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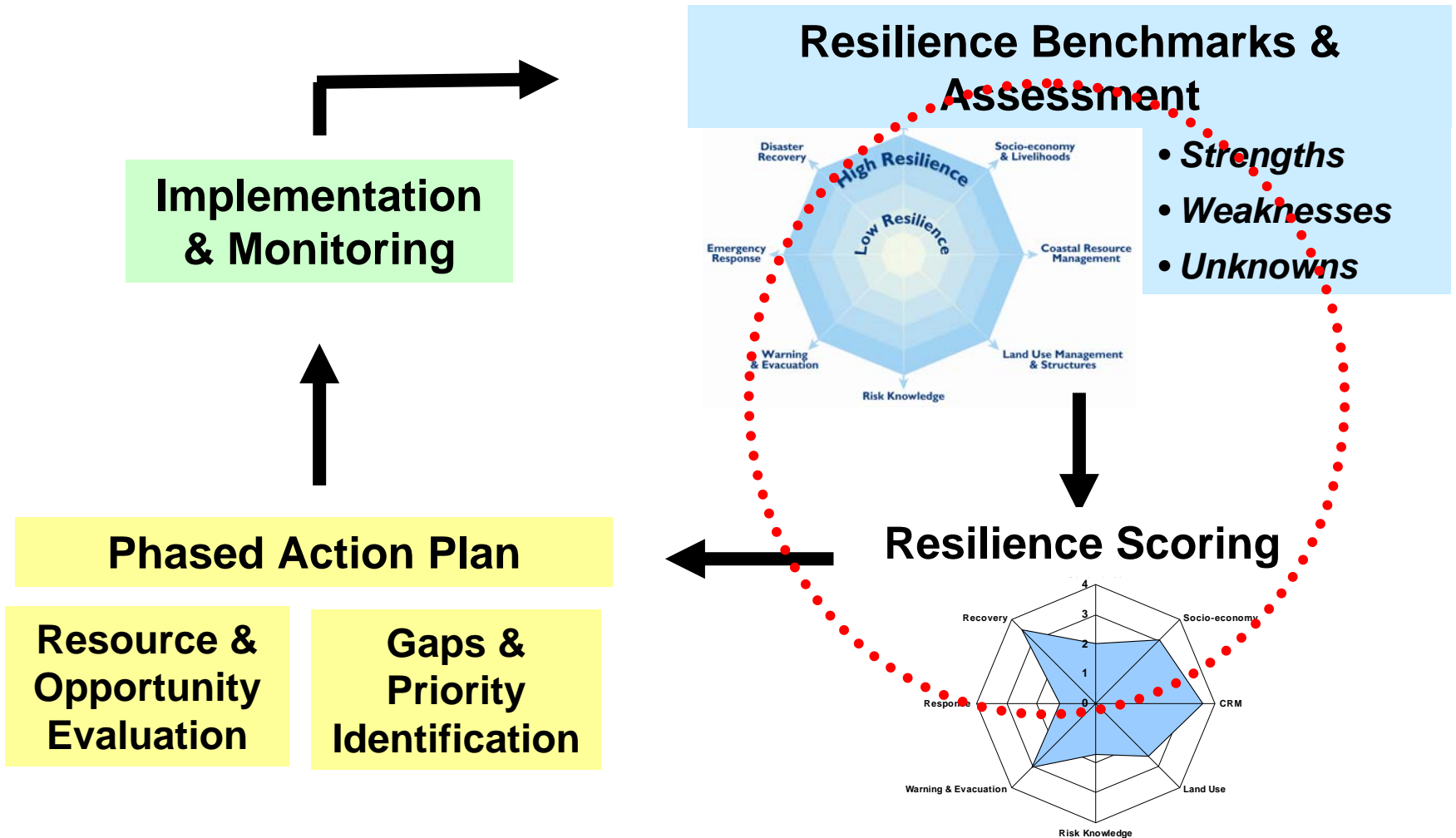


# Overview presentation on the Ranong CCR assessment: process and summary findings

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# The CCR System





# Basic features

- **Area coverage:** 10,860 hectares and includes 7 villages, five impacted by the Tsunami.
- **Population:** 4486 in 743 households.
- **Livelihoods:** predominantly fisheries and agriculture dependent communities. Rest are wage labor, trading or only in agriculture.
- **Climate:** more than 4,000 mm per year. One of the highest rainfall in Thailand.
- **Impact of 2004 tsunami:** loss of over 160 human life; over 220 fishing boats (engines and gear); homes, public buildings; coastal infrastructure. Livelihoods devastated.

## Kampuan Tambon



## Objectives of the “Ranong beta assessment”

1. To carry out a *field practicum of the CCR Guidebook* (including the framework and the benchmarks) as a tool for the community level assessment.
2. Learn methodological *lessons for updating and modifying* for the CCR guide and training programs.
3. Develop a *template assessment* for the future CCR assessment

# Methods and processes

# Assessment Methodology

## 1. Preparation

- Establish scope of the assessment
- Organize assessment team
- Identify organizations, stakeholders and people
- Contact and Schedule interviews, focus groups and field activities
- Train the assessment team in field research skills and the CCR tools

## 2. Data Collection

- Conduct secondary review related to resilience benchmarks
- Conduct interviews and focus groups discussions at the national, provincial and community levels
- Collect/compile secondary field data such as community mapping, GIS, erosion rates, flood heights, slopes...

