

**Six Monthly Report  
1 July – 31 December 2017  
Strengthened Indonesian Resilience:  
Reducing Risk from Disasters  
(StIRRRD)**

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**GNS Science International Consultancy Report 2018#1**



***Strengthened Indonesian Resilience:  
Reducing Risk from Disasters  
(StIRRRD)***



Universitas Gadjah Mada,  
GNS Science International,  
Ministry of Foreign Affairs and Trade (MFAT)  
New Zealand Aid Programme



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### **BIBLIOGRAPHIC REFERENCE**

Daly M, Fathani TF, Riches S, Ediningtyas F, Wilopo W. 2018. Six Monthly Report 1 July – 31 December 2017. Lower Hutt (NZ): GNS Science. 189. (GNS Science International Consultancy Report 2018/01).

# Six Monthly Progress Report: 1 July 2017–31 December 2017

## Strengthened Indonesian Resilience: Reducing Risk from Disasters (StIRRRD)

### Summary

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#### Activity information

Activity Title	Strengthened Indonesian Resilience: Reducing Risk from Disasters (StIRRRD)
Goal	Reduced losses from disasters
Intended outcomes Long-term	Disaster resilience strengthened and risks reduced
Medium-term	<ul style="list-style-type: none"><li>• Effective DRR<sup>1</sup> activities – improved practice</li><li>• DRR strengthening model applied to other districts</li><li>• Strengthened DRR planning and implementation by Local Government</li><li>• Improved community DRR practice</li></ul>
Short-term	<ul style="list-style-type: none"><li>• Increased stakeholder awareness and buy-in of DRR approach</li><li>• Local government staff have skills and knowledge to support DRR</li><li>• DRR Action Plans finalised</li><li>• Expert knowledge and skills applied to support DRR</li><li>• Improved community awareness of hazards and risks</li></ul>

#### Contract or grant information

Start and end dates	19 September 2014–30 September 2019
Total cost	\$7.266M
Reporting period	1 July 2017 – 31 December 2017

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<sup>1</sup> DRR = Disaster Risk Reduction

## Progress report preparation

Prepared by	Michele Daly, Teuku Faisal Fathani, Sylvia Riches, Fransisca Ediningtyas, Wahyu Wilopo.
Reviewed by	Hannah Brackley and Kelvin Berryman
Date of Report	31 January 2018
Report Number	GNS Science International Consultancy Report 2018/01

## Executive Summary

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The StIRRRD Activity continues to make good progress as it moves into Phase 2 and the remaining 18 months of the Activity.

Support for and interest in the Activity remains high among key government partners BNPB<sup>2</sup> and Kemendesa<sup>3</sup>. Bappenas<sup>4</sup> is already aligning its future work programme with StIRRRD. A focus for the remainder of the Activity will be on ensuring support from GoI partners remains high to help ensure sustainability.

The total spend to date is \$5.607 M against a budget of \$6.041M. Overall the budget is 7% underspent to the end of December 2017. Activity has increased significantly in Output 3 (Coaching and Mentoring) with two additional unplanned visits occurring in July and October 2017. However this has been at the expense of developing the Activity toolkit, local government network meetings and undertaking the first Community Project, all of which are behind schedule. The *Seismometers in Schools* Community Project is now underway and implementation is progressing in parallel with the second Community Project (*Tsunami Preparedness*). The delay will not affect overall delivery of Outputs or affect Outcomes. The progress with the Activity Toolkit is slower than expected and significant effort will be needed to catch-up. An additional local government network meeting will need to be scheduled sometime over the next 6 months.

Highlights this reporting period include improved progress in Morowali, and significant progress made in developing the scope for the Community Projects and the associated local engagement that's gone with this. The Community Projects are highly anticipated projects within their respective districts and have wide-ranging stakeholder involvement including NGOs, government agencies and local universities.

At this stage of the Activity (33 months) there are tangible impacts being seen across all 10 districts (including the pilot districts). Key impacts include new or updated Disaster Risk Management (DRM) legislation in 7/10 districts, increasing spend on

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<sup>2</sup> BNPB = Indonesian National Authority for Disaster Management

<sup>3</sup> Kemendesa = Ministry of Village Development, Disadvantaged Regions and Transmigration (formerly KPDT then KDPDPT)

<sup>4</sup> Bappenas = National Planning and Development Agency

DRM activities in 7/10 districts, and tangible improvements in Disaster Risk Reduction (DRR) Action Plan implementation in Morowali and Seluma districts, which sees them reassessed as high and mid-performing districts respectively.

Impacts in each of the StIRRRD districts are summarised in Appendix C and Results Table in Appendix D.

