganti dengan "adanya masukan dari pemerintah/komunitas" • Lurah: No.1 yang baik dan berkelanjutan perlu. No.2 hanya menguntungkan 1 komunitas. Air bersih tidak ada, tumbuhan tidak ada. Opsi 1-3 perlu dikendalikan negara sehingga individu perlu ada pengorbanan. Contoh ingin membuat tanggul, tetapi ada hak milik (tanah) sehingga pembangunan tanggul terhalang adanya tanah tersebut. • RW: tambak dikelola pribadi.
7		Apakah sumber daya alam dalam kondisi baik dan dikelola secara berkelanjutan?	• Local government committee • Community council • Community planning committee • Community productive users group • Council of elders • Local NGO/CBO • Society • Womens group • Youth Group	• Youth group: sumber daya alam sama dengan tambak. • Local government committee: kondisi saat ini tidak baik-baik saja. Berkelanjutan apabila menguntungkan secara ekonomi atau bekerja di sektor alam (petani dan tambak), tidak berkelanjutan apabila bekerja di sektor nonalam (limbah batik dibuang sembarangan ke alam). • Womens group: setuju. Udara panas karena tidak ada pohon. Saluran air setelah pembendungan tersumbat

No	Tema	Pertanyaan yang didiskusikan	Peserta FGD (Stakeholders)	Catatan
				penuh sampah, kotor, penuh nyamuk, tidak mengalir karena dibendung sehingga tidak sehat. Hidup di Jeruksari terpaksa, apabila ada opsi lain akan pindah. Dulu ada sawah namun tidak bisa digunakan (terendam) dan tambak juga banyak yang merugi.
8		Apakah pemerintah mengetahui perkiraan perubahan iklim di masa depan?	Local government committee	- BMKG: Pemerintah sudah meratifikasi sehingga otomatis atas ke bawah sama. Dari segi perubahan iklim saat ini, historis, dan global sudah terjadi perubahan iklim dibandingkan jaman dahulu. Ada lembaga sendiri yang menganalisis (BPP). Ada proyeksi suhu, iklim, dan cuaca hingga 2049 namun tidak seakurat yang dulu karena adanya distorsi dari perubahan iklim. - DKP: ada prediksi suhu, iklim, dan cuaca per hari.
9		Apakah pemerintah mempunyai rencana untuk beradaptasi terhadap perubahan iklim?	Local government committee	Local government committee: sudah ada RAD API
10		Apakah pemerintah mempunyai anggaran untuk menindaklanjuti rencana adaptasi perubahan iklim tersebut?	Local government committee	Local government committee: belum ter-tagging dalam rencana anggaran daerah.

No	Tema	Pertanyaan yang didiskusikan	Peserta FGD (Stakeholders)	Catatan
11		Apakah pemerintah meninjau rencana investasi modal untuk memastikan bahwa perubahan iklim telah ditangani secara memuaskan?	Local government committee	
12	(Flood) Governance	Terdapat rencana pengurangan risiko banjir yang tepat untuk komunitas ini. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	- Local government committee - Community council - Community planning committee - Community productive users group - Council of elders - Local NGO/CBO - Savings group - Womens group - Youth Group	- Local government committee: Kalau rencana sudah, DED, FS, amdal namun tinggal menunggu anggaran. - DPUPR: anggaran pompa jeruksari termasuk ke dalam bentuk adaptasi.
13		Rencana pengurangan risiko banjir mencakup Prospective Risk Reduction dan korektif. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	- Local government committee - Community council - Community planning committee - Community productive users group - Council of elders - Local NGO/CBO - Savings group - Womens group - Youth Group	BAPPERIDA: yang merencanakan adalah BBWS