# Assessment Methodology

## 3. Compiling, Analysis & Reporting

- Score each resilience benchmark and develop robust score for each element
- Develop conclusions of resiliency, strengths and weaknesses
- Prepare assessment summary and recommendations for increasing resilience

## 4. Communicating Results

- Communicate results to relevant experts and local professionals/programs for getting feedbacks.
- Validate and revise draft CCR assessment findings based on feedback from stakeholders



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## 5. Leading towards action planning....

- Action planning and mainstreaming exercise

## INTERVIEW DATA SHEETS

For each interview use a data sheet, such as the example below, to record comments from the interviewees. Later, you can combine the inputs from different respondents for each benchmark for assessing patterns. Where appropriate, record the score that the interviewee/focus group assigns to the benchmark. Before the interview, create a table for each of the element and benchmark areas that this informant is supposed to comment on. Some interviews do not need to cover all of the elements.

Name of Person being Interviewed _____ Organization _____		
Intended key topics of discussion _____		
Date _____		
ELEMENT	Interviewee Comments	Their Scoring
<i>Interviewer's Conclusions</i>	<i>Enter any inconsistencies, follow-up interviews or questions, data collection...</i>	<i>Interviewer's objective ranking</i>

## Resilience Benchmarks

### A. Governance

<input checked="" type="checkbox"/> <b>Plans and policies</b> <input checked="" type="checkbox"/> <b>Basic services</b> <input checked="" type="checkbox"/> <b>Collaboration mechanisms</b> <input checked="" type="checkbox"/> <b>Leadership, financial and technical resources</b>	<b>A1</b> Community development plans and policies incorporate short-term and long-term goals and actions for achieving coastal community resilience.
	<b>A2</b> Basic services are accessible to society provided by capable and transparent as an enabling condition for building coastal community resilience.
	<b>A3</b> <u>Multisectoral</u> collaboration mechanisms are functional and effectively used to for resilience.
	<b>A4</b> Financial, technical and human resources provide regular support to achieve community resilience.

@ interviews-2

### B. Socio-economy and Livelihoods

<b>LIVELIHOODS</b> <input checked="" type="checkbox"/> <b>Sustainable and diverse livelihoods</b> <input checked="" type="checkbox"/> <b>Technical and financial resources</b> <input checked="" type="checkbox"/> <b>Social and cultural networks</b>	<b>B1</b> Economic development plans and programs promote sustainable and diverse livelihoods based on knowledge of risks from coastal hazards.
	<b>B2</b> Technical and financial resources are available to promote economic diversification, to reduce vulnerability to coastal hazards, and promote post-disaster recovery.
	<b>B3</b> Social and cultural networks established and support efforts to build coastal community resilience.