The focus for the next six months will be on delivering the community projects, developing the Activity Toolkit, and strengthening the StIRRRD district network. Also occurring is the MFAT-led Mid-Term Review of StIRRRD which will assist the StIRRRD team to identify areas for improved performance over the remainder of the Activity.

Additional unprogrammed tasks, such as participation in the annual national DRR event by StIRRRD this year, the Activity Mid-Term Review and supporting a visit to NZ by BNPB in March, will need additional support from MFAT, as will a couple of other additional tasks. It is recommended that the fourth Community Project be dropped in favour of supporting these additional unprogrammed tasks.

This report summarises the services delivered over the reporting period (collated from the monthly reports), and reports on progress against the costed workplan (budget), delivery of outputs, timeline, Results Framework and Action Plan implementation. Key learnings, highlights and issues are discussed.

## Summary of Services for the Reporting Period July-December 2017

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*Note: Output and sub-output numbers below correspond to those in the costed workplan (Version 9.7). More information on the services can be found in the monthly reports. District and StIRRRD impacts are listed in Appendix C.*

### **Output 0: Project Management**

(0.1) Team leadership and management is an important component of an Activity this size and complexity. With a large team split between Indonesia and New Zealand, considerable effort is required to ensure the team is functioning effectively and efficiently. A number of different team meetings are held including:

- Separate Project Team Meetings: Each of the GNS Science and UGM<sup>5</sup> teams hold regular project meetings (approximately fortnightly) to discuss progress and monitor risks etc.

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<sup>5</sup> UGM = Gadjah Mada University

- Joint UGM-GNS Project Team Meetings: A joint UGM and GNS Science Project Team meeting was held in Yogyakarta on 10-11 August. The meeting was a great opportunity for some project planning and team building. Progress was made on District Strategies, Toolbox, future opportunities for StIRRRD, Community Project planning and progressing a paper/report on the gender component of the Activity.
- Director's Meetings (involving Daly, Fathani, Wilopo, Edingtyas and Riches) are held approximately monthly, and were held this reporting period on 14 July in Padang, 25 August (via Skype), 29 September, 26 October 2017 and 14 December in Jakarta. The purpose of these meetings is to discuss project risks, emerging issues and particular issues that require quick decisions or action. Topics covered during the above meetings included:
  - Planning and Logistics for the AGG meetings.
  - Finances.
  - Reporting.
  - The DRR Awareness Week event in Sorong.
  - Community projects.
  - The visit of the Indonesian Ambassador to GNS Science in Avalon.
  - Whether StIRRRD should move across to sit under Bappenas' jurisdiction (instead of BNPB).
  - The need for clarification about the Massey University lead projects – BNPB were confused about the relationship between the two projects. The perceived risk to StIRRRD was also discussed (refer under section on risks below).
  - Prof. Dwikorita Karnawati's appointment to the Head of BMKG<sup>6</sup>. This was viewed as a positive move for StIRRRD and Gama-Inatek<sup>7</sup>.
  - GNS Science-UGM MoU and renewal of this to coincide with the President's visit to NZ in March. It was discussed that a reference to Gama-Inatek could be added to the MoU, particularly around StIRRRD and DRR.
  - Kemendesa has requested a chapter on StIRRRD as part of a book it is writing on DRR (details to be confirmed). UGM supplied a draft chapter to meet Kemendesa's tight timeframes. The final book has not been completed yet.
  - The upcoming review and UGM's role in this. It was agreed that UGM should take a lead in helping establish the itinerary and identify key stakeholders for the visit. UGM's costs to participate (flights and accommodation) are not budgeted for and additional support will be requested from MFAT.
  - The Activity Results Table and Annual Report. The tasks for compiling information needed for the Results Table and report were discussed.

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<sup>6</sup> *BMKG = National Meteorological and Geophysical Monitoring Agency*

<sup>7</sup> *GAMA-Inatek = Centre for Disaster Mitigation and Technological Innovation (at UGM)*

