



**Development the Concept of Vulnerability
Assessment in Indonesia for Natural and
Climate Change Hazard: Its implementation to
develop community resilience**

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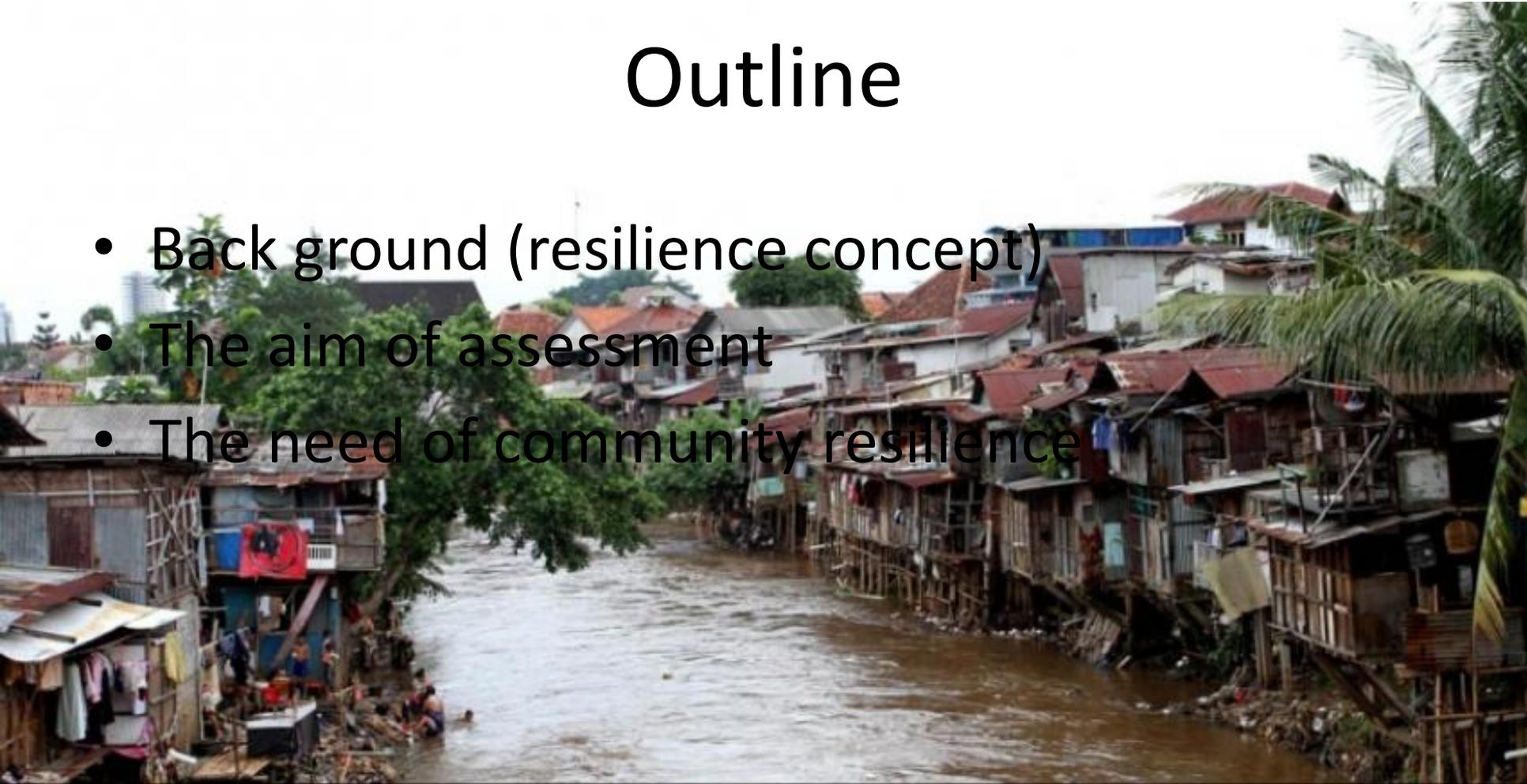
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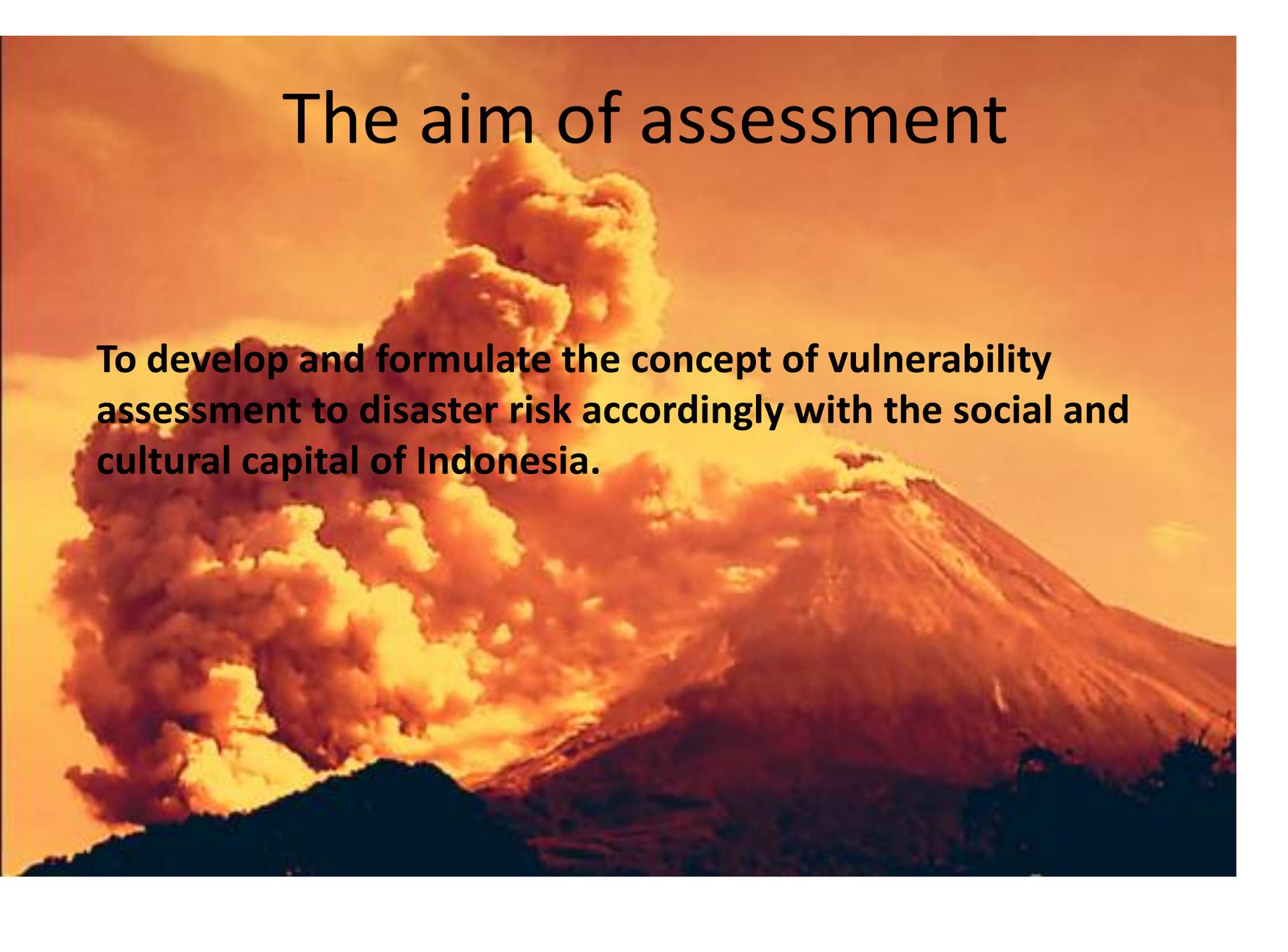
Outline