### C. Coastal Resource Management

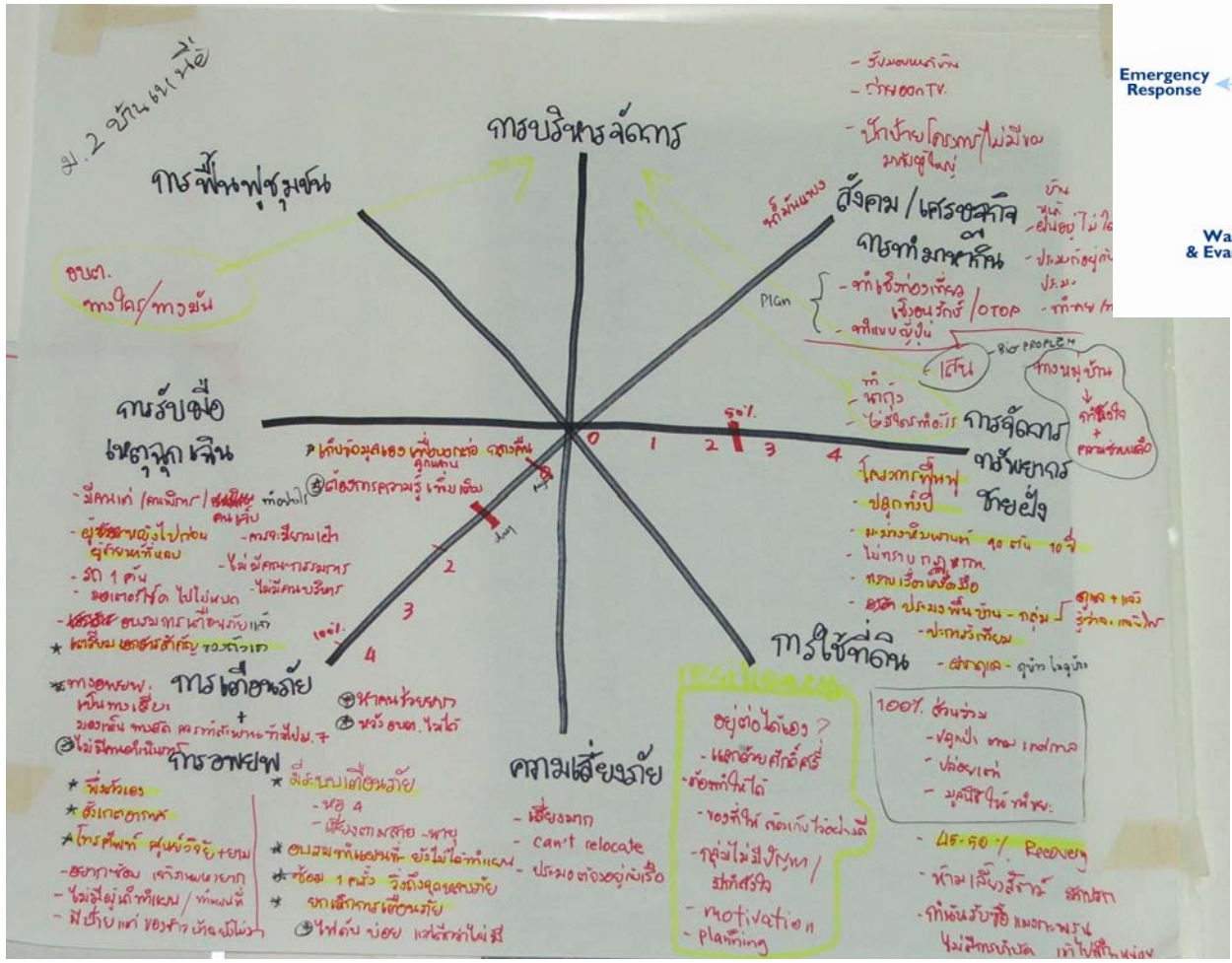
<input checked="" type="checkbox"/> <b>Plans, institutions, and systems</b> <input checked="" type="checkbox"/> <b>Ecosystems protected and maintained.</b> <input checked="" type="checkbox"/> <b>Restoration policies</b>	<b>C1</b> Plans, institutions, and systems established and effectively managing coastal and other natural resources for food security, sustainable development, conservation, natural resource/habitat restoration, and public safety.
	<b>C2</b> Sensitive coastal habitats, ecosystems and natural features are protected and maintained to reduce risk from coastal hazards.
	<b>C3</b> Restoration policies and systems guide post-disaster management of natural resources and minimize risks from coastal and natural hazards.

### D. Land Use Management and Structural Design

<input checked="" type="checkbox"/> <b>Land use decisions</b> <input checked="" type="checkbox"/> <b><u>Siting</u>, design, and construction considers risks</b> <input checked="" type="checkbox"/> <b>Monitoring and enforcement</b> <input checked="" type="checkbox"/> <b>Redevelopment policies and systems</b>	<b>D1</b> Land use plans are developed and reviewed based on an assessment of risks from coastal hazards and the need to protect sensitive coastal habitats.
	<b>D2</b> <u>Siting</u> , design, and construction of public and private structures <u>considers risks</u> from coastal hazards and protects sensitive coastal habitats.
	<b>D3</b> Effective monitoring and enforcement of land use policies and building standards and codes
	<b>D4</b> Redevelopment policies and systems guide post-disaster reconstruction away from sensitive and vulnerable areas

# Exploring on the resilience elements

@ community FGDs



# Scoring

- Setting up a scoring system that can also **involve people into the process** with their own senses and own/familiar analogies
- May need **multiple sessions** to get a robust output on the scoring
- Scorings would give an **indication about which end the community belongs** on respective elements of resilience (e.g. higher resilience, lower or level?)

0 to 4

Absent > Poor > Fair > Good > Very Good



# Compilation

Resilience Element	Low	Medium	High
Governance			
Socio-economy & Livelihoods			
Coastal Resource Management			
Land Use Management & Structures			
Risk Knowledge			
Warning & Evacuation			
Emergency Response			
Disaster Recovery			