- Action Plan updates for the Annual Report. The tasks required for completing these for the Annual Report were discussed.
- Plans for Faisal, Wahyu and senior BNPB staff (Pak Lilik, Pak Robi) coming to NZ on the back of a visit to Sydney in March 2018. The Sydney visit is associated with the ISO<sup>8</sup> application UGM is making for their landslide Early Warning System which BNPB is sponsoring. The Sydney Visit is 11-16 March and a visit to NZ would be immediately after this (i.e. 17-19 March). It is not clear whether these dates coincide with the President's visit yet. Faisal and Wahyu recommend that Prof. Rita Dwikorita also gets invited in her capacity as Head of BMKG. They thought the Head of BNPB could also be invited. This would make the delegation a very senior one, which would be good for 60th anniversary commemorations.
- Regular monthly Province Coordinator Meetings have been established. These are conducted by Skype and discuss district specific issues. These meetings are an important way to exchange information about district impacts for reporting purposes and to discuss district specific coaching needs. Meetings were held as follows:
  - Nusa Tenggara Barat/ Central Sulawesi Teams: 27 July 2017, 15 & 19 September 2017, 5 October, 16 November 2017.
  - West Sumatra/ Bengkulu Teams: GNS Science and UGM visited Western Provinces in early July; with subsequent discussions via email and WhatsApp. Province Coordinator meetings were held on 30 August, 19 September, 16 October, 21 November and 10 December 2017.
- The programme's risk register is regularly updated and programme risks are a standing item on GNS Science's and the UGM-GNS Science project team meetings. A copy of the latest risk register is contained in Appendix F.

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<sup>8</sup> ISO = *International Standards Organisation*

(0.2) AGG Meetings: Two AGG (Activity Governance Group) meetings were held this reporting period:

- The 10th AGG meeting was held at the UGM campus in Jakarta 17 July 2017. There was good attendance from Govt. of Indonesia agencies; BNPB, Bappenas, Kemendagri (MOHA)<sup>9</sup>, and Kemendesa. Agam BPBD<sup>10</sup> also attended, representing the ALGG (Activity Local Governance Group). Attending the AGG is valuable experience for district representatives. StIRRRD team members attending were Michele Daly, Faisal Fathani, and Wahyu Wilopo. GNS Science was represented by Kelvin Berryman, UGM by Prof. Dwikorita Karnawati and MFAT by Mehaka Rountree and Firliana Purwanti. The policy matrix had been updated and a number of new district specific issues were presented. There was good discussion at the meeting, however the meeting ran out of time and consequently there were only general comments made on agenda topics such as the policy matrix and StIRRRD sustainability. In future it was agreed that 'special' AGG meetings on specific topics should be held in order to make more substantive progress. Suggestions for topics for 'special' meetings included a) Sustainability of StIRRRD, b) Toolbox and DRR Training with BNPB and c) including DRR in the National Development Plan with Bappenas. Meeting minutes have been circulated and are available again on request.
- The 11<sup>th</sup> AGG meeting was held on 15 December 2017 in Jakarta at BNPB offices (AHA<sup>11</sup> Centre meeting room) (Figure 1). The meeting was set up as a 'special' meeting as agreed at the 10<sup>th</sup> AGG meeting and focused on StIRRRD sustainability and future directions. StIRRRD team members Michele Daly, Faisal Fathani and Wahyu Wilopo attended. Unfortunately due to a late change in the date, Kelvin Berryman of GNS Science was unable to attend. There was good representation from BNPB, Bappenas, MOHA and Kemendesa, and Firliana Purwanti represented MFAT. Overall it was a positive meeting and timely given the upcoming Mid-Term Review. The Minutes are currently being finalised and will be circulated in January 2018. Preliminary outcomes included:
  - Agreement that StIRRRD was achieving good outcomes, but expectations of further progress and implementation were high.
  - Ideas for future StIRRRD directions were quite broad: maintain a local government focus; more community focus; more private sector focus; more hazard/risk assessment and participatory mapping; other perils focus; expanded university network and more effective linkages between universities and local government developed (these are still perceived to be relatively weak).
  - MoHA is becoming more involved and is keen to see some policy changes around improvements to the way local government operates (e.g. budget % for DRR; addressing staff rotation; positioning of BPBD etc). StIRRRD is contributing to the debate on what changes might be needed and there could be an ongoing role here.

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<sup>9</sup> Kemendagri = Ministry of Home Affairs (MOHA)