No	Tema	Pertanyaan yang didiskusikan	Peserta FGD (Stakeholders)	Catatan
14		Rencana pengurangan risiko banjir ditinjau dan diperbarui secara berkala. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	- Local government committee - Community council - Community planning committee - Community productive users group - Council of elders - Local NGO/CBO - Savings group - Womens group - Youth Group	- BAPPERIDA: rencana sudah dari dua tahun yang lalu sekarang akan direview. Apabila mau dilaksanakan akan direview (pengembangan alat, dana, dll). - RW: peristiwa banjir di Jeruksari sudah bencana sehingga perlu penanganan serius/besar dari pemerintah pusat. - Womens group: Pompa dan peninggian jalan saja, tidak ada inovasi lain.
15		Siapa saja pemangku kepentingan kunci yang harus dilibatkan dalam perencanaan dan tindakan manajemen risiko banjir untuk komunitas ini?	- Local government committee - Community council - Community planning committee - Community productive users group - Council of elders - Local NGO/CBO - Religious council - Savings group - Society - Womens group - Youth Group	
16		Berapa banyak dari pemangku kepentingan kunci yang terlibat secara aktif dalam perencanaan	- Local government committee - Community council	

No	Tema	Pertanyaan yang didiskusikan	Peserta FGD (Stakeholders)	Catatan
		dan tindakan manajemen risiko banjir?	• Community planning committee • Community productive users group • Council of elders • Local NGO/CBO • Religious council • Savings group • Society • Womens group • Youth Group	
17	(Generic) : Life and Health	Apakah layanan kesehatan tersedia dalam jangkauan fisik yang aman bagi komunitas ini?	• Civil protection group • Community council • Council of elders • Society • Womens group	
18		Beberapa kelompok komunitas mungkin mengalami hambatan dalam mengakses layanan kesehatan karena kondisi keuangan, social, budaya atau fisik mereka. Apakah sistem layanan kesehatan memenuhi kebutuhan semua kelompok komunitas, terutama kelompok rentan atau terpinggirkan, untuk menjamin akses?	• Civil protection group • Community council • Council of elders • Society • Womens group	• Council of elders: tidak dipenuhi kesehatannya karena KIS ditarik, dari pusat tidak aktif dan kurang informasi terkait pengaktifan BPJS.
19	(Flood) : Life and Health	Untuk mendukung tanggap darurat banjir, evakuasi dan Pencarian &	• Local government committee • Community council	• Local government committee: terdapat tosa.

No	Tema	Pertanyaan yang didiskusikan	Peserta FGD (Stakeholders)	Catatan
		Penyelamatan, manakah dari hal-hal berikut yang dimiliki oleh komunitas? Pilih semua yang berlaku. Silakan centang semua opsi yang berlaku.	• Community planning committee • Council of elders • Local NGO/CBO • Society • Womens group • Youth Group	
20		Apakah Anda yakin bahwa peralatan darurat banjir berada dalam kondisi yang baik, diuji secara rutin, dan akan berfungsi dengan baik?	• Local government committee • Community council • Community planning committee • Council of elders • Local NGO/CBO • Society • Womens group • Youth Group	• DP3KB: alat kesehatan setiap tahun dikalibrasi. Yang rentan yaitu kendaraan (ambulance) yang korosif terkena air laut, tetapi untuk penggantian unit cepat. • DKPP: perawatan terbatas dalam jangka waktu per tahun. • RW: peralatan diberikan (dibina) oleh BINTARI, namun perawatan tidak ada sama sekali apalagi diuji rutin, contohnya jalur evakuasi yang lama kelamaan hilang. • LPMD: tidak tahu, maka memilih tidak.
21		Apakah semua kelompok di komunitas mampu mengakses infrastruktur dan peralatan darurat?	• Local government committee • Community council • Community planning committee • Council of elders • Local NGO/CBO • Society	• DKPP: struktur jalan Jeruksari ada jalan besar yang terletak di tengah-tengah desa sehingga evakuasi mudah dilakukan. • BAPPERIDA: ada Tagana yang menggerakkan dan memanfaatkan alat darurat.