Compilation of score by elements

D. Objectives for Land Use Management and Structural Design	Overall score of 65% was given for this Element by Weravut Brawat.
<b>D1</b> Land use decisions incorporate coastal hazards risk assessment and the protection of sensitive coastal habitats.	<ul style="list-style-type: none"> <li>National Land Use Plan was developed every 5 years (2004-2009). There is a land use policy under development as well. National Level policy with decentralization to Province, district and tambon</li> <li>At the National Level, there are Departments focused on 1) Building Law, 2) land use plan and 3) Public Works</li> <li>Provincial level land use plans have not really been developed; Provincial DPT develops the urban plans, and the District office administers Tassaban Plans</li> <li>Land use law is difficult to implement since there are people who have different opinions.</li> </ul>
<b>D1.1</b> Land use plans are prepared and updated	<ul style="list-style-type: none"> <li>Many levels of plans - 5 year for provincial land use. In the process of making it law (2008), which will not be retroactive.</li> </ul>
<b>D1.2</b> Risks to existing and future development have been evaluated and factored into land use plans.	<ul style="list-style-type: none"> <li>Various other plans were developed as a result of various post tsunami activities. After Tsunami in 2005 surveys and assessment were carried out in 6 provinces and have developed a more extensive land use plan that considers the tsunami hazard data and the inundation areas.</li> </ul>
<b>D1.3</b> Community goals and priorities for land use are considered in land use allocation	<ul style="list-style-type: none"> <li>Indication that there are more people coming from other provinces. The immigrants are coming and impacting money distribution. Migrants can bring...</li> </ul>
<b>D1.4</b> Existing physical structures in coastal areas have been evaluated and their risk of failure known.	
<b>D2</b> Siting, design, and construction of buildings and infrastructure consider risks from coastal hazards and protects sensitive coastal habitats.	<ul style="list-style-type: none"> <li>National setback law, established after tsunami, applies in Ranong. New setbacks for land use categories. No construction within 30 meters (22 September 2006). This includes Amphur (District) of Suksamron, Kapur, Muang and all islands in Ranong. Shoreline is divided into 3 land use categories: 1) within 50 meters from the shore. No buildings accept residential less than 6 m high and 75 m<sup>2</sup>; each must be 4 meters apart from each other and 30 meters from shore. Can build dam, port, and drainage systems. 2) between 50-200 meters from the shore: no building higher than 12 meters, no factories unless 100 m<sup>2</sup>. Commercial use is very limited; buildings greater than 2000m<sup>2</sup> in all stories; no market; no mechanic workshop except related to boats; no gas stations; hospital; school; 3) between 200-500 meters: prohibit buildings greater than 16 m high; warehouses; no basement; no change or adjustment with existing building</li> <li>Building law department and Public works department administers the Building law. No guideline documents for building, just a big law document.</li> <li>If there is a landuse plan, the tambon or amphur will need to approve building type. Building guidelines apply in urban areas that have Master Plan</li> <li>Environmental Law Enforcement (Ministry of Natural Resources, 13 April 2006) - addresses sand dunes, beach</li> </ul>

Descriptive compilation of findings by sub-elements

*Compile* and *complete* first  
and then make  
*comprehensive*

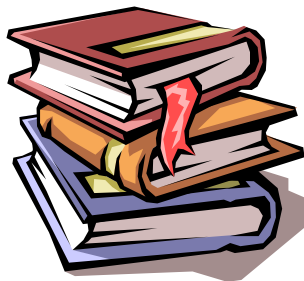
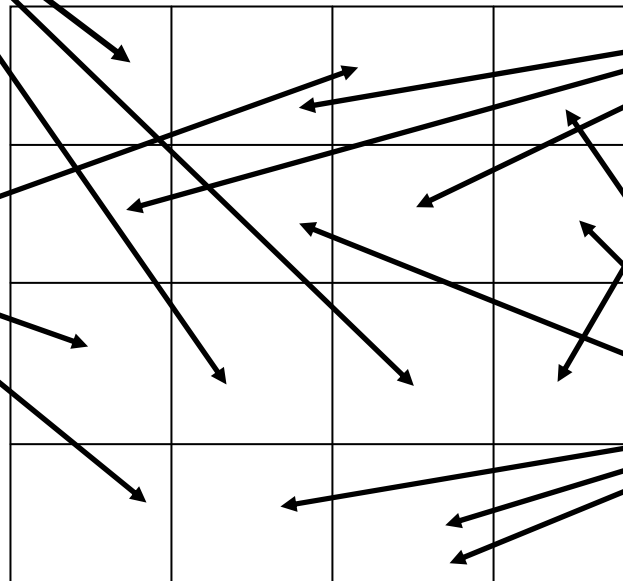


