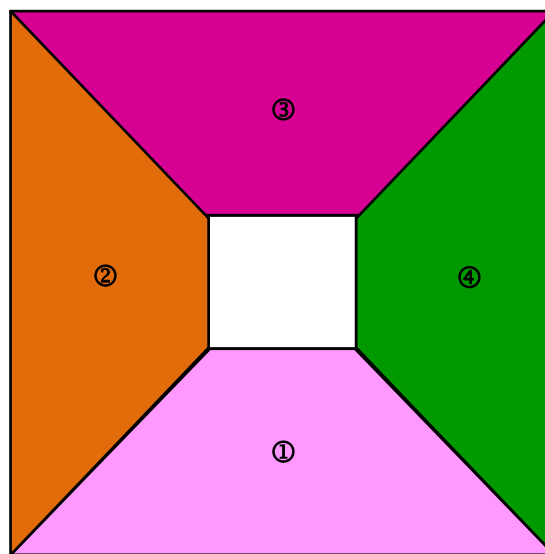


# YONMENKAIGI SYSTEM METHOD (YSM) RESULTS

## Bengkulu City

### EARTHQUAKE DISASTER RISK REDUCTION BY EARTHQUAKE-RESISTANT BUILDINGS



#### ① HUMAN RESOURCES

Short Term (1 Year)	Mid Term (2 Years)	Long Term (5 Years)
Community understands earthquake	Community understands earthquake-resistant houses	Ability to construct earthquake-resistant houses
Community campus	Construction labor trained for building earthquake-resistant houses	Ability to identify earthquake-resistant houses
School Community	Local government with knowledge of earthquake disaster risks	Certified consultant for earthquake-resistant buildings
Disaster social community organization		Central government with knowledge regarding earthquake disaster risks

#### ② INFORMATION & DATA AND FINANCIAL

Short Term (1 Year)	Mid Term (2 Years)	Long Term (5 Years)
Financial: Community support	Financial: Regional budget	Financial: National budget
CSR budget	Fund relief from private sector	Fund relief from foreign sector (ADB, World Bank)
Information and data: Documentation regarding previous disaster occurrences	Information and data: Existing building data	Information and data: Earthquake hazard map
Total population		
Potential earthquake hazard map		

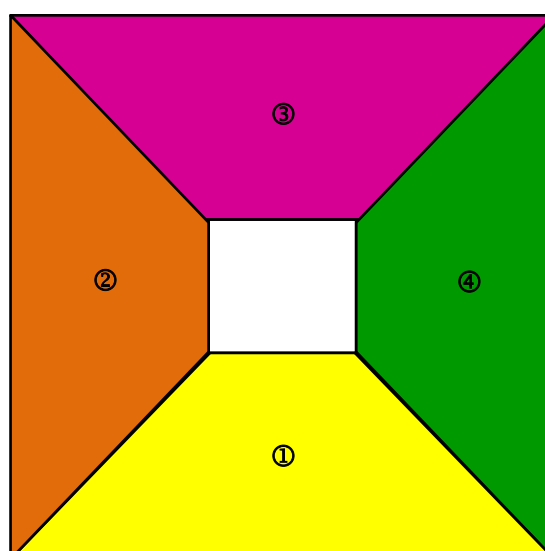
③ PROGRAMS

Short Term (1 Year)	Mid Term (2 Years)	Long Term (5 Years)
<p>Software: Data collection (community, location)</p> <p>Analysis on earthquake hazard (probability/risk)</p> <p>Study on earthquake-resistant buildings</p> <hr/> <p>Hardware: Identification on traditional houses (traditional structural system)</p> <p>Simple earthquake-resistant houses</p>	<p>Software: Earthquake DRR and earthquake-resistant building trainings</p> <p>Earthquake DRR training</p> <p>Dissemination on earthquake DRR</p> <hr/> <p>Hardware: Building retrofitting</p> <p>Earthquake-resistant normal public facility (school, mosque, etc)</p> <p>Earthquake-resistant houses traditional technology</p>	<p>Software: Establishment of earthquake disaster mitigation curriculum in educational institution (toddler, elementary school, middle school, high school, university).</p> <p>Establishment of earthquake-resistant building regulation</p> <p>Creating building permit (conforming with earthquake-resistant building standard)</p> <p>Insert DRR knowledge on university's community service program</p> <p>Contingency plan</p> <p>Monitoring and evaluation</p> <hr/> <p>Hardware: Earthquake-resistant shelter</p> <p>Earthquake-resistant important public facility</p>

