



Vulnerabilities and Adaptation for Coastal Community in Pekalongan from High Tide: Using Dissagregated Gender Analysis

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Presented in Gender Aquaculture and Fisheries (GAF 8)
At 21-23 November 2022, Kochi-India



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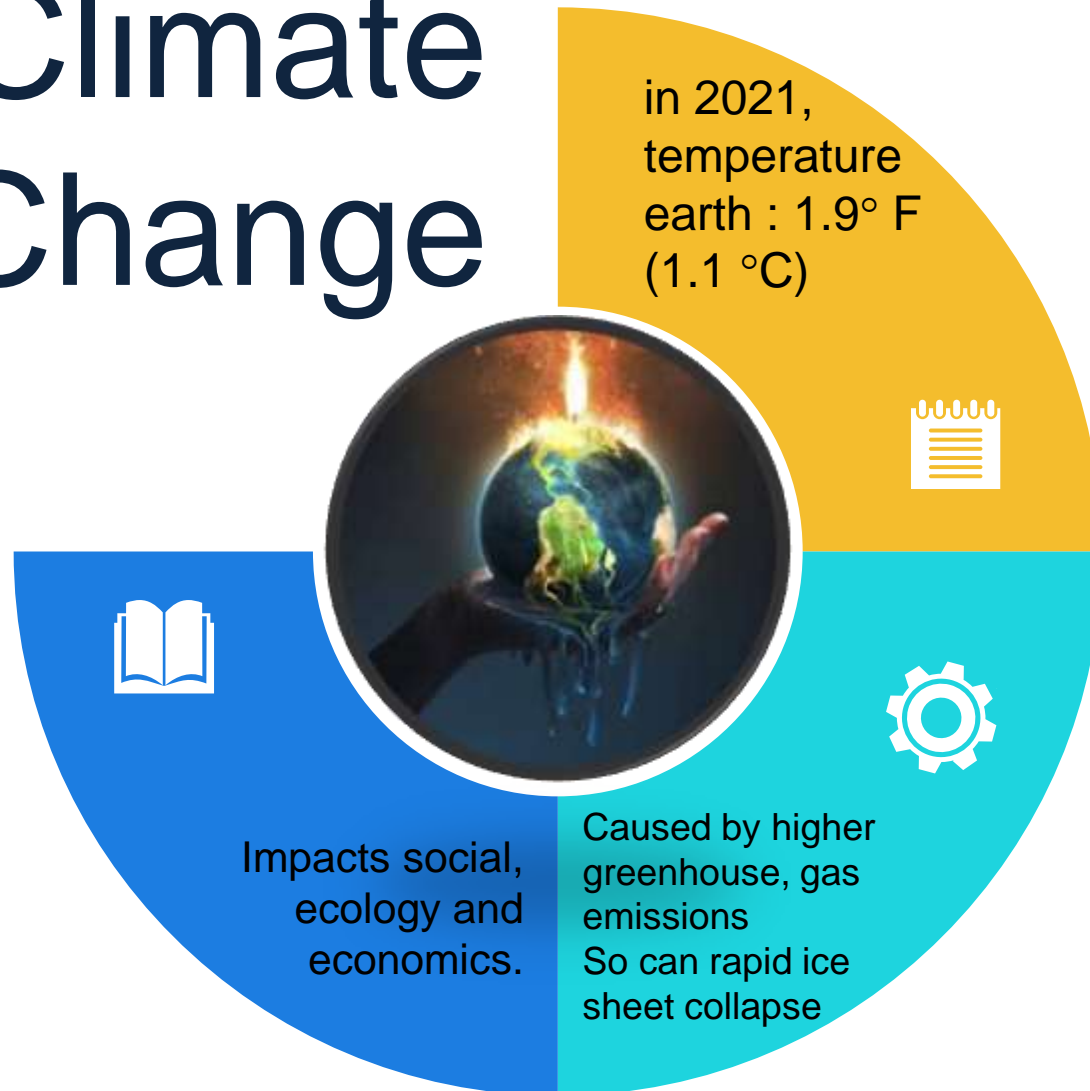
Background