- Back ground (resilience concept)
- The aim of assessment
- The need of community resilience

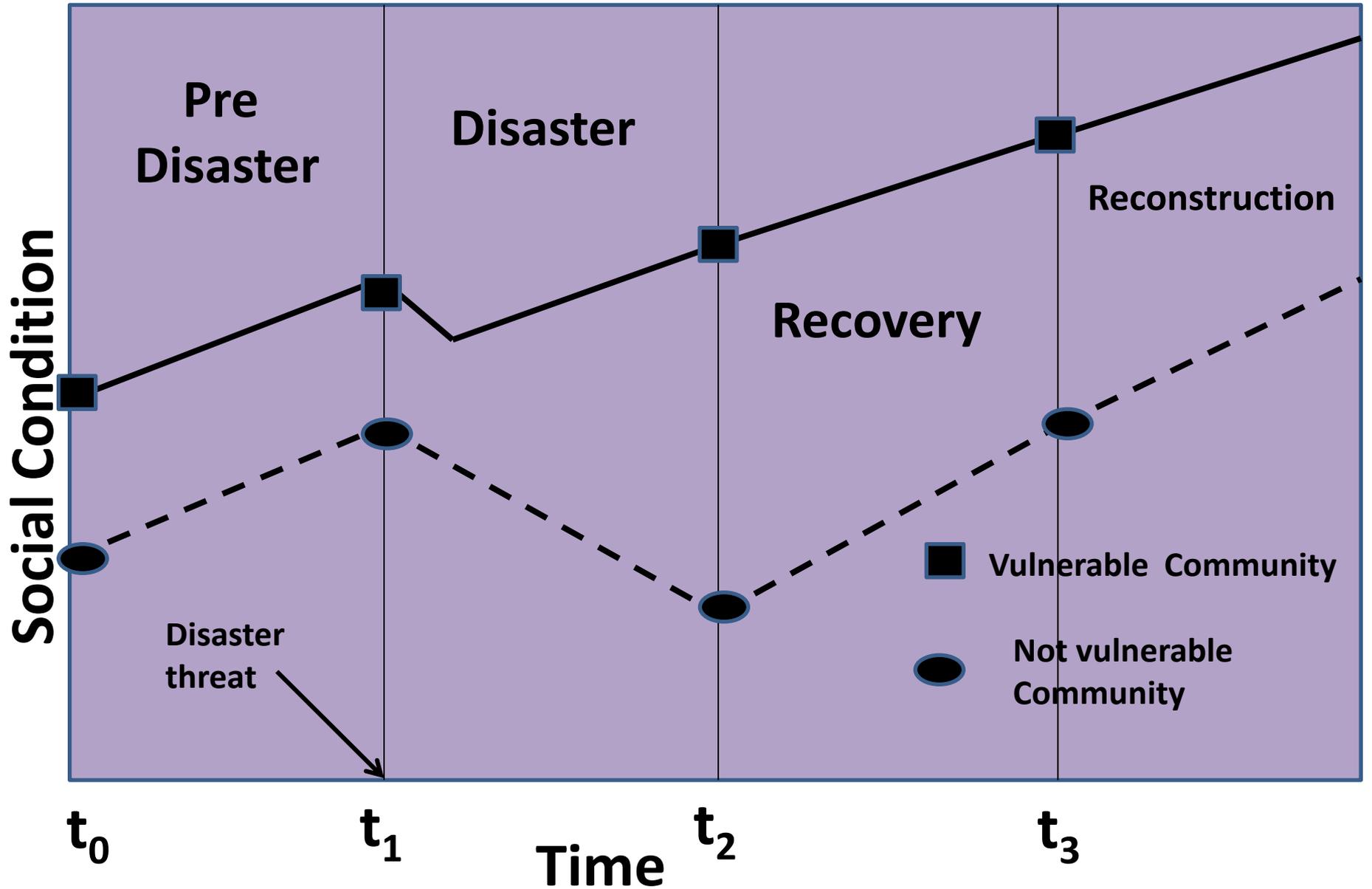


The aim of assessment