<sup>10</sup> BPBD = Local Disaster Management Agency

<sup>11</sup> AHA = Asean Humanitarian Agency



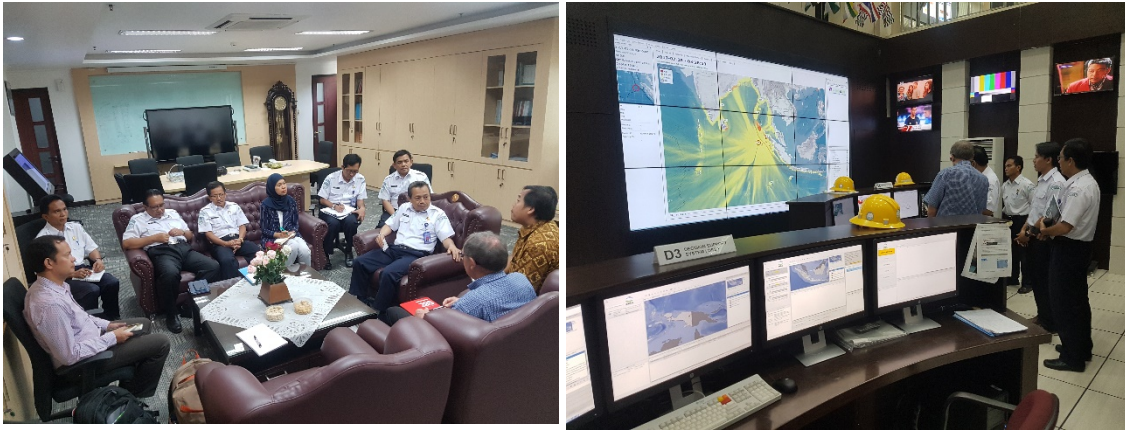
- MFAT are still working on a Partnership Agreement with BNPB under which StIRRRD sits. It can then be registered as an Activity with the Ministry of Finance.
- GNS Science, UGM and MFAT all considered that this meeting format worked in terms of being able to progress meaningful discussion on a specific topic. Progress reports were kept to a minimum and discussion time was allocated to just one issue. The downside is that often agency representatives attend for whom it's their first meeting and as a result they can be unfamiliar with the Activity.



**Figure 1** 11<sup>th</sup> AGG Meeting at BNPB offices in Jakarta. Left) Meeting Chair, Ir. Medi Herlianto, Director for Preparedness, BNPB and Ms. Firliana Purwanti, MFAT. Right) AGG meeting participants. (Source: Michele Daly, GNS Science)

(0.3) Jakarta Liaison. A number of people and organisations were met with by members of the StIRRRD team during the July and December visits to Jakarta:

- Indonesia National Platform for DRR - Trinirmala Ningrum, to find out more about the National DRR Platform, how this is or could be connected to forums at provincial and district levels, and what resources are available (e.g. ToR examples; best practice) to help the districts.
- NGO SKALA (Partnership for Sustainability) - Trinirmala Ningrum & Jojo Rahardjo, concerning the Palu-Koru Fault Expedition project and connections to the StIRRRD *Seismometers in Schools* Community Project.
- BMKG (National Meteorological and Geophysical Monitoring Agency) seeking support for the *Seismometers in Schools* Community Project (Figure 2). BMKG were very supportive and were excited about the project. BMKG's regional office in Palu will become involved in coordination meetings about the project.
- Badan SAR Nasional (National Search and Rescue Agency) to learn more about their role in preparedness and the volunteer network that is active in the community.
- Indonesian ASEAN Secretariat – HE. Jose Tavares, to explore possible connections into ASEAN for StIRRRD methodology. Activities seem response focused at present.



**Figure 2** Meetings in Jakarta: left) Coordination meeting with BMKG in Jakarta concerning the Seismometers in Schools project and right) Tour for UGM and GNS Science staff of BMKG's 24/7 monitoring facility. (Source: Michele Daly, *GNS Science*)

- NZ ASEAN Ambassador – Stephanie Lee, to explore possible connections into ASEAN. Infrastructure resilience and economics were identified as areas of interest.
- OECD Regional Office – Yulianti Susilo, to explore touchpoints and connections into the OECD (Organisation for Economic Cooperation and Development).
- Bappenas, concerning how NZ can support it to model the socio-economic impacts of disasters and assist in prioritising and quantifying DRR investment needed to lower the risk index. The StIRRRD team undertook to set up a meeting with a NZ economist to explore this further (see also below under *Other Related Activities*).
- BNPB Training Centre, concerning how the StIRRRD Toolbox can support their DRR training programme. It was apparent that not a lot was known about StIRRRD by the Training Centre staff, and this will need to be addressed. The StIRRRD team would ultimately like BNPB staff's direct involvement in the Toolbox development. BNPB mentioned the need for a disaster risk assessment training module that they could add to their existing suite of training modules.