BACKGROUND

Climate Change



Coastal systems are sensitive to **Climate Change**

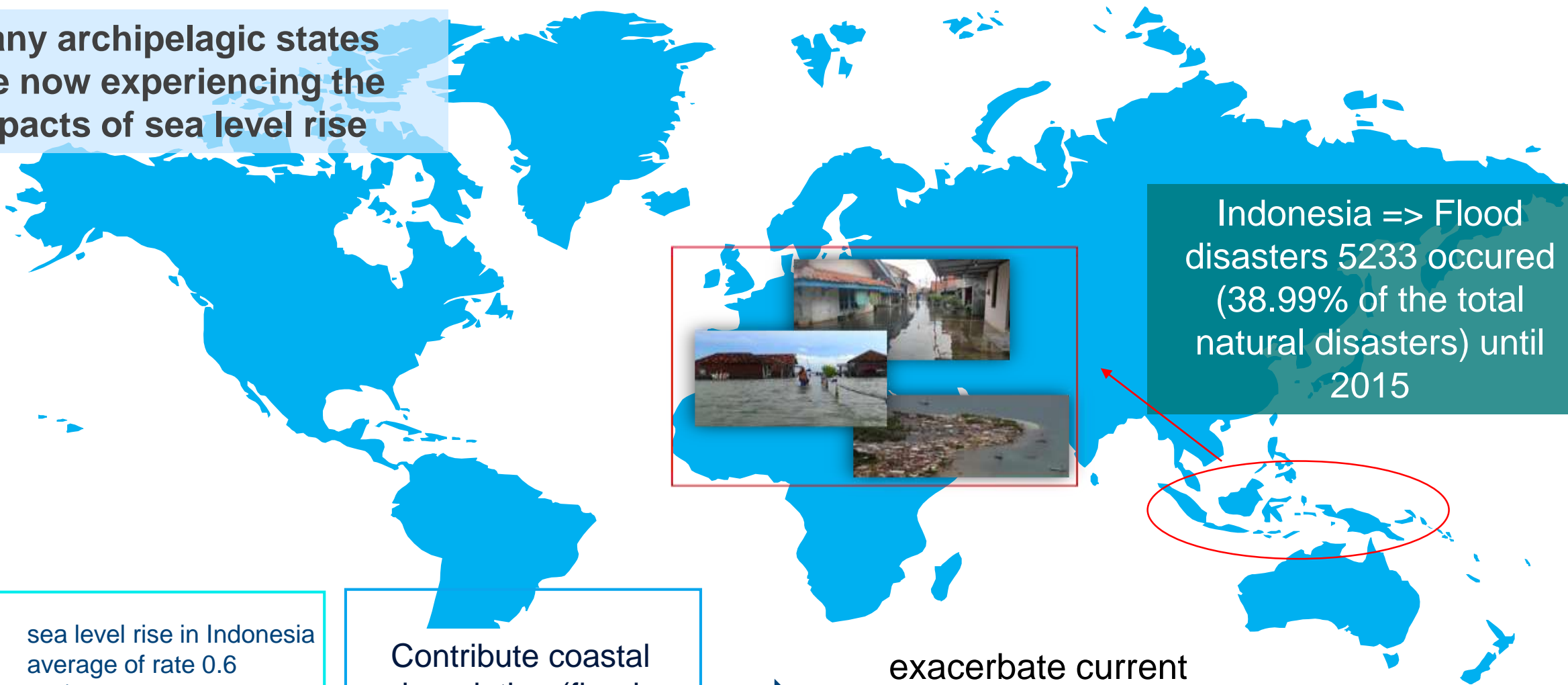
- In 2021, global sea level set a new record high—97 mm (3.8 inches)
- High-tide flooding is now 900% more frequent than it was 50 years ago.