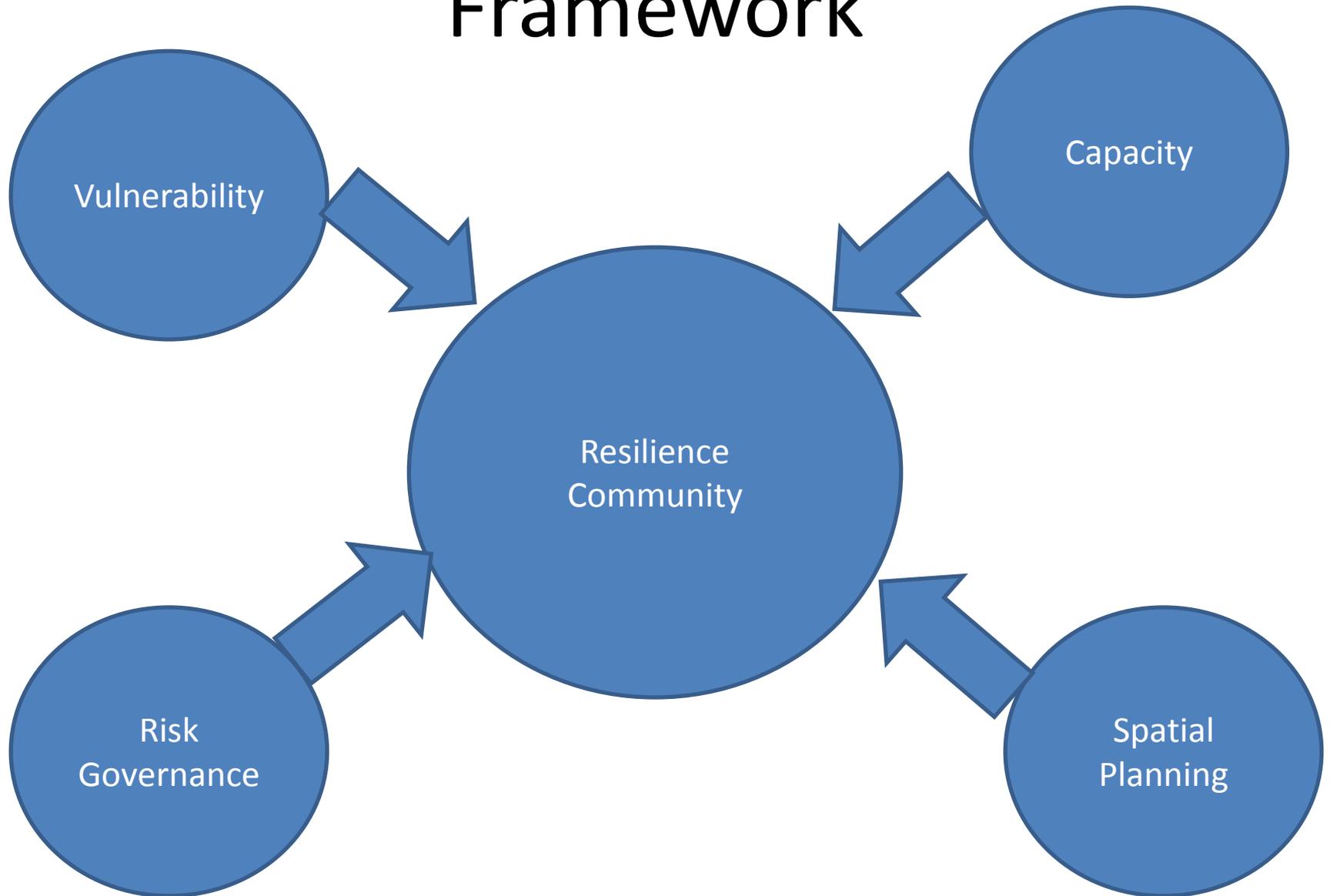
To develop and formulate the concept of vulnerability assessment to disaster risk accordingly with the social and cultural capital of Indonesia.