**FGDs**

**Institutional  
visits &  
resource  
interviews**



**Benchmarks by elements**



**Secondary  
reviews**



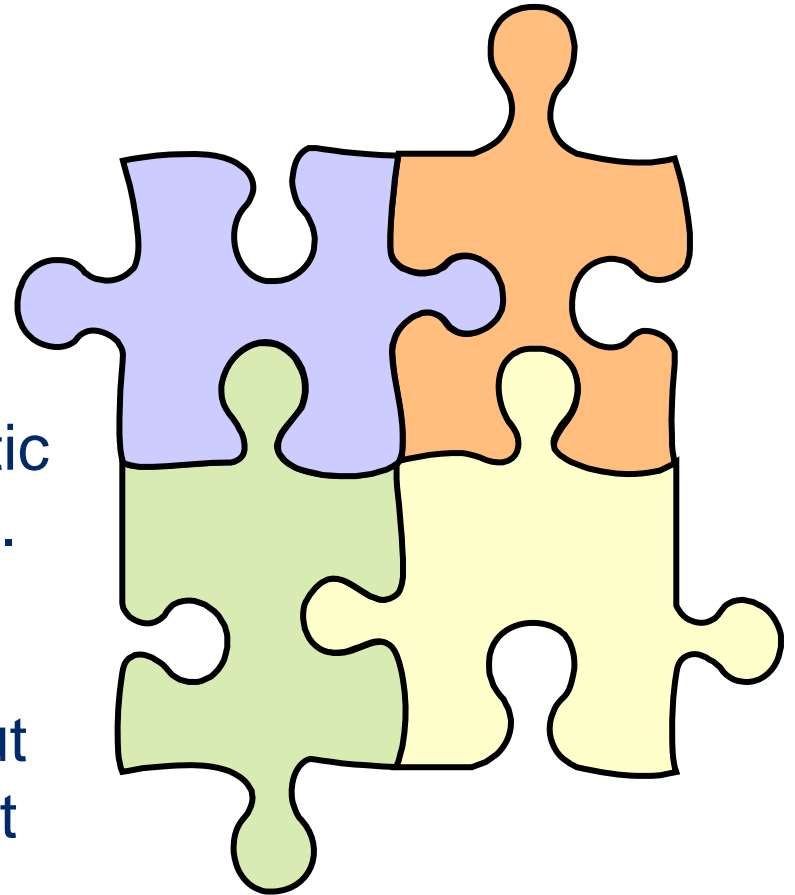
# Making synergies and cross linkages

## For instance:

- Land use policy is there but implementation is problematic which relates to governance.

Or,

- Warning towers are there but people do not have sufficient trust and knowledge for responses.





# Developing a context overview of study area

@ desktop review  
/agency visits

## CONTEXT OVERVIEW OF STUDY AREA

**Name of Site:** *what is the political boundary?* \_\_\_\_\_

**Geographic boundaries:** *consider if there are major ecosystem features that influence the weather/hazards of the region*

### Demographic data:

- Population
- Density
- Religion
- Poverty rate
- Literacy rate
- Education level

Brief Description \_\_\_\_\_

### Key hazards: both known and potential

- Tsunami
- Flooding
- Storm surge
- Landslide
- Wildfires
- Drought
- High winds
- Typhoon
- Monsoons
- Coastal Erosion
- Other....

Brief Description \_\_\_\_\_

### Key livelihoods

- Fishing (deep sea/inshore)
- Farming
- Aquaculture
- Tourism
- Sand mining
- Market/trading

Brief Description \_\_\_\_\_

### Key natural resources

- Forest
- Deep sea fisheries
- Inshore/shallow water fisheries
- Coral reefs
- Mangroves
- Sea grass beds
- Estuaries
- Bay/Lagoons
- Major rivers
- Mineral deposits

Brief Description \_\_\_\_\_

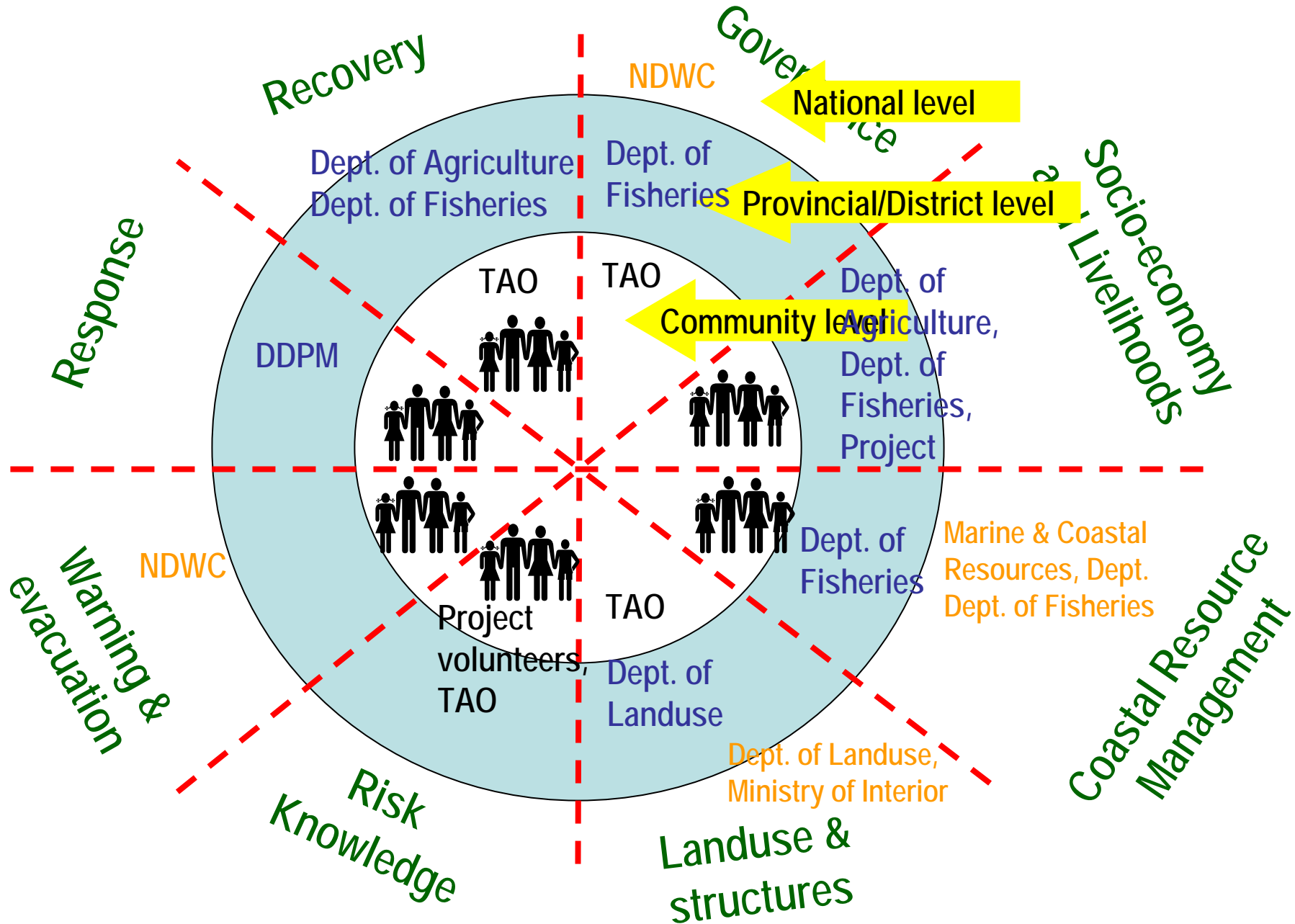
### Government roles & responsibilities for coastal, hazards, planning, development