Background



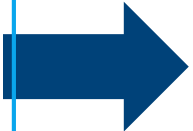
Many archipelagic states are now experiencing the impacts of sea level rise



Indonesia => Flood disasters 5233 occurred (38.99% of the total natural disasters) until 2015

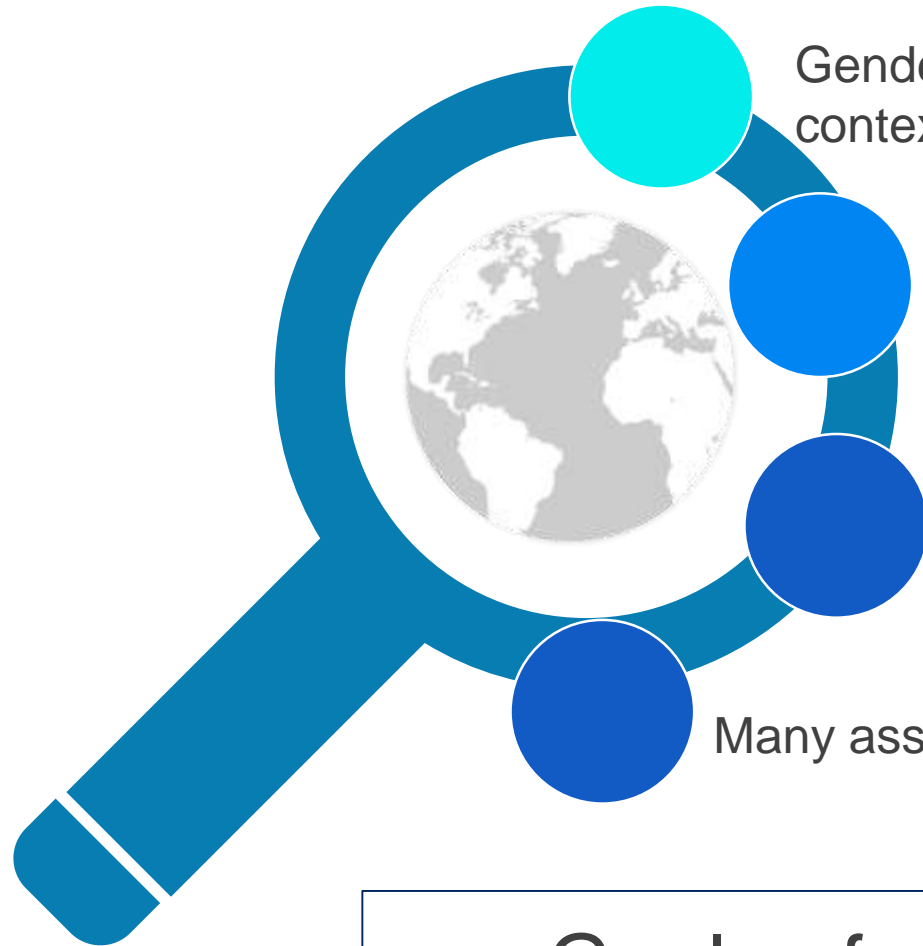
- sea level rise in Indonesia average of rate 0.6 cm/year
- land subsidence average of rate 4 cm/year

Contribute coastal inundation (flood disaster)



exacerbate current community vulnerabilities and societal inequalities also

It is important to explore the response and adaptation of vulnerability communities that have a low ability to adapt



Gender and vulnerability are important issues to address in the context of flooding caused by climate change

which are more noticeable in developing countries

Inequalities and marginalization are critical factors of gender-based differences in vulnerability and to adapt