Resilience Concept



Framework



Why the community resilience is important to reduce the disaster risk in Indonesia

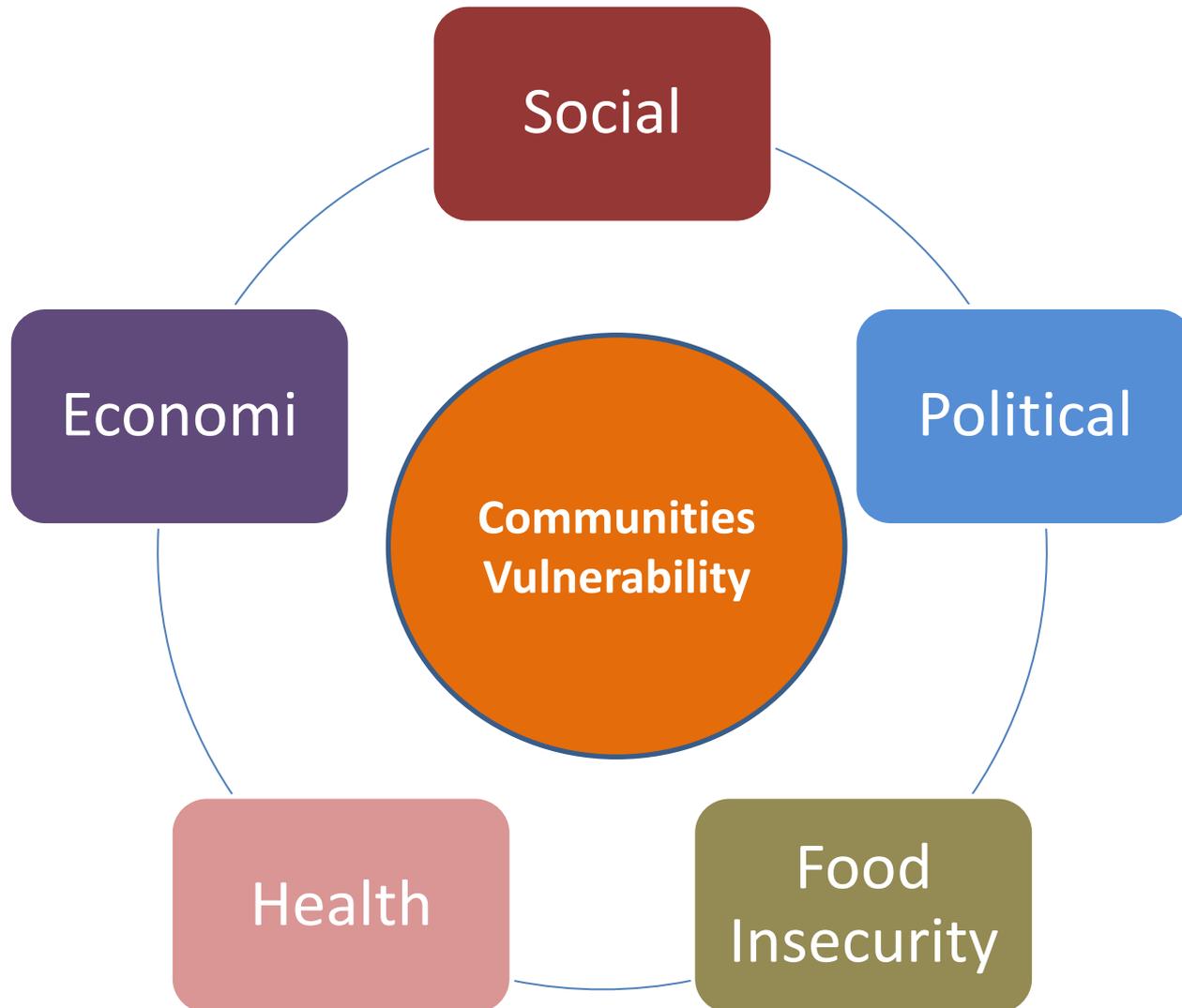
- Many disaster occurred at remote areas
- The phenomenon of sea level rise due to climate change threaten many coastal areas.
- Community coping capacities including adaptive capacity in many areas are still low while community vulnerability are high.
- Many areas are threaten by multi hazards including the sea level rise due to global climate change.
- Risk Governance still have not touched the root causes of disaster risk .
- Spatial planning in many areas are still not disaster based .