④ MANAGEMENT DAN INSTITUTIONAL

Short Term (1 Year)	Mid Term (2 Years)	Long Term (5 Years)
<p>Institutional: Establishment of earthquake disaster forum in neighborhood associations and hamlets</p> <p>School/university</p> <p>Meteorology, climatological, and geophysics agency</p> <p>NGO</p> <p>Village social activities group/Community empowerment in rural areas/Village executive board</p> <hr/> <p>Management: Meetings</p>	<p>Institutional: Local parliament – local regulation</p> <p>Regional planning agency – city planning</p> <p>Public works agency – physical development</p> <p>BPBD</p> <hr/> <p>Management: Inter agencies coordination meeting</p> <p>Budget committee meeting</p>	<p>Institutional: Central parliament – laws and standardization</p> <p>Central public works agency</p> <p>National planning agency</p> <p>BNPB</p> <hr/> <p>Management: Coordination with executive and legislative</p>

## TSUNAMI DISASTER RISK REDUCTION



### ① HUMAN RESOURCE

Short Term (6 Months)	Mid Term (1 Year)	Long Term (2 Years)
Disaster prepared community recruitment  Volunteer recruitment  Data collection of tsunami-related knowledge local wisdom  Evacuation drill training  Tsunami emergency response training for community  Dissemination of tsunami to community seminar	Invite foreign/outside the district speakers as lesson learned of DRR  Inclusion of disaster mitigation education in the curriculum  Training program for policy makers  Emergency response drill  Disaster prepared community training	Resilient subdistrict revitalization

### ② INSTITUTIONAL

Short Term (6 Months)	Mid Term (1 Year)	Long Term (2 Years)
Create early warning instrument  Purchase of tools and utilities in tsunami emergency response  Coordination with related agency  License for institutional resources  Strengthening regional discussion forum as institution for tsunami countermeasures  Community necessity evaluation  School institution	Monitoring and evaluation  Operational control center of disaster mitigation optimization  Composing detail spatial plan and detail disaster mitigation plan  BPBD and local parliament	Local regulation on tsunami DRR  Local technical managing unit for operational control center of disaster mitigation  Technical evaluation  BNPB and central parliament

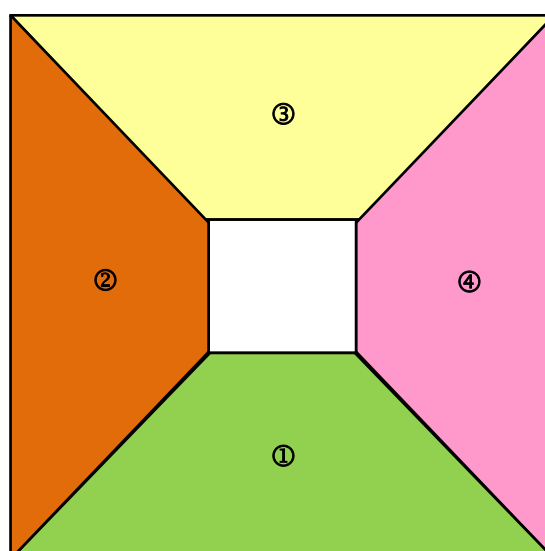
Disaster prepared community recruitment		
Volunteer recruitment		

③ LOGISTIC & HARDWARE AND PROGRAM		
Short Term (6 Months)	Mid Term (1 Year)	Long Term (2 Years)
Logistic and hardware: Create evacuation signs	Logistic and hardware: Supply of buffer stock	Logistic and hardware: Shelter construction
Create route, route map, and evacuations signpost	Logistic warehouse	Program: Early warning siren
Evacuation route construction	Subdistrict logistic warehouse construction	Increase for early warning siren
Communication instrument such as HT, etc	Program: Monitoring and evaluation	Inclusion of local content related to disaster mitigation to school
Program: Contingency plan	Regional action plan	
Operational vehicle procurement for relief distribution	Establishment and activation of disaster prepared subdistrict	
Increasing tsunami evacuation route sign	Shelter construction	
Planting mangrove and pine for coast preservation	Establishment of local regulation to arrange companies to allocate its profit for DRR	
Create early warning instrument	Independent fund from community as its involvement in DRR	
Purchase of tools and utilities in tsunami emergency response		

④ FINANCIAL AND INFORMATION & DATA		
Short Term (6 Months)	Mid Term (1 Year)	Long Term (2 Years)
Financial: Independent fund from community	Financial: City budget and province budget	Financial: National budget
Cooperation with CSR from private and national companies	Establishment of MoU with private sector (telecommunication, banking, industry, etc)	Allocated fund always included in national budget
Cooperation with university for research and community service	MoU for cooperation	Information and data: Education of DRR to community
Budget planning inclusion in regional budget	Establishment of local regulation to arrange companies to allocate its profit for DRR	Collected and completed data accessible for public
Information and data: Social survey through assessment	Independent fund from community as its involvement in DRR	Community able to receive clear info regarding hazard map and evacuation route
Create banner, poster, and infomercial for tsunami alertness in mass media	Information and data: Hazard map and evacuation route distribution	
Database collection for facility		

and infrastructure	Cooperation from university's community service for evacuation map and hazard map	
Cooperation with mass media for information dissemination		
Data acceptance from meteorology, climatology, and geophysics agency		
Update existing information		
Create banner and brochures for tsunami-related dissemination		
Establishment of hazard map and evacuation route		
Disaster hazard mapping		