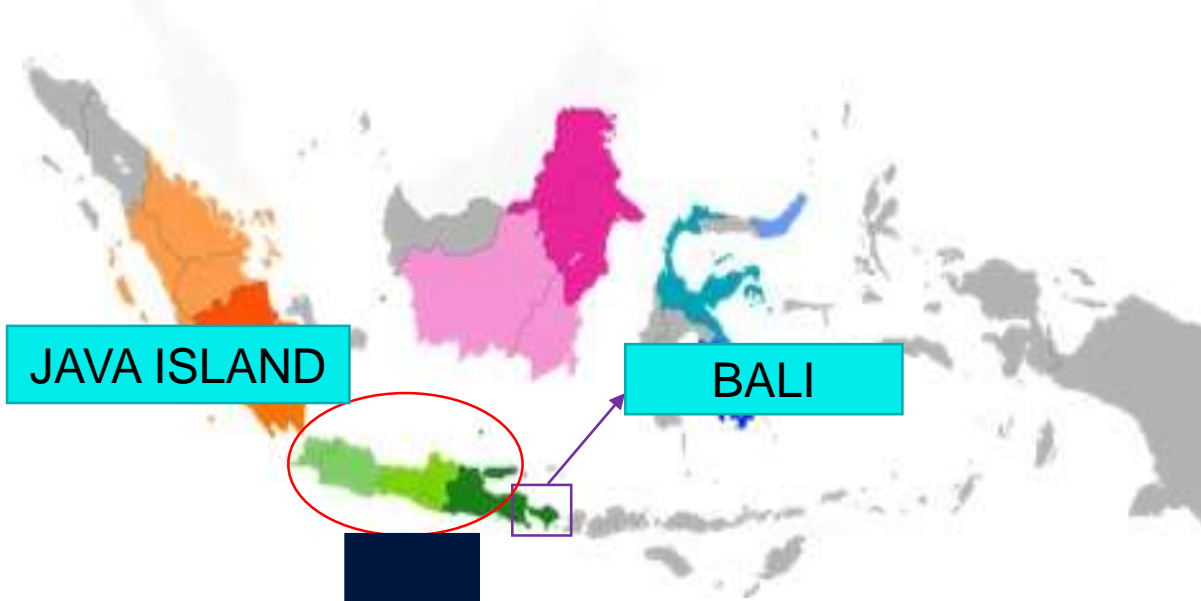
Many assume that the women are most vulnerable

Sources : Anna (2015); .Garai (2015) Cvetkovi'c (2018)

Goals of Research

- To investigate vulnerabilities of Communities the impacts of coastal inundation
- To analyze the role of gender to impacts of coastal inundation
- To investigate adaptation strategies of communities