- Coastal Local extension \_\_\_\_\_
- Hazards Planning/mitigation \_\_\_\_\_
- Regional planning/land-use/building laws \_\_\_\_\_

### List of secondary data available

- Road maps
- Topographic map
- Storm inundation maps
- Demographic maps/data
- Building rules
- Community vision, strategic plans
- Damage assessment
- GIS - Geographic Information Systems
- Coastal zoning/planning laws
- Hazard plans
- Land use plans

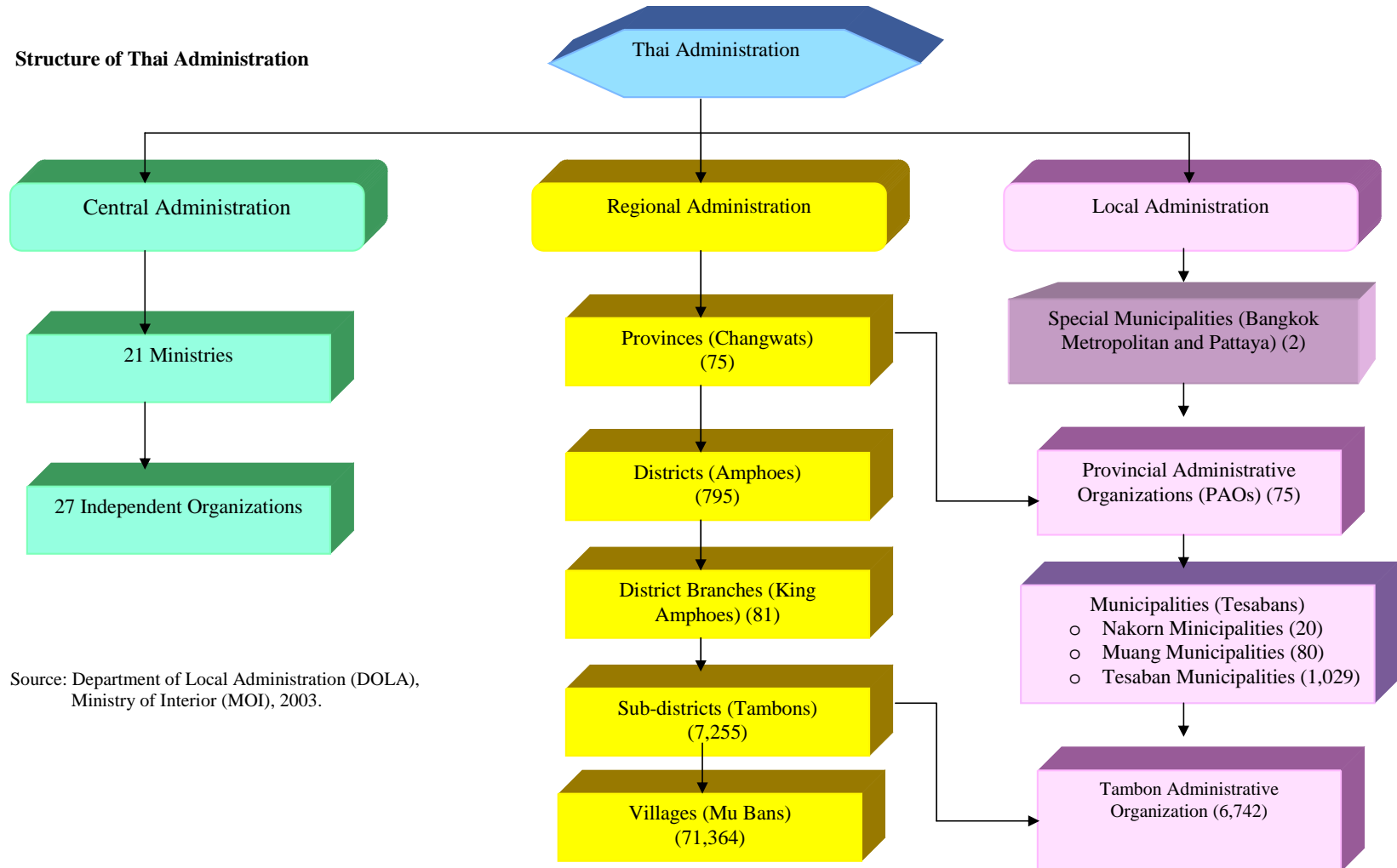
# Multi layer information collection



# **Summary results and findings**

# Governance

Structure of Thai Administration



Source: Department of Local Administration (DOLA), Ministry of Interior (MOI), 2003.

# Governance

## Plans

- Various types of plans available at national level but weak collaboration, public relations and lack of communication are evident.

## Collaboration

- Differential perceptions existing between TAO and some local people. Confidence and 'corruption' remained critical.
- People have a strong concept of "self sufficiency" following the King's philosophy.
- Gaps in functional collaboration between NGO and Govt. agencies.

## Services

- TAO is taking care of their own mandates - infrastructure development and maintenance etc. also responsible to implement land use and other policies with administrative services.

## Resources

- Financial and technical resources are not consistent.
- Disaster management has not been incorporated into daily activities at the Tambon level.

# Socio-economy and livelihoods

## Diverse Programs

- In post tsunami situation women have more options. Household economy is more diverse.
- Value added products (dry fish, paste) “One Tambon One Product” emphasized after tsunami.
- Aquaculture is being promoted. GAP (good aquaculture products) has got popularity.

## Technical and Financial Resources

- Revolving funds (i.e. micro credit) got popular. Shift in loans from recovery actions to loans for improved quality of life happened.
- Technical assistance helped to build skills
- Marketing new products is lacking.

## Social Networks

- Informal and business groups provide relatively stronger networks for business.
- Intra community network are stronger at village level.



# Coastal Resource Management



## Institutions

- Some important post-tsunami policies put in place:
  - ♦ “Environmental setback law” in 6 provinces.
  - ♦ “National CRM Policy” draft being processed recently.
- Lack of integration on policies & programs at various levels. Plans are not translated into community planning efforts.

## Habitat Protection

- Mangrove awareness.
- Awareness of declining fisheries resources.