- Prof. Ir. Masyhur Irsyam, Head of the Research Centre for Disaster Mitigation, ITB & Ir. Lutfi Faizal, Head of Standardisation and Cooperation Division for the Ministry of Public Works and Housing (Figure 3). The meeting discussed the Global Earthquake Model and Indonesia's possible membership of this consortium, but also directions for future projects involving StIRRRD. Prof. Masyhur commented on the reduced support from NZ in the building code and EQ hazard areas, a gap which Australia had since filled. There remain gaps in the ability of Indonesia to cope with the burgeoning construction sector. In Jakarta an Advisory Board has been set up to provide oversight of buildings higher than 8 storeys, but buildings smaller than this remain un-checked, creating a significant vulnerability. Prof. Irsyam and Dr. Faizal hold the view that the Indonesian Government would rather not know about active faults in the Jakarta area and the local EQ engineering community is encouraging international experts to publish this information. The pair confirmed that national risk modelling studies would be a benefit for risk communication purposes and to assist with political buy-in to the problem.
- UN-OCHA<sup>12</sup> Coordination Meeting – convened by Oliver Lacey-Hall (Figure 3). The StIRRRD team were observers at this regular meeting for DRM related agencies in Jakarta. The meeting provided updates on security, humanitarian activities and hazard alerts (e.g. Mt Agung in Bali). A significant presentation of relevance for StIRRRD was given by Pak Yoga on Bappenas' Disaster Management Master Plan 2015-45. Copies of the presentations given can be found at the following link: <https://drive.google.com/drive/folders/1Eq6yC0HWK5BYclTMnhvBIgi8UcdefbSg?usp=sharing>
- LIPI (National Institute of Sciences) - Irina Rafliana, about the *Seismometers in Schools* project and LIPI's ongoing involvement. UGM is to send a letter confirming LIPI's involvement. Irina confirmed her ongoing involvement despite taking on further studies next year.
- Bappenas - Arum Sudjatma, about the next stages of scoping up the economic modelling project discussed at the meeting in July. Ms Sudjatma will prepare an outline of next steps to circulate internally and externally. These include holding a discovery workshop with GoI stakeholders to see what current models exist and getting a team of NZ modellers out to Indonesia to look at the suitability of underlying datasets and the currency of existing models.

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<sup>12</sup> UN-OCHA= United Nations Office for the Coordination of Humanitarian Affairs



**Figure 3** Meetings in Jakarta: left) with Prof. Ir. Masyhur Irsyam, ITB & Ir. Lutfi Faizal, Ministry of Public Works and Housing, and their newly published book on Indonesia's EQ Hazard, and right) at the UN-OCHA Coordination Meeting. (Source: Faisal Fathani, UGM)

(0.1) Meetings with MFAT: There were several meetings this reporting period.

- StIRRRD team members met with Mehaka Rountree and Firliana Purwanti of MFAT (Jakarta Post) on 17 July 2017 to discuss programme progress. Particular topics for discussion included post-StIRRRD projects, StIRRRD sustainability and exit strategy. These areas will require focus over the next 18 months. It was suggested that the best way to ensure sustainability of the Activity was to enter into a non-financial Partnership Arrangement between MFAT and BNPB, such as has been achieved for the National Disaster Response Framework Activity. This may take some time to put in place. An engagement strategy with the Indonesian Government (mainly BNPB) was identified as a priority and both MFAT and STIRRRD project directors will be giving this attention over the coming months. The team also had the opportunity to meet with HE Trevor Matheson who appreciated a project update.
- GNS Science team member Michele Daly (with other GNS Science staff), met with Courtney Rose, Simon Webber and Katharine Biggs of MFAT (Wellington) on 22 August to discuss a range of topics including the AHA Centre Training, GNS Science-MFAT services level agreement and StIRRRD. StIRRRD was discussed in the context of sustainability and how to start identifying post-StIRRRD projects which might support sustainability or meet other GoI priorities. It was suggested that a meeting on this be held after the NZ October general election. *Note: this meeting has now been superseded by the Mid-Term Review.*

- A meeting was held with Firlina Purwanti and Courtney Rose on 14 December in Jakarta to discuss StIRRRD budgets. Faisal Fathani, Wahyu Wilopo and Michele Daly were in attendance from StIRRRD. With the Review and other upcoming 'additional-to-scope' activities, it was looking likely that the fourth Community Project would have to be sacrificed to undertake these other important activities. The StIRRRD team is in the process of preparing costings for the additional activities and look at whether these costs can be met within the \$89K envelope of the fourth Community Project. If not, a decision will be needed on what additional tasks to drop, or whether MFAT can provide additional funding for tasks such as attendance at the National DRR Awareness week in Medan in October 2018.
- Michele Daly met with Elliott Kirton, Courtney Rose and Simon Webber on 6 December in Wellington. This meeting discussed:
  - Synergies and collaboration between MFAT's DRM projects (StIRRRD, NDRF, and the new Massey University project),
  - Upcoming RfP for DRM work in the Philippines.
- MFAT advised GNS Science in November of their intention to undertake a Mid-Term Review of StIRRRD. StIRRRD team members have been involved in contributing to the scope of the review and the work plan. UGM in particular will be heavily involved in the review, the majority of which will take place in Indonesia in February 2018.