Continued

- The absence of an effective response from the public and officials to natural disasters .
- Disaster resilient village programme just still employee and administration based has not touched the community
- The absence of risk culture at many disaster prone areas.
- Program of recovery and reconstruction after the disaster has not supported by various stakeholders .
- The absence of the equal perception between the government and the public in DRR

Vulnerability Assessment

Scope of Community Vulnerability



Post disaster vulnerability matrices 1

No	Concept	Variabel	Indicator	Note
1	Political vulnerability	Legal protection for victims	Legal availability	Group of productive and non productive age
		Post disaster aids	<ul style="list-style-type: none"> • Availability • Speed • Distribution 	Group of productive and non productive age
		Participation in decision making	<ul style="list-style-type: none"> • Involvement 	Group of productive and non productive age
		Access to post disaster relief	<ul style="list-style-type: none"> • Ability to access aids 	Group of productive and non productive age
		Access to manage the assets	<ul style="list-style-type: none"> • Ability to manage the damage property / missing after the disaster • The availability of assistance to manage assets • Assistance to take care debt and 	Group of productive and non productive age

Post disaster vulnerability matrices 2

No	Concept	Variabel	Indicator	Note
2	Economic vulnerability	Loss of income sources	<ul style="list-style-type: none"> • Main and secondary income • Main and secondary value of income 	Productive age and elderly
		Loss of assesst	<ul style="list-style-type: none"> • Value of loss movable and non movable 	Productive age and elderly
		Payment of debt and credites	<ul style="list-style-type: none"> • Value of debts and credites 	Productive age and elderly
		Access to income	<ul style="list-style-type: none"> • The ability to get the main and secondary income 	Productive age and elderly
		Meeting the primary needs	<ul style="list-style-type: none"> • Ability to meet the needs of food, clothing , shelter • Sufficiency condition needs of food , clothing , shelter 	Productive age and elderly

Post disaster vulnerability matrices 3

No	Concept	Variabel	Indicator	Note
3	Social vulnerability	Loss of parent	<ul style="list-style-type: none"> Loss of parent due to disaster 	<i>people who have experienced a disaster.</i> <ul style="list-style-type: none"> Children
		Converge to the home environment	<ul style="list-style-type: none"> Ability to converge to the home environment 	<i>people who have experienced a disaster.</i> <ul style="list-style-type: none"> Children
		Knowledge and disaster preparedness	<ul style="list-style-type: none"> Knowledge victims of natural disasters Preparedness measures for natural disasters 	<i>Community Groups of adults , elderly , and children</i>
		Poverty	<ul style="list-style-type: none"> Less income 	<i>Community Groups of adults , elderly , and children</i>

No	Concept	Variabel	Indicator	Note
3		Public and social facilities in the shelter	<ul style="list-style-type: none"> • Availability • Availability of social spaces , spaces of worship • Family information 	<p><i>people who have experienced a disaster.</i></p> <ul style="list-style-type: none"> • Gender, elderly, children
		Facilities and support education and training	<ul style="list-style-type: none"> • Availability of education and training assistance from the government or NGO 	<p><i>people who have experienced a disaster.</i></p> <ul style="list-style-type: none"> • Gender, elderly, children
Prestasi sekolah				

Post disaster vulnerability matrices 4

No	Konsep	Variabel	Indikator	Keterangan
4	Health vulnerability (physics and psychology)	Physucal health	<ul style="list-style-type: none"> • Physical condition • Physical health problems • The ability to recover the physical health problems 	Ability to meet the nutritional needs of food and post-disaste
		Psychological health	<ul style="list-style-type: none"> • Psychological health • Gangguan kesehatan psikologis • Kemampuan memulihkan kondisi psikologis 	Group of productive and non productive
		Health care	<ul style="list-style-type: none"> • Availability of the health care, health workers, medicin, health facilities, water facilities. 	<ul style="list-style-type: none"> •Group of productive and non produc • Emergency response period, rehabilitation and reconstruction