- Promotion of legal fishing gear, but enforcement of illegal gear is weak.

## Restoration

- Beach reforestation programs are growing.
- Large artificial reef is being constructed 20 km offshore

# Landuse and structures



## Plans

- National plans, provincial plans, and local master plans exist for land use.
- Implementation has been a critical issue at TAO level.

## Structures

- National and Provincial setback and environmental laws passed but not implemented at the local level other than the urban areas.
- Building code is in place, but apparently not practiced much
- Basic Infrastructure (road connectivity, water, and electricity) are prominent in the area. TAO is key to development and maintenance.

## Monitoring and implementation

- Overall agreement that more training is needed to know laws and to better understand technical aspects for implementation
- TAO tends to negotiate and compromise to avoid conflict. May avoid strict enforcement if it doesn't create big impact. Enforcement is more responsive than proactive.

## Redevelopment

- Beginning to consider risks in redevelopment, but it is not systematic



# Risk Knowledge

## Risk Assessment

- Various types of spatial maps available (e.g. land use maps, hazard maps, social maps or risk-resource maps). However, the GIS based inundation maps are not available to all.
- Community has good memories of tsunami damaged areas and landslide prone zones.

## Use of information

- Risk knowledge used to develop roads and drainage systems
- TAO has started use their risk mapping knowledge on taking actions such as rebuilding public structures but still have some debates on the site selection.

## Risk communication

- Lag/gap between “local knowledge” and “scientific knowledge”. Villagers complementing risk communication with their experiences & observations.
- Have various traditional risk communication modalities such as media, mosque/village speakers, community radio, inter-personal communication etc.



# Warning and Evacuation

## Warnings

- Warning equipment in place and connected to national NDWC
- Sign and shelters constructed and widely visible.
- Multiple warning towers available but people do not have full trust' on towers.

## Systems disseminate warnings

- Warning messages distributed to radio, TV, towers, loud speakers
- People have come up with ideas for alternatives (e.g. guards)

## Evacuation

- Evacuation plan, map and evacuation route identified
- Forecast are monitored by villagers
- Villagers still not confident with towers because the system may malfunction.

## Outreach

- Outreach and education materials are lacking at all levels.