MAP OF STUDY

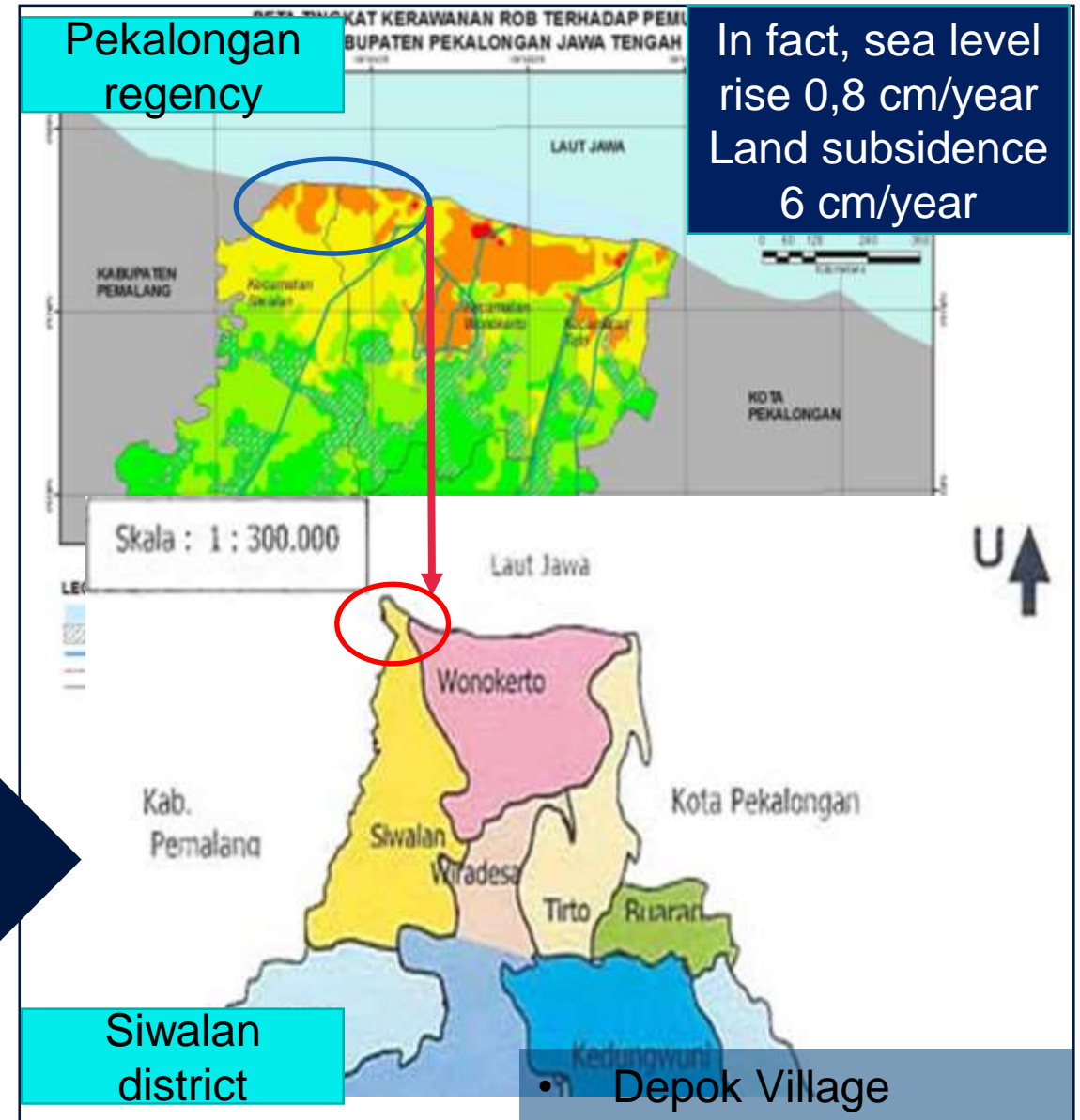


JAVA ISLAND

BALI



Central Java
Province



Pekalongan
regency

In fact, sea level
rise 0,8 cm/year
Land subsidence
6 cm/year

Skala : 1 : 300.000

Siwalan
district

• Depok Village



Materials & Methods



Methods

SAMPLING

Respondents were taken using the accidental sampling method. Total Respondents : 50 person
Informants : 10 person



Analysis Methods

- Descriptive statics
- factor analysis of criteria & descriptive qualitative

Sources : Creswell, 2014



Data Collection Methods

- Observation
- Questionnaire
- Indepth Interview

Responden
Communities affected
by Rob floods in
Siwalan District,
Pekalongan Regency

Indicators

❖ Vulnerabilities

Vulnerability from dimension social, economic, physic, political, human capital, natural and living conditions

❖ The role of Gender

the distribution of power between man and women in a household to coping high tide inundation

❖ Awareness

Individual knowledge in responding to floods

❖ adaptation

Household adaptability in the face of flooding



Results



Vulnerability



Flooding can have a critical impact on communities either it affected them directly or indirectly

Natural

- Degradation the environment
- destroy ecology system
- Losses rice farmland, jasmine plantations, fishponds

Physical

- Damaged roads and other infrastructure
- Damaging home buildings and home furnishings.

Political

Political tool without bringing adaptation efforts for the long term

Human Capital & Social

- Health risk
- Disrupts daily activities
- Hindering children education

Economy

- disrupts economic activities
- long-term impacts included disrupted cash flow
- income loss
- Losses livelihood