(0.4) Communications Plan. On Wednesday 27 September, the Indonesian Ambassador H.E. Mr Tantowi Yahya and embassy officials visited GNS Science offices in Wellington to meet with members of the GNS Science Executive (Figure 4). While focusing on StIRRRD and our DRR projects in Indonesia and Asia, the meeting also discussed opportunities in the geothermal and groundwater spaces. Ambassador Yahya signalled that Indonesia was keen to grow its linkages with NZ in the DRM space. He invited the StIRRRD team to send a delegation to talk to the Indonesian parliament about the project. There is also likely to be a parliamentary delegation from Indonesia prior to a visit by Indonesian President Joko Widodo in 2018 to mark the 60th anniversary of a bilateral agreement between Indonesia and New Zealand. NZ based StIRRRD team members are working with the Embassy on ideas to mark the occasion. Ideas to date include:

- refresh the MoU between GNS Science and UGM – this may result in a visit to NZ by the UGM Rektor or Vice-Rektor for the signing,
- establish a more formal relationship with the Indonesian Institute of Sciences (LIPI),
- establish a formal cooperation arrangement between Wellington and Padang cities (linked by the Tsunami Blue Line projects), followed by an exchange visit,
- establish an MoU between GNS Science and BMKG (Bureau of Meteorology, Climate and Geophysics),
- support a visit to NZ by senior BNPB and UGM StIRRRD staff for discussions about extensions to StIRRRD and/or other projects,



- Support the Embassy to host a field trip to selected Wellington sites for the President (Tsunami Blue Line and seismic strengthening examples).
- Ambassador Yahya and his party were also given an overview of the work of GeoNet by GeoNet Public Information Specialist Emily Lambie (Figure 4).



**Figure 4** (left) Emily Lambie providing an overview of GeoNet for the Indonesian Embassy delegation, and (right) GNS Science Chief Executive Ian Simpson and H.E Tantowi Yahya exchanging gifts. (Source: Michele Daly, GNS Science)

(0.4) Communications Plan: There was a lot of social media activity during the DRR Month in Sorong, West Papua (October 2017) and during the initial eruption of Mt Agung near Bali (November 2017). During the period a total of fifteen Facebook and sixteen Twitter posts were made. Notably, Twitter impressions increased by 706%, largely as a result of tweets during the National DRR month event and during the initial eruption of Mt Agung.

**Table 1** StIRRRD Social Media Metrics January 2017 – December 2017

<b>Facebook</b> impressions from page posts	Jan – June 2017: 4,261 July – Dec 2017: 5,648 This equates to a 33% <u>increase</u> in total <b>Facebook</b> reach over the last period.
<b>Facebook</b> Page likes:	Jan – June 2017: 183 July – Dec 2017: 197 This equates to an 8% <u>increase</u> in total <b>Facebook</b> likes over the last period.
Total number of <b>Twitter</b> impressions from tweets:	Jan – June 2017: 6,080 July – Dec 2017: 48,985 This equates to a 706% <u>increase</u> in total <b>Twitter</b> reach over the last period.
Total number of <b>Website</b> visits:	Jan – June 2017: 1,104 July – Dec 2017: 1,059 This equates to a 4% <u>decrease</u> in total <b>Website</b> visits over the last period.

- Five blog posts were added to the StIRRRD website during the reporting period:
  - 2 July: May a shaky month for Central Sulawesi: <https://stirrrd.org/2017/07/02/may-a-shaky-month-for-central-sulawesi/>

- 2 August: Coaching and mentoring in West Sumatra and Bengkulu: <https://stirrrd.org/2017/08/02/coaching-and-mentoring-in-west-sumatra-and-bengkulu/>
  - 22 August: August earthquake shakes Bengkulu: <https://stirrrd.org/2017/08/22/august-earthquake-shakes-bengkulu/>
  - 18 September: DRR action plan activities progressing well in Morowali, Central Sulawesi: <https://stirrrd.org/2017/09/18/drr-action-plan-activities-progressing-well-in-morowali-central-sulawesi/>
  - 24 November: National DRR month event: Sorong, West Papua: <https://stirrrd.org/2017/11/24/national-drr-month-event-sorong-west-papua/>
- Fifteen Facebook and sixteen Twitter posts were made in the reporting period. Facebook postings included information about the appointment of the new Head of BMKG (Prof. Dwikorita Karnawati), StIRRRD's attendance at the National DRR Month in Sorong (including an overview and a range of posts from the event) and the eruption of Mt Agung in Bali.

(0.4) Communications Plan: A presentation on StIRRRD was given at the 10th Australasian Natural Hazards Management Conference in Perth, Australia on 1 November 2017 (Figure 5). The presentation focussed on the university network that has been established as part of StIRRRD as an important tool to enable increased information about local issues in support of local government. A copy of the presentation can be found as an attachment to the November monthly report.