# Emergency response



## Incident Command System/protocols

- National level incident command system is there and has linkages from to Provincial to Amphur (district) Level who coordinates with TAO
- Governor can mobilize military for immediate response.
- DDPM has a motto of “one tambon one team” and promotes CBDRM concept. They do not have any regular activity for any of these two.

## Emergency Facilities

- Good collaboration with private and volunteer rescuer foundation. Recent floods demonstrated their ability to mobilize food supplies, health care workers

## Drills and training

- Desktop drills and simulation exercise, first aid training etc.
- Annual drills, coordination with police and hospital
- Resource constraints for TAO level trainings

# Recovery



## **Disaster recovery process**

- Several agencies noted that now there is better coordination than pre-tsunami.
- Immediate financial assistance provided for families, followed by occupational recovery and financial/technical assistance for agriculture and fisheries sectors.
- TAO developed list of requests for infrastructure development.
- Various databases of local and Provincial authorities are now growing.

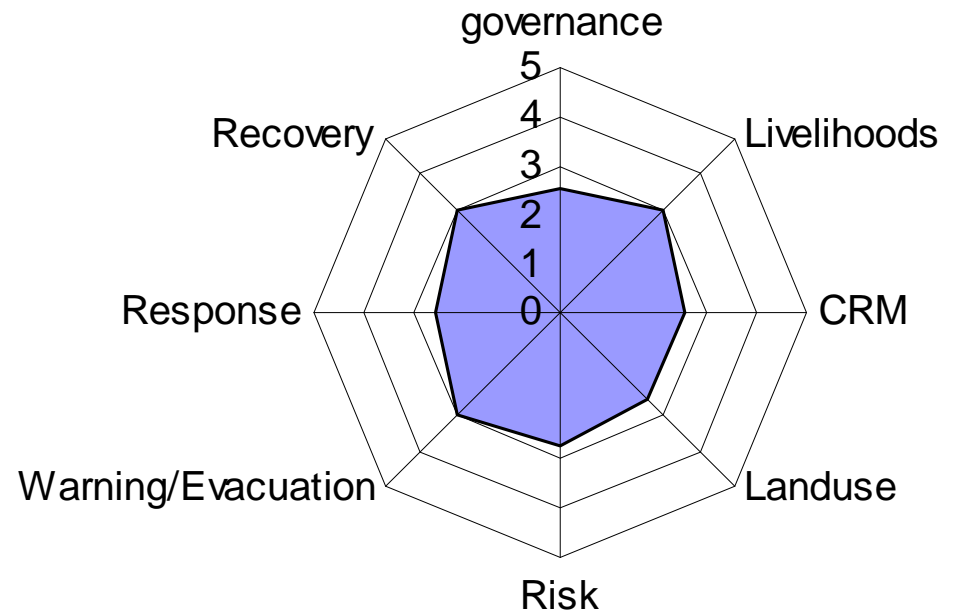
## **Disaster recovery plans and process (short and long term)**

- Short term recovery: sectoral focus on housing, fisheries, agriculture.
- Long term recovery: some infrastructural long term agency plans.
- TAO has some long term infrastructure recovery plan for projects

Elements	Benchmark issues	Status
<b>Governance</b>	<b>Plans</b>	▲
	<b>Collaboration</b>	▼
	<b>Services</b>	■
	<b>Resources</b>	▼
<b>Socio-economy &amp; Livelihoods</b>	<b>Diverse Programs</b>	▲
	<b>Technical and Financial Resources</b>	▲
	<b>Social Networks</b>	▲
<b>Coastal Resource Management</b>	<b>Institutions</b>	▲ ■
	<b>Habitat Protection</b>	▲ ■
	<b>Restoration</b>	▲
<b>Land use &amp; Structure</b>	<b>Landuse plans</b>	▲ ■
	<b>Structures</b>	▲
	<b>Monitoring and implementation</b>	■
	<b>Redevelopment</b>	▲
<b>Risk Knowledge</b>	<b>Risk Assessment</b>	▲
	<b>Use of information</b>	▲
	<b>Risk communication</b>	■
<b>Warning and evacuation</b>	<b>Warnings</b>	▲
	<b>Systems disseminate warnings</b>	■
	<b>Evacuation</b>	▲
	<b>Outreach</b>	■
<b>Emergency response</b>	<b>Incident Command System/protocols</b>	■
	<b>Emergency Facilities</b>	■
	<b>Drills and training</b>	■
<b>Recovery</b>	<b>Disaster recovery process</b>	▲
	<b>Disaster recovery plans and process (short and long term)</b>	■

# Overall scores and action planning priority

- “Medium status” on:
  - Warning and Evacuation
  - Recovery, and
  - Socio-economy & Livelihoods
- “Low status” on:
  - CRM,
  - Landuse
  - Risk Knowledge, and
  - Governance.
- The overall resilience of the community indicates a “medium” status.



## Action planning priority:

**“Low status elements” require immediate action planning and “medium status” elements require further improvement and further development with continued monitoring and evaluation for both.**

**Thanks.**

**And a reflection from Ranong coastline....**