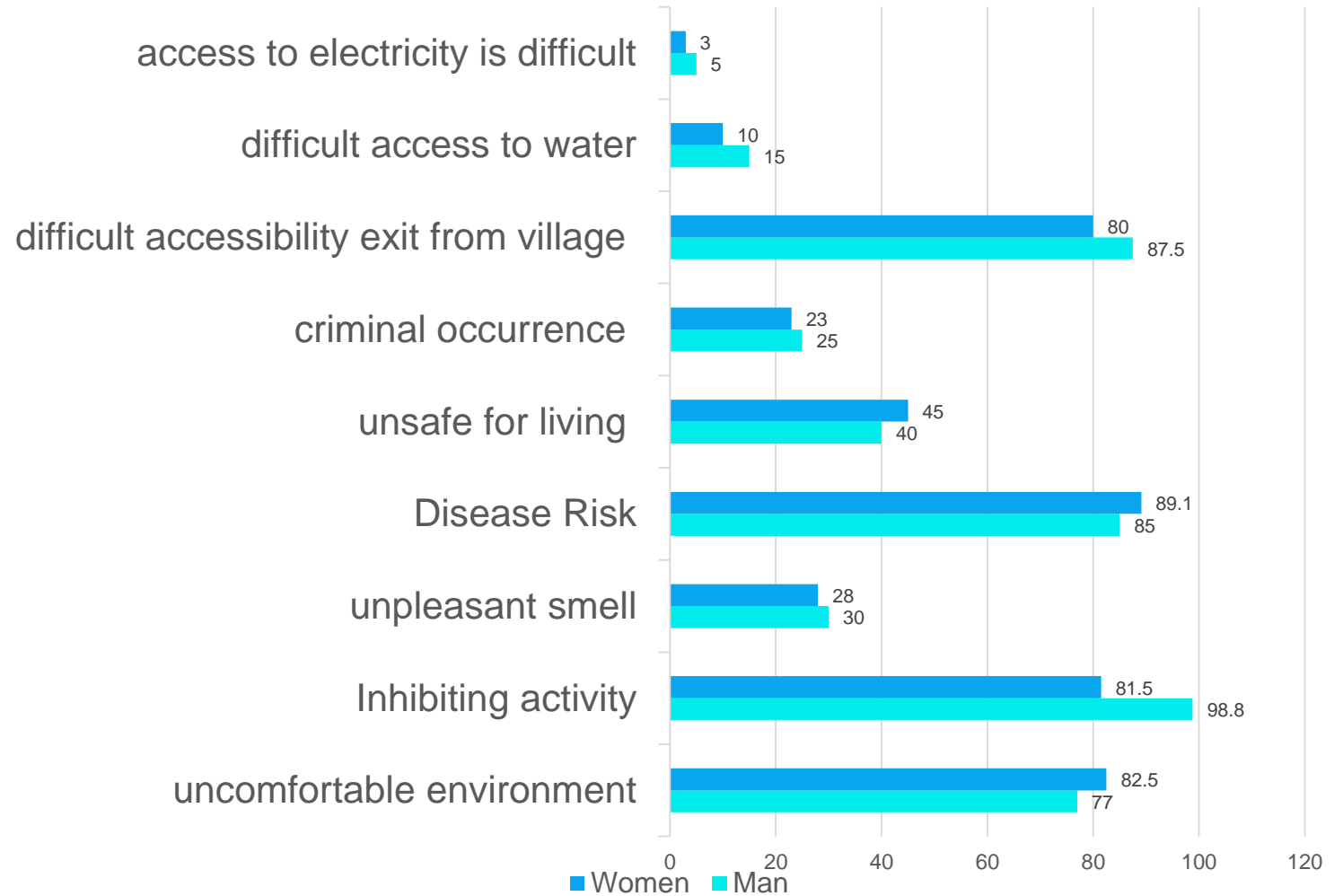


Vulnerabilities Communities

Man and women almost have same perception about living condition

- People have access to clean water and access to electricity
- worried about the risk of skin diseases
- Floods disrupt daily activities
- Difficulty of access out of the village

Perception Living Condition



Man n=25
Women n=25

The Role of Gender

Productive Profile

64% of all respondents	Breadwinner : Man and women
58% of all respondents	Family decision maker : Man Dominance

Domestic Responsibilities

89% of all respondents	Taking care of the children : women dominance
87,2% of all respondents	Preparing food & Cooking : women dominance
94% of all respondents	Washing and Cleaning : women dominance

Disaster preparedness & response pra disaster

87% of all respondents	Building protection : man dominance
56% of all respondents	Knowledge on disaster : man & women
82% of all respondents	Being a member of social organization : Man & Women



n=50 (man n=25 women n=25)

During Disaster

83% of all respondents	Rescuing family members : Man Dominance
68% of all respondents	Rescuing assets : man dominance
72% of all respondents	Basic needs fulfilment : man dominance

