

Pesisir Selatan - DRR Action Plan Workshop, Painan 21 & 22 April 2015



Participants, Pesisir Selatan Action Plan Workshop

As part of the Strengthening Indonesian Resilience: Reducing Risk from Disasters ([StIRRRD](#)) program, a two-day, Disaster Risk Reduction (DRR) Action Plan workshop was held in [Pesisir Selatan](#) on the 21 and 22 April 2015.

About 40 participants from the government agencies, including representatives from the Police, Military, Bappeda (Planning), Transport, Social Agency, Environmental Agency, Water Resource Management Agency, Forestry, Energy, and Mineral Resources Agency, Public Works, Health and staff of the District BPBD attended the workshop. The head of the District Parliament attended the workshop as did two representatives of local village Disaster Preparedness Groups. The Red Cross was the only NGO that participated (see [List of Participants](#), Appendix 1). Seven women attended the workshop.

The StIRRRD team, comprising staff from University of Gadjah Mada (Indonesia), GNS Science (New Zealand), and Andalas University (UNAND) facilitated the workshop. Simultaneous translation from Bahasa Indonesian to English and vice-versa was provided.

The purpose of the workshop was to draft a DRR-specific, collaborative Action Plan, formulated by the district government representatives, with input from Andalas University (UNAND) and NGO's. The development of the plan utilises components of the Yonmenkagai System Method (YSM - UGM, 2013). The translated results from the [YSM discussion](#) are included as Appendix 4 and a draft Action Plan will be developed from this and through further refinement via a study visit to New Zealand and a second follow up workshop, before being presented to the local parliament for budget approval.

The workshop included an opening ceremony, and a mixture of presentations, discussion sessions, group exercises and a half day field trip to see the district hazard and risk issues. The [workshop agenda](#) is given as Appendix 2. Two workshop booklets that contained the [presentations](#) and short related [papers](#) were provided and are included as Appendix 3. The participants completed a post-[Workshop evaluation](#) survey, the results of which are given as appendix 5.

A [Women's Focus group discussion](#) on DRR was held on the 23 April 2015 and notes from that are given in Appendix 6.

The StIRRRD team met the Secretary of the District parliament to engender support for the Action Plan initiative.

1.0 WORKSHOP DAY 1 – 21 APRIL 2015

1.1 Opening ceremony

The workshop was officially opened by head of Head of District (Bupati). His speech referred to the hazards and risks in Pesisir Selatan which include earthquake, tsunami, flood, fire, landslide, coastal erosion and the lack of preparedness within the district.

1.2 Setting the Hazardscape

Pak Prinurdin, Head of BPBD and Martawijaya Rajo Bagampo, Head of the District Parliament described the hazardscape of Pesisir Selatan. Floods are the most common disaster in Pesisir Selatan, particularly in the south on broad low lying coastal plains. Illegal logging leaves much debris carried by flood waters. Forest Fire is another seasonal hazard and there were 56 forest fires in 2014. They would like to have 1 fire truck per sub-district.

There is a limited budget for community awareness and education at present. The BPBD attempt to socialise impacts to the community via football games, Friday prayers etc. but is predominantly response focussed.

There are ~160000 people exposed to tsunami in the district. They would like to build more tsunami evacuation shelters but funding is limited. They also need to have decent roads that lead away from coast as tsunami evacuation routes, or some steps and paths to go up the hills as alternative.

BPBD budget for 2015 is IDR11.0 B rupiah (~USD\$825 k).



From left, Prinurdin (BPBD), Martawijaya Rajo Bagampo (Head DPRD) and Dr Abdul Hakam (UNAND).