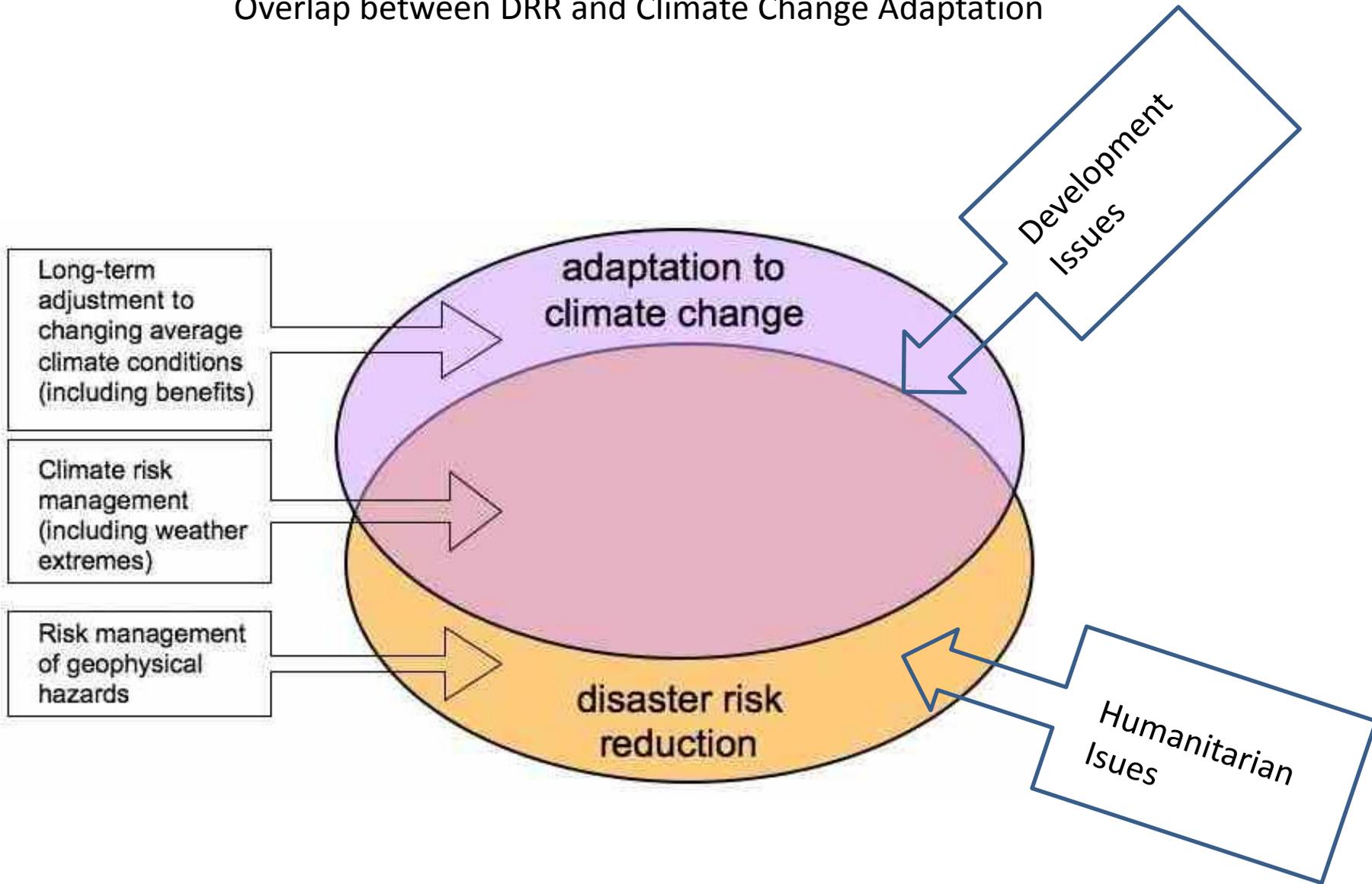
Matriks Kerentanan Pasca Bencana Alam 5

No	Konsep	Variabel	Indikator	Keterangan
5	Food insecurity vulnerability	Food security and nutrition	Ability to meet the nutritional needs of food and nutrition post-disaste	Group of productive and non productive
		Food aids	<ul style="list-style-type: none"> • Availability of food aids from government or NGO • Tha ability to access the food aids •Distribution of food aids •Nutritional sufficiency in food aid 	Group of productive and non productive

Integration

- Preparation of Community Coping Capacity
- Preparation of Disaster Risk Reduction Policy

Overlap between DRR and Climate Change Adaptation



Modified from DFID