No	Tema	Pertanyaan yang didiskusikan	Peserta FGD (Stakeholders)	Catatan
			• Womens group • Youth Group	• DPUPR: ada penjaga pompa dari masyarakat setempat dan listrik-solar dari DPUPR.
22	(Flood) : Assets	Apakah komunitas dan aset-aset komunalnya dilindungi melalui kombinasi tindakan perlindungan banjir struktural dan non-struktural?	• Local government committee • Community council • Community planning committee • Community productive users group • Local NGO/CBO • Society	• DKPP: dapat mengungsi di luar Jeruksari seperti di rumah keluarganya. Rumah yang sudah diuruk lingkungan sekitarnya tetap terdampak. • BAPPERIDA: semua kena banjir, perlindungan sudah ada. • RW: banyak barang-barang di pertanyaan peralatan untuk keadaan darurat yang sebelumnya tidak dimiliki sehingga hanya menyelamatkan diri seadanya. • KSB: setiap individu melindungi dirinya sendiri, hanya disabilitas yang tidak. Aset sebagian besar terendam. • Community council: Ketika banjir tidak teratasi (butuh sehari-hari), kebutuhan dan alat-alat tidak terlindungi. Tidak ada alat yang bisa digunakan saat dibutuhkan.
23		Apakah tindakan perlindungan terhadap banjir dapat diandalkan, dipelihara secara rutin, dan tidak menimbulkan risiko baru?	• Local government committee • Community council • Community planning committee	• DP3KB: jalan ditinggikan berdampak ke permukiman sehingga rumah makin pendek, berpengaruh ke kesehatan karena kelembaban tinggi.

No	Tema	Pertanyaan yang didiskusikan	Peserta FGD (Stakeholders)	Catatan
			• Community productive users group • Local NGO/CBO • Society	• Society: ada parapet, namun air tetap meluap walaupun sudah ditambah dengan karung-karung.
24		Apakah perencanaan perlindungan di masa depan secara aktif mempertimbangkan potensi dampak perubahan iklim?	• Local government committee • Community council • Community planning committee • Community productive users group • Local NGO/CBO • Society	
25	(Flood) : Lifelines	Ada rencana tanggap darurat banjir yang tepat untuk komunitas ini. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	• Local government committee • Community council • Community planning committee • Community productive users group • Council of elders • Local NGO/CBO • Savings group • Society • Womens group • Youth Group	• Local government committee: sering mengorbankan daerah lain, terkadang tempat yang aman juga terkena dampak pembangunan sehingga menimbulkan masalah lain. Pompa air kota menyebabkan dampak ke Jeruksari padahal pompa air tersebut bentuk penanganan perubahan iklim di kota.
26		Rencana tanggap darurat banjir mencakup rencana yang ditargetkan untuk memenuhi kebutuhan spesifik semua	• Local government committee • Community council • Community planning committee	

No	Tema	Pertanyaan yang didiskusikan	Peserta FGD (Stakeholders)	Catatan
		kelompok social termasuk semua kelompok rentan. Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	• Community productive users group • Council of elders • Local NGO/CBO • Savings group • Society • Womens group • Youth Group	
27		Rencananya diuji dan diperbarui secara berkala dengan melibatkan semua organisasi yang berpartisipasi? Apakah Anda sangat setuju, setuju, tidak punya pendapat, tidak setuju, atau sangat tidak setuju dengan pernyataan tersebut?	• Local government committee • Community council • Community planning committee • Community productive users group • Council of elders • Local NGO/CBO • Savings group • Society • Womens group • Youth Group	
28		Apakah anggota komunitas menerima peringatan dini banjir dari pemerintah, dinas terkait cuaca atau sumber terpercaya lainnya?	• Local government committee • Community council • Community planning committee • Community productive users group • Council of elders • Local NGO/CBO	• BMKG: peringatan banjir dari Pusdataru. BMKG menggunakan whatsapp group dalam menyebarkan informasi ke OPD terkait kemudian ke komunitas. • DKP: informasi ombak besar dan cuaca buruk sampai ke komunitas. • BAPPERIDA: kendala informasi karena yang memegang hp