Post Disaster

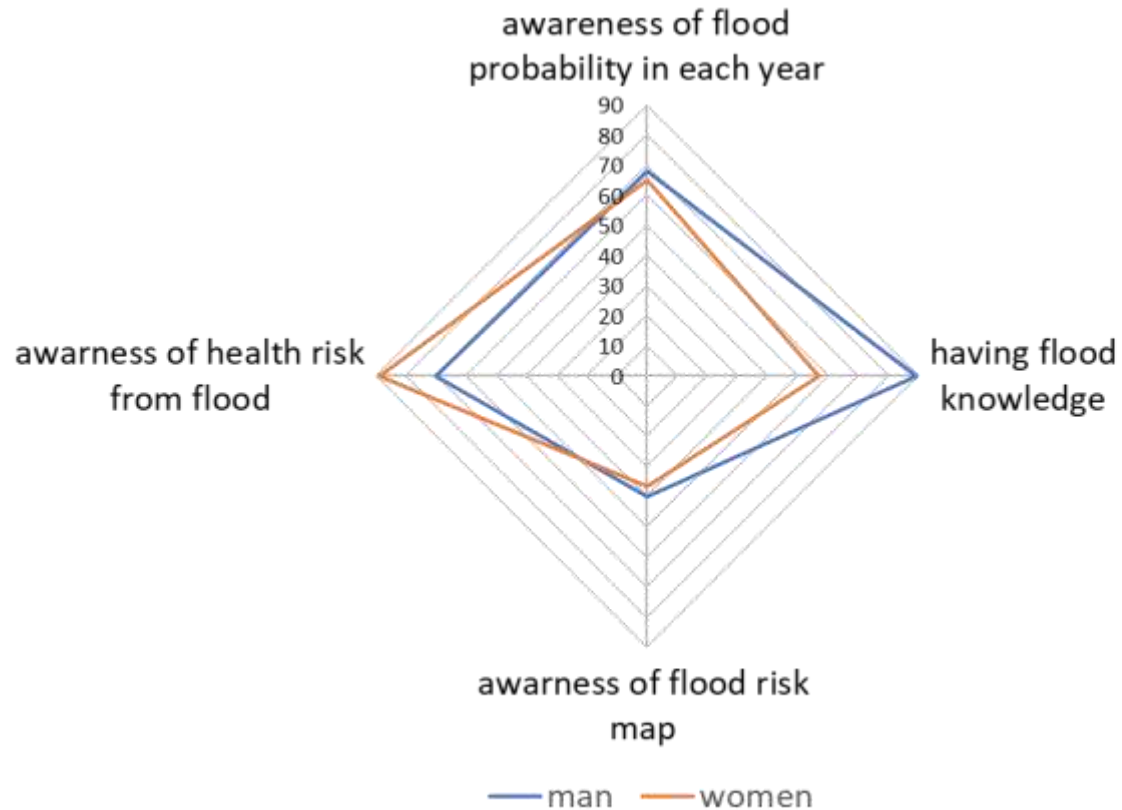
74% of all respondents	Cleaning the house : women
87% of all respondents	House renovation : man dominance
56% of all respondents	Living cost : man & women dominance

- ❖ Women have the double burden (breadwinner and responsibilities in doing all the domestic job)
- ❖ Also Man have double burden are responsibilities disaster preparedness, rescuing during disaster, post disaster and breadwinner