**Figure 5** Michele Daly presenting on StIRRRD at the 10<sup>th</sup> Australasian Natural Hazards Management Conference in Perth, Australia, November 2017. (Source: Hannah Brackley, GNS Science).

(0.4) Communications Plan: On 14 November, Esti Anantasari gave a live interview on the Radio Republic of Indonesia (RR1) about the socio-cultural perspective of DRR and lessons learned from StIRRRD (Figure 6). There were several callers, male and female, during the interview who asked some questions or gave feedback on using a

cultural approach for DRR. All of the callers agreed that capacity building is important for DRR.



**Figure 6** Top) Esti Anantasari at the RRI PRO1 office during a live radio interview, Bottom) StIRRRD team members Esti Anantasari and Arry Geld at the RRI PRO1 radio station. (Source: Arry Geld, UGM).

(0.4) Communications Plan: StIRRRD was in the news in Palu with respect to one of the Community Projects (*Seismometers in Schools*). A project coordination meeting facilitated by UGM (Esti Anantasari and Agung Setianto) and with support from Irina Rafliana (LIPI), was held in Palu on 12 October 2017. The project was profiled by the local media (Figure 7). According to the media, the local government and schools were very happy and support was high for the project.





**Figure 7** Media article referring to StIRRDR's Seismometers in Schools Community Project. (Source: UGM).

(0.4) Communications Plan: Michele Daly gave an update on StIRRDR for the NZ Natural Hazards Business Cluster on 29th August 2017. She also gave a presentation on StIRRDR at the following meeting on 19th September 2017 at which the Indonesian Ambassador was present. More information on the cluster can be found here: <http://www.naturalhazards.co.nz/>

(0.4) Communications Plan: A presentation on StIRRDR was given by Michele Daly to about 25 participants at the Palu-Koru Fault Seminar at BPPT (Agency for the Assessment and Application of Technology) offices in Jakarta on 14 December 2017. Participants ranged from NGOs to UNESCO staff to technical staff from BPPT. A copy of the presentation can be found as an attachment to the December monthly report.

(0.4) Communications Plan: StIRRDR team members Faisal Fathani and Wahyu Wilopo travelled to Manila for the UNESCO-JASTIP Symposium on 16 November (Figure 8). Faisal presented about DRR including four slides on StIRRDR. UGM's GAMA-InaTEK has officially joined the UNESCO-JASTIP group, providing further opportunities to promote StIRRDR to the international community.



**Figure 8** Pictures from the UNESCO-JASTIP Symposium. Faisal Fathani presenting about DRM and StIRRRD (top) and the Symposium attendees (below) (Source: UGM)

### ***Output 1: Activity Toolkit***

(1.1) The development of the Toolkit is progressing. Draft case studies, guidance notes, and the various tools and templates used in StIRRRD are being collated in one place. A spreadsheet identifying the various tasks required has been prepared and GNS Science and UGM team members assigned to write up various case studies and guidance notes and drafting the proposed structure for the web page.

(1.1) An initial meeting with the BNPB Training centre has been held to ensure alignment of the Toolbox with BNPB's other training material. This initial meeting will need to be followed up by a series of working meetings, possibly also including a workshop at BNPB to showcase StIRRRD to staff who may not know about the Activity. Ideally BNPB staff would have direct involvement in Toolbox development and/or testing the Toolbox concept.

(1.1) The Massey University team was in Indonesia the week of 30 October 2017 to progress an Activity Design for the e-learning component of the AHA Centre Training.

Richard Woods from the StIRRRD team was in Jakarta and met with members of this team to explore any connectivity with the StIRRRD Toolbox. The former project is response focussed and there does not seem to be any obvious synergies between the two projects at the current time.

### ***Output 2: Risk Reduction Network Support***

(2.8) StIRRRD team members and representatives from across StiRRRD districts attended the national DRR month event held in Sorong, West Papua on 23 to 24 October 2017 (Figure 9). The first morning consisted of an opening ceremony and speeches by dignitaries including an update on the BNPB forward work programme from Willem Rampangilei, Head of BNPB. During the afternoon, StIRRRD hosted a special session on DRR and international cooperation. Two sessions were held with a focus on cooperation at the national level and international assistance with DRR implementation in the districts. Presenters at the respective sessions included:

- Session 1
  - Drs. Sumedi Andono Mulyo, Director of Disadvantaged Areas, Transmigration and Rural Areas, Bappenas
  - Richard Woods, Natural Hazards Risk Management Specialist, GNS Science
  - Lilik Kurniawan, Director Disaster Risk Reduction, BNPB
- Session 2
  - Akris Mohamad Yunus Fattah, Head of BPBD, Donggala
  - Selupati SH, Head of BPBD, Bengkulu
  - Drs Zainal Abidin, Head of BPBD, Sumbawa
  - Henry, BPBD Head of Prevention and Preparedness, Padang
- Presentations from Lilik Kurniawan (BNPB) and Sumedi Andono Mulyo (Bappenas) discussed their respective DRR work programmes. Of note, Dr. Sumedi discussed the strong alignment between the StIRRRD programme and Bappenas work programme over the next few years. In addition, he highlighted the potential for future collaboration on modelling the economic impact of disasters for cost-benefit analyses using existing New Zealand economic models.