1.3 Andalas University (UNAND) and DRR in Pesisir Selatan

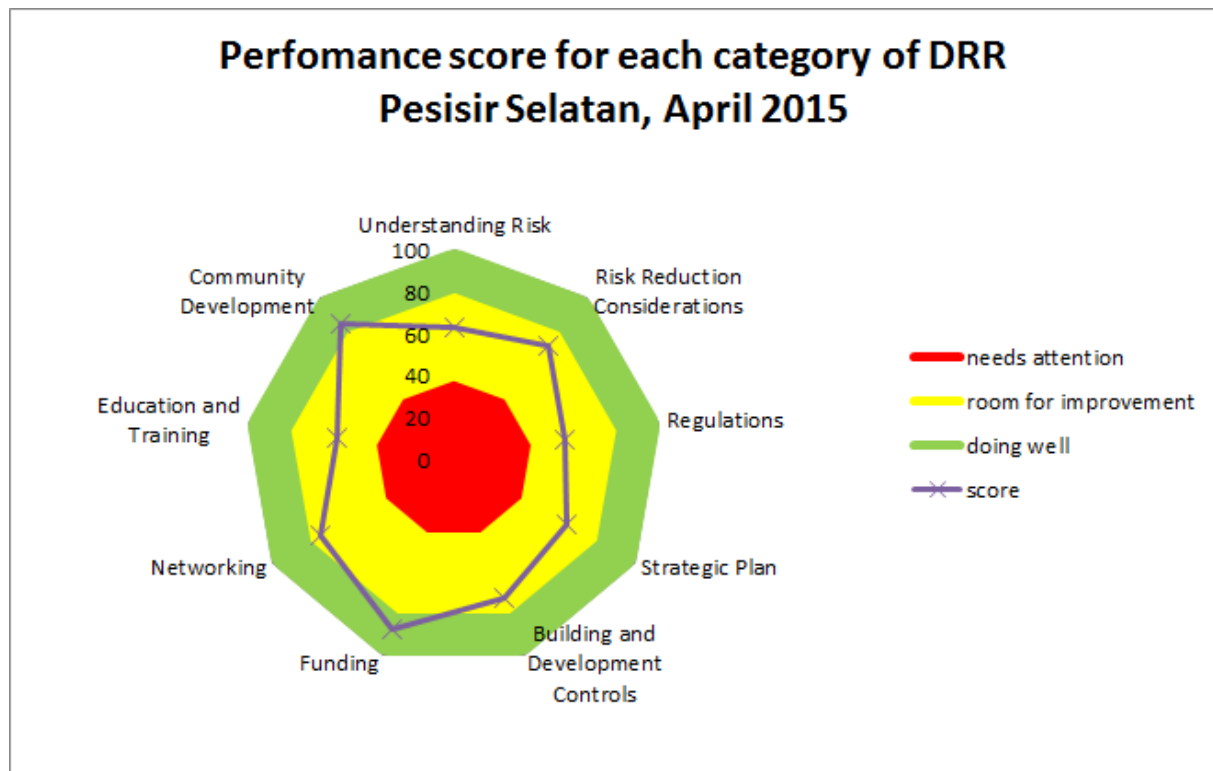
[Abdul Hakam](#), director of the UNAND Centre for Natural Disasters outlined the University's role in DRR. Their focus is on education, preparing students to become agents for DRR in their field of expertise to reduce impacts among the community. Students include medical, agriculture, civil, engineering. There is a student disaster committee (Komite Siaga Bencana Mahasiswa) and 2 members attended the workshop. The student's research is still under-utilised and sits in reports and on the website. They need to be collated and disseminated.

Andalas have compared tsunami evacuation for Bengkulu and Pessel/Padang in 2007 in collaboration with the Japanese and this included consideration of routes – roads and paths to shelters.

1.4 DRR – Self Assessment Tool Survey

Participants of the Introductory workshop, held in November 2014, were used to trail the Local Government – Self Assessment Tool (LG-SAT) being prepared by the StIRRRD programme, specifically to measure DRR activity. The tool is part of a suite of measurement tools for the effectiveness of the implementation of the StIRRRD programme in each District over the next few years. Each of the participants completed a LG-SAT survey, to assess the level of risk reduction activity (as opposed to preparedness, response and recovery). The results were presented back to workshop by Dr Esti Anantasari, and are summarised in the radar diagram given below. The Assessment found that:

- There is good funding for DRR
- The Community are being engaged in DRR practice
- More work is needed on identification of vulnerable groups
- Education and training requires improvement and DRR is not yet integrated into local schools
- Understanding risk and how to reduce needs improvement. While BPBD risk/hazard maps exist, they are not well distributed
- Regulations, building and Development controls and DRR Strategic planning need addressing



Summary of the DRR environment in Pesisir Selatan 2015, based on a DRR Local Government – Self Assessment Tool Survey

1.4.1 Discussion

Key points from the following discussion included

- There were a lot more agencies at the introductory workshop which suggests that the coordination between agencies is not good.
- It is difficult to address DRR when can't deal with seasonal hazards e.g. 2014 fires, floods.
- Regional level Spatial Plans were completed in 2010. Detailed plans are finished but are restricted to areas with lots of activity.
- Socialisation with the community hasn't been done well because the community still thinks these regulations don't exist.

1.5 DRR Presentations

A series of technical presentations, targeted at hazard issues identified in the Introductory Visit held in November 2014, were given by the StIRRRD team. [Presentations](#) and related [papers](#) that were distributed at the workshop are given in Appendix 3.