Adaptation Communities

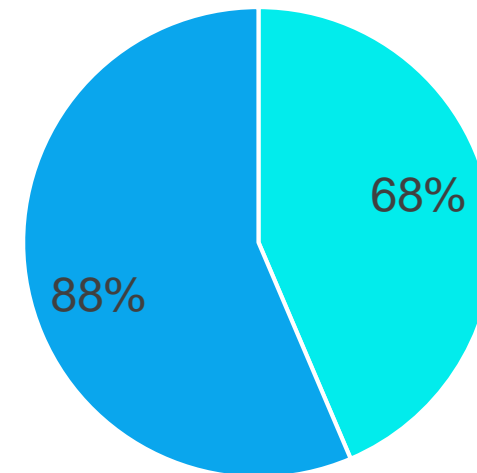
Risk Disaster Awareness



Man n=25
Women n=25

Desire to stay or migrate

The majority of people choose to stay in coastal inundation area

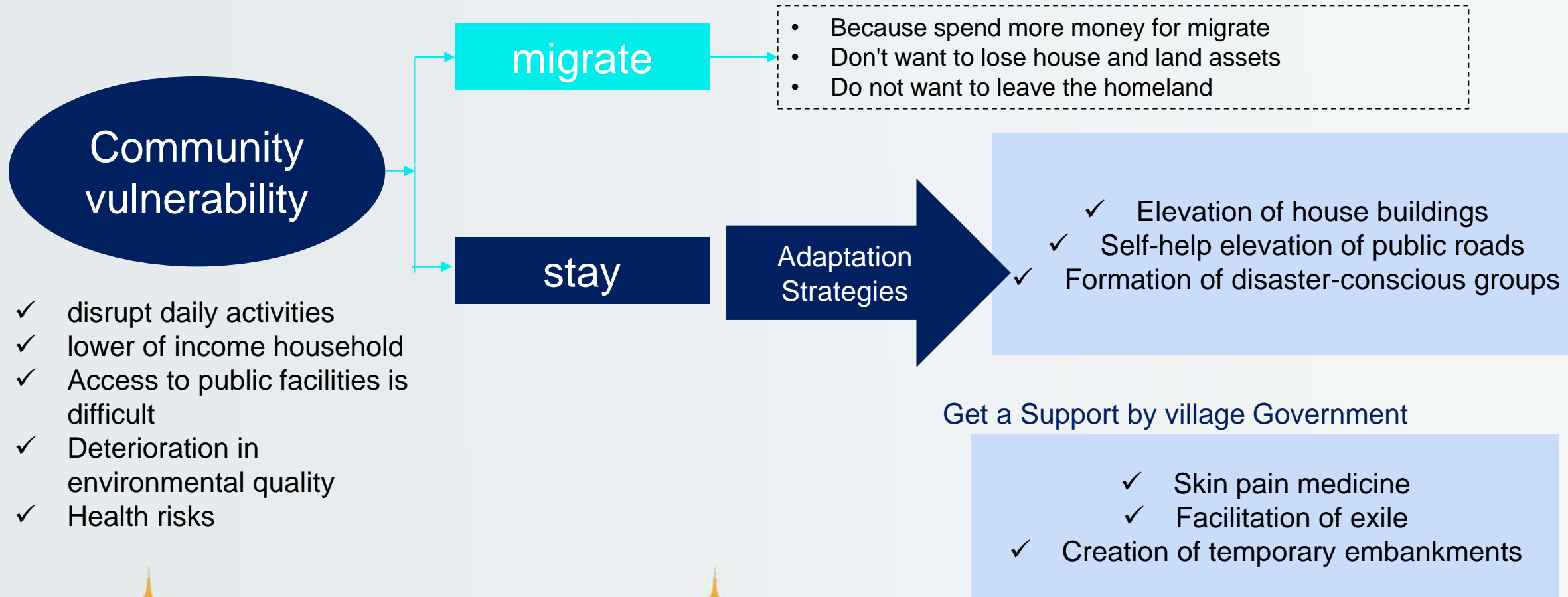


DESIRE TO STAY (%)

man women

- There are fewer people to choose to stay because they have an access to education or a job than women
- Women have the responsibility to carry out reproductive roles

Community Adaptation Efforts



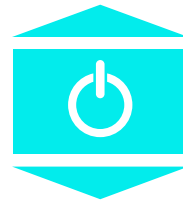


Conclusion



Conclusion

- ❖ Women and Man have double burden of disaster preparedness, pre disasters, during disaster and post disaster.
- ❖ Women more vulnerable than man cause not have access to education and job, so women dependent with man for adaptation



- ❖ Coastal inundation impacts to capital dimension of human
- ❖ Although people lose access to capital, both natural, economic, physical, but most of respondents choose to stay living in coastal inundation area
- ❖ The communities independent to coping the disaster

Acknowledgment

1. Our deep appreciation are accorded to organizer : Special thanks to GAF 8



2. Thanks to Dr Nikita Gopal (Chair of GAF) and Dr Kyoko Kusakabe (Vice chair of GAF)
3. Thanks to Dr Meryl J Williams (Past Chair of GAF)
4. Thank to ACIAR for the sponsorship
5. Thanks to the Masters to Doctoral Education Grant program for Superior Scholars (PMDSU).
6. Thanks to Prof. Indah Susilowati as Supervisor.

wonderful
indonesia



THANKS



Keywords

- Men
- Women
- High tide
- Floods
- Vulnerabilities
- Adaptation