No	Tema	Pertanyaan yang didiskusikan	Peserta FGD (Stakeholders)	Catatan
			• Religious council • Society • Womens group • Youth Group	anaknya, tidak ada kuota internet, ada yang tidak paham dalam membaca informasi.
29		Jika anggota komunitas menerima peringatan dini banjir, apakah mereka dapat menggunakan peringatan tersebut untuk mengambil tindakan perlindungan atau pencegahan? Silakan centang semua opsi yang berlaku.	• Local government committee • Community council • Community planning committee • Community productive users group • Council of elders • Local NGO/CBO • Religious council • Society • Womens group • Youth Group	
30	(Flood) : Livelihoods	Apakah prakiraan banjir dibuat untuk wilayah ini?	• Local government committee • Community council • Community productive users group	• BMKG: prakiraan banjir ada untuk PU pusat dan BMKG pusat yang disebar ke UPT Jawa Tengah per 10 hari dan sebulan, tidak disebarluaskan karena tumpang tindih dengan kewenangan Pusdataru (banjir).
31		Apakah informasi prakiraan cuaca disampaikan kepada pihak berwenang secara tepat waktu untuk disebarluaskan dan memberikan peringatan darurat?	• Local government committee • Community council • Community productive users group	• BMKG: dari BMKG peringatan cuaca maksimal 1 jam sebelum kejadian dan minimal 3 jam. Banjir bukan kewenangan BMKG lagi, dapat diakses melalui cuaca.bmkg.go.id hingga tingkat desa, prakiraan

No	Tema	Pertanyaan yang didiskusikan	Peserta FGD (Stakeholders)	Catatan
				tersedia per jam, tetapi jika ingin meminta data historis harus meminta ke instansi.
32		Apakah informasi prakiraan dikomunikasikan dengan cara yang dapat dipahami dan digunakan oleh pihak berwenang?	• Local government committee • Community council • Community productive users group	• BMKG: pihak berwenang yang mendapat peringatan dini adalah BPBD dan PSDA. • BAPPERIDA: secara umum dapat dipahami. • PSDA: ada level awas, siaga, dan waspada. • Community productive users: prakiraan cuaca tidak diinformasikan dengan jelas, misalnya di jam sekian ada angin ribut sebelah utara, tetapi utaranya tidak dirincikan tepatnya dimana.
33	(Flood) : Natural Environment	Apakah lahan miring (dengan kelerengan) dipelihara atau dilindungi sedemikian rupa sehingga mengurangi limpasan air, erosi dan tanah longsor?	• Local government committee • Community council • Community planning committee • Community productive users group • Council of elders • Local NGO/CBO • Society • Womens group • Youth Group	• Community planning committee: karena kawasan pesisir.

No	Tema	Pertanyaan yang didiskusikan	Peserta FGD (Stakeholders)	Catatan
34		Apakah saluran air dan fitur drainase alami lainnya dilestarikan secara aktif, dan dilengkapi dengan area retensi air hujan dan kanal buatan sehingga banjir dapat dicegah bahkan ketika terjadi badai ekstrem?	• Local government committee • Community council • Community planning committee • Community productive users group • Council of elders • Local NGO/CBO • Society • Womens group • Youth Group	• Local government committee: karena belum ada tindak lanjut.
35		Apakah infrastruktur ramah lingkungan dan/atau solusi berbasis alam digunakan secara aktif untuk mengatasi manajemen risiko banjir?	• Local government committee • Community council • Community planning committee • Community productive users group • Council of elders • Local NGO/CBO • Society • Womens group • Youth Group	• Local government committee: ada, namun tidak tahu kebermanfaatannya dan efektivitasnya pada masyarakat.