## RESILIENT COMMUNITY: FLOOD AND LANDSLIDE



### ① PROGRAM

Short Term (April-October 2015)	Mid Term (November 2015- November 2016)	Long Term (November 2016- November 2018)
DRR volunteer recruitment  Establishment of DRR forum in city/village level  Dissemination of DRR to community  Coordination with university for establishment community service program  DRR for local content in school  Identification of environmental and housing vulnerability  Paradigm change of flood  Identification of vulnerable group  Coordination with related agency  Planning comparative study to area with similar social/physical characteristics	DRR volunteer training  Sharing with local parliament regarding DRR  Local content implementation in school  Establishment of flood and landslide masterplan  Reparation/construction of drainage and cliff protection  Dredging shallow base of the river  Early warning system installation  Establishment of local regulation for disaster mitigation  DRR simulation  Establishment of disaster mitigation task force from various stakeholders	DRR evaluation  Regional action plan for flood and landslide  Shade trees planting

### ② HUMAN RESOURCE

Short Term (April-October 2015)	Mid Term (November 2015- November 2016)	Long Term (November 2016- November 2018)
Composing budget plan  Human resource planning evaluation for once every six month	Establishment structural organization for disaster management volunteer  Budget properly distributed as	Establishment of disaster mitigation task force personnel  Reference for disaster area and its countermeasure is available

<p>Planning for detail and sustainable training</p> <p>Establishment of vision and mission related with flood and landslide disaster prepared community</p>	<p>needed</p> <p>Identification of public figure and their impact on local wisdom</p> <p>Training for task force</p> <p>First year evaluation</p> <p>Comparative study to appointed areas</p> <p>Professional treatment of vulnerable victim</p>	<p>Human resource evaluation and analysis</p> <p>Increase of volunteer capacity for vulnerable group treatment</p>
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③ FINANCIAL		
Short Term (April-October 2015)	Mid Term (November 2015- November 2016)	Long Term (November 2016- November 2018)
<p>Involvement of university student through disaster-related community service program (budget subsidy for community service)</p> <p>Implementation of budget plans into action in 2015</p> <p>Identification of financial source from education institution, university for DRR purpose</p> <p>Identification of foreign financial source for DRR purpose</p> <p>Identification of other sources that may able to support DRR activity (private sector)</p> <p>Identification of independent fund from community to support DRR activity</p> <p>Identification of financial source from national and regional budget</p> <hr/> <p>Information and data:</p> <p>Identification of area with flood and landslide hazard</p> <p>Supply all data and information if needed for research</p> <p>Identification of maps owned by stakeholder for disaster mitigation purpose</p>	<p>Gather related stakeholder to compile budget meeting for DRR</p> <p>Establishment of local regulation to arrange companies to allocate its profit for DRR</p> <p>Disaster management budget planning for 2016</p> <p>Community coaching to increase participation of disaster mitigation by independent funding</p> <hr/> <p>Information and data:</p> <p>Coordination with all stakeholders related to research and community service data</p> <p>Unification of flood and landslide maps existed from stakeholders</p> <p>Create flood and landslide disaster probability map in Bengkulu</p> <p>Flood and landslide hazard area mapping</p>	<p>Compile budget for infrastructure repair and improvement if affected from flood and landslide</p> <p>Plan budget for completing data and information related with flood and landslide disaster</p> <hr/> <p>Information and data:</p> <p>Completing data and information related with flood and landslide</p> <p>Summarize all research and community service results that that has been done for next preventive activity</p> <p>Establishment of disaster relief reception regulation</p>

<p>Identification of unavailable data for DRR planning</p> <p>BPBD operational control center of disaster mitigation optimization</p> <p>Identification of disaster-related related local wisdom</p>		
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④ INSTITUTIONAL		
Short Term (April-October 2015)	Mid Term (November 2015- November 2016)	Long Term (November 2016- November 2018)
<p>Establishment of disaster response forum</p> <p>Establishment of DRR working group (Rapid response team)</p> <p>Establishment of decree for DRR team (working group)</p> <p>Establishment of DRR administrative unit</p> <p>Propose mayor regulation for DRR team position will not be shuffled in ≤3 years</p> <p>Introduce area and evacuation route</p> <p>Maintaining relationship with local parliament</p> <p>Communicate disaster status to central government</p> <p>Strengthening coordination between agencies related with DRR</p> <p>Establishment of disaster mitigation task force (structural, duties and function)</p>	<p>Establishment of mayor regulation related to DRR</p> <p>Composing DRR action together with local parliament</p> <p>Composing SOP for flood and landslide DRR</p>	<p>Establishment of regulation regarding disaster relief fund distribution</p> <p>Institutional strengthening</p> <p>Composing contingency plan</p> <p>Spatial and urban planning</p> <p>Disaster relief monitoring</p>