- [Earthquake hazards](#) in Western Sumatra and Pesisir Selatan -Phaedra Upton (GNS Science).
- [Tsunami hazard](#) associated with the Sunda Tectonic margin - Gegar Prasetya (UGM)
- [Earthquake design for buildings and infrastructure](#) - Prof Iman Satyarno (UGM)
- [Hazard maps](#) and GIS tools - Dr Wahyu Wilopo
- [Flood and water resources management](#) - Dr Djoko Legono
- [Landslide mitigation and early warning systems](#) - Dr Faisal Fathani, UGM
- [Social and cultural aspects of DRR](#) – Dr Esti Ananstari UGM
- [Challenges for local government in implementing DRR](#) – Phil Glassey, GNS Science

1.6 SMG comparative risk assessment

A group exercise ranked the risks of Pesisir Selatan using a Seriousness, Manageability and Growth, [\(SMG\) method](#) developed in New Zealand, which is used by local authorities to rank hazards in terms of risk. This is a qualitative method and considers the impacts of the hazard in terms of deaths and injuries, damage to infrastructure, economy and the environment. The ability of the local emergency response unit to deal with the hazard (Manageability) and whether there are secondary or on-going issues related to hazard (Growth, e.g. Climate change, disease) are also assessed. The [SMG method](#) and exercise are given in the workshop booklets (Appendix 3).



Participants work on the SMG Analysis

Table 1: SMG scores from the group exercise

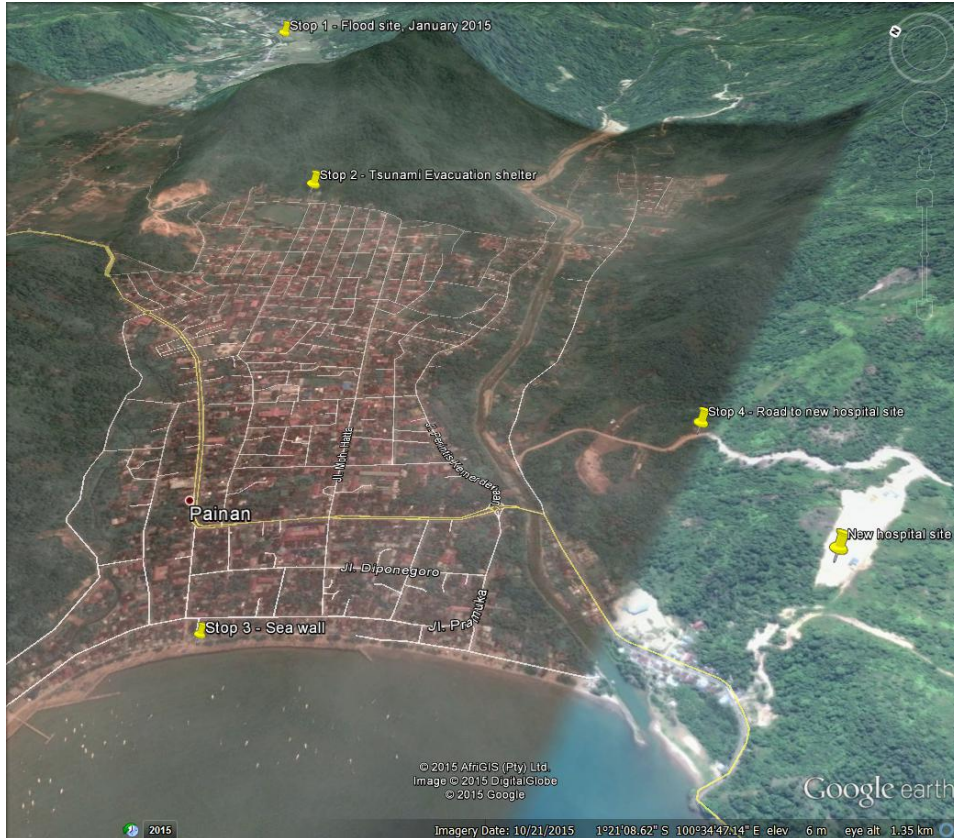
Hazard	Seriousness					Manageability					Growth Subtotal	Total
	Social	Infrastructure	Economic	Nature	Subtotal	Reduction	Preparedness	Emergency Response	Recovery	Subtotal		
TSUNAMI												
Group I	4	4	4	5	17	3	2	2	2	9	3	29
Group II	5	5	5	4	19	3	4	3	4	14	5	38
EARTHQUAKE												
Group I	3	4	4	4	15	3	2	1	2	8	4	27
Group II	4	4	3	3	14	4	3	4	5	16	5	35
FLOOD												
Group I	3	3	3	4	13	3	2	1	2	8	3	24
Group II	3	3	1	2	9	3	3	3	4	13	4	26
Group III	3	4	4	3	14	1	1	2	3	7	3	24
LANDSLIDE AND DEBRIS FLOW												
Group I	3	3	3	4	13	3	2	1	2	8	3	24
Group II	3	2	2	3	10	2	1	1	3	7	2	19

Part of the SMG process is to discuss the impacts from different stakeholder perspectives, and the SMG exercise resulted in groups ranking the risks from various hazards differently as shown in table. However earthquake and tsunami were considered as hazards likely to have the greatest impact.

2.0 WORKSHOP DAY 2 – 22 APRIL 2015

2.1 Field Visit – Contextualising the issues

A half day field trip organised by the BPBD, was an opportunity to contextualise the hazards discussed the previous day. A map of Painan showing sites visited during fieldtrip is given below.



Stop 1 - Site of flooding, January 2015

Stop 2 - Tsunami Shelter.

Stop 3 - Sea wall

Stop 4 – New Hospital Road

Map of field visit sites around Painan

2.1.1 Stop 1 – River, flooded in January 2015



2.1.2 Stop 2 Tsunami shelter

The hillslope behind Painan has been enhanced into a natural tsunami shelter by the addition of steps and platforms which can be used in the event of a tsunami. An adjacent building houses emergency medical supplies, food and water.



2.1.3 Stop 3 Sea wall

A new sea wall has been built along the water front. It is likely that permanent development will occur on land reclaimed behind the wall



Stop 4: Road to proposed site of new hospital (NB: only GNS and UGM with BPBD)



The access road to the new hospital site is rough and has required the cutting of steep batters and crosses two steep gullies. There appear to be a number of issues with this site:

- It is on the other side of the river from most of the town and potentially can be cut off from the town in flood, tsunami or earthquake.
- The road to the site is very steep and will be prone to landslides.
- The road crosses two steep gullies/side streams which will flood in heavy rain.



2.2 Action Plan development using Yonmenkaigi (YSM)

The [Yonmenkaigi System Method](#) (Universitas Gadjah Mada, 2013) is a tool to develop a collaborative Action Plan among many stakeholders. It is structured around 4 aspects; human resources, organisations and relationships, activities, and finances and actions designed to achieve a stated DRR objective. Three groups worked through different DRR objectives (Appendix 4). Plans and ideas were placed on a timeline using post-it notes, e.g., activities that can be achieved in 6 months, 1 year and 2 years. Once the chart has been populated, the sides debated with each other to refine the plans with discussion resulting in moving of actions, sometimes swapped from one aspect to another or combined. Finally a spokesperson presented the chart to the whole room for further debate and refinement.

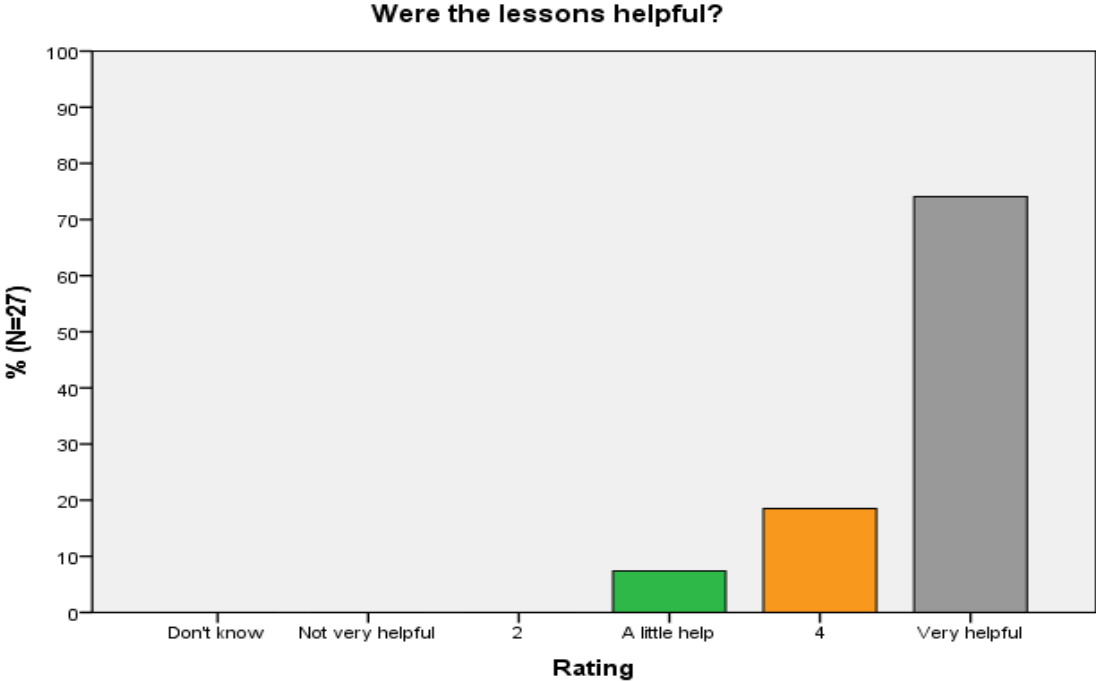
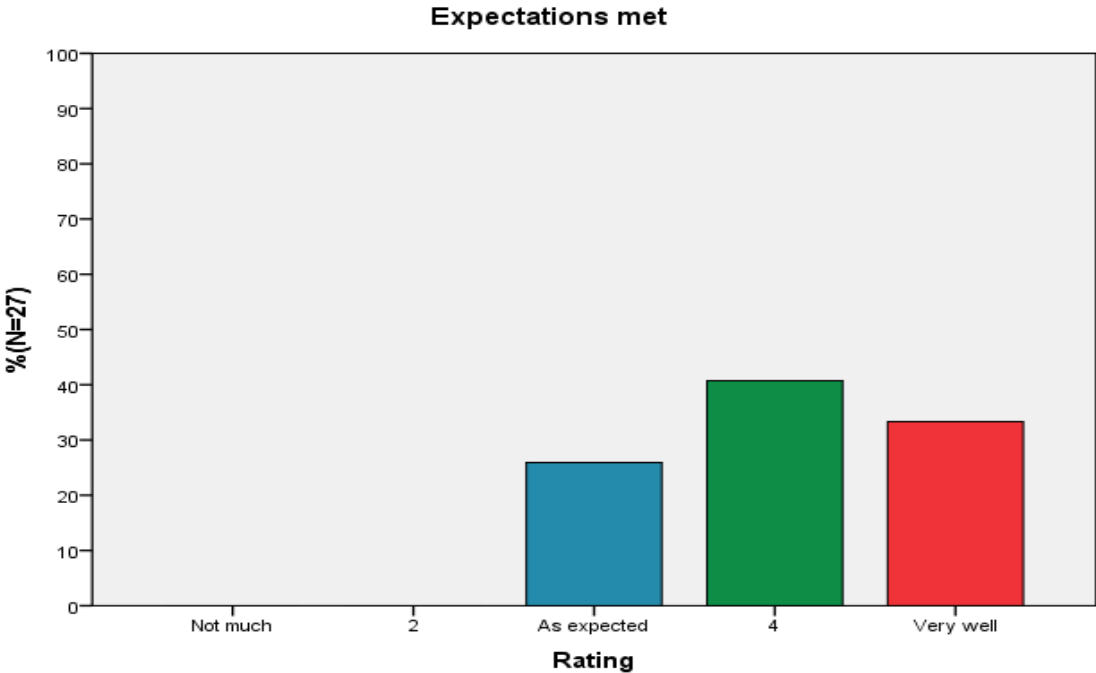
These actions have been collated (see [appendix 4](#)) and will be used to form the basis of an Action Plan. The draft plans will be revised during and following a New Zealand Comparative study visit in June 2015, before being finalised in a workshop and presented to the district parliament.



Participants work through the YSM method to develop draft Action Plan

3.0 KEY OBSERVATIONS

- There was support for DRR and the Activity from the head of DisatRICT and from the head of parliament who engaged in the workshop.
- There was a good turnout of various local government staff at the workshop, but there could have be more departments represented. The YSM Action Plan session seemed to be dominated by the BPBD staff.
- There seems to be significant DRR initiatives happening in Pesisir Selatan, however they seem a little uncoordinated and disparate.
- There was keenness to deliver socialisation initiatives but limited detail on what this means and what socialisation looks like. There is limited budget for community awareness and education.
- In general the participants considered that the workshop met or exceeded expectations and the lesson learnt would be very helpful in there work



4.0 REFERENCE:

Univeristas Gadjah Mada 2013: *The Guidebook of Yonmenkaigi System Method. Buku Panduan Yonmenkaigi*. Universitas Gadjah Mada – Community Development Team, Civil and Environmental Engineering Department. 59 p.

Appendix 1: [List of Participants](#)

Appendix 2: [Workshop agenda](#)

Appendix 3: Workshop [presentations](#) and [papers](#)

Appendix 4: [Yonmenkaigi Results](#)

Appendix 5: [Post Workshop Evaluation](#)

Appendix 6: Transcript of the Women’s Focal Group Discussion