**Figure 9** (left) Opening ceremony of the national DRR month event in Sorong, October 2017, and (right) StIRRRD special session one presenters hosted by Teuku Faisal Fathani, UGM (right). (Source: UGM)

- In the latter session, presentations from BPBD in Donggala, Bengkulu, Sumbawa and Padang provided insights into the strengths and challenges that each district has faced during DRR Action Plan implementation.
- On the second morning, StIRRRD Director Teuku Faisal Fathani presented on lessons and good practice from the implementation of early warning systems to detect land movement. Dr. Fathani presented alongside Dr. Sumedi Andono Mulyo, Usman Firdaus (Kemendesa sub-directorate Head) and Medi Herlianto (BNPB Director of Readiness).

**Output 3: Coaching and Mentoring Support**

(3.2) Table 2 contains a summary of contacts UGM made with the districts during the reporting period and a brief description of topics covered. Contact was made by phone, email and via the *WhatsApp* smartphone App.

**Table 2** The UGM Team has been in communication (phone, email, WhatsApp smartphone App) with the Head and staff of BPBDs of the following districts and associated Universities (UNAND, UNIB, UNRAM UNTAD)<sup>13</sup> on the dates given below regarding the activities shown.

District	Month					
	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
<b>Agam</b>	4, 5, 10, 11, 22	2, 29	1, 10, 26-30	1, 5, 8, 10, 14, 22, 23	12, 26	15
<b>Bengkulu</b>	5, 5, 8, 10, 24	13, 15	21, 25	5, 9, 12, 19	20	12, 16
<b>Donggala</b>	10	1, 4	18, 27	16, 17, 26	15	8
<b>Mataram</b>	10, 12, 17, 21, 24	4, 6, 9, 21	20	1, 10, 16-20	6, 22, 26	8
<b>Morowali</b>	3, 7, 10, 12, 31	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 18, 21, 22, 29	15, 25	26	15	n/a
<b>Pesisir Selatan</b>	6, 7, 10, 11, 12		18, 20, 23	3, 9, 16, 17	12, 13	12
<b>Seluma</b>	3, 7, 23	8, 29	6, 7, 12	13	19, 22, 23	2, 15
<b>Sumbawa</b>	10, 17, 19, 24	9	20	1, 9, 10, 16, 19	6	8
	Preparation for July visit.	Seismometers in School Community Project	Seismometers in School Community Project	Preparation for DRR Month in Sorong in October 2017	Seismometers in School Community Project	Seismometers in School Community Project
	Tsunami Community Project	Progress of Action Plan Implementation	October visit	Seismometers in School Community Project	DRR programs for 2018	Natural events – high tide in toale & Solubomba villages. Condition of Mataram & Sumbawa during rainy season.
	Lecture	Preparation for Mini Hazard 101 Workshop	Progress of Action Plan Implementation	October visit	UNRAM monitoring during high rainfall and impact of Mt Agung eruption	BPBD budget for 2018
	Progress of Action Plan Implementation	August visit	Materials request	Action Plan Implementation	DRR activities & event	Action plan progress.
	Staff rotation.	Disaster preparedness in schools	Contingency plan for flood, drought and landslide	Materials request	Tsunami Community Project	BPBD plan for 2018

<sup>13</sup> UNAND (Andalas University), UNIB (Bengkulu University), UNRAM (Mataram University), UNTAD (Tadulako University)

District	Month					
	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	Progress of collaboration between BPBD and University.	Confirmed DRR Activities conducted	Tsunami Community Project	MOU	Disaster Resilient Village	Women discussion/empowerment group.
	Establishment of DESTANA	BPBD staff rotation	Assistance with natural hazard event	Tsunami Community Project	Disaster Management Plan discussions	KSB training skills conducted in November.
	Signing of Action Plan document (Seluma)				Womens discussion group	DRR activities.

(3.1) All-Districts Visit. Lessons learned from this visit in March 2017 have been summarised in a substantial visit report<sup>14</sup> which was completed and submitted to MFAT on 27 October 2017. This report contains an update on the districts visited, progress against Action Plans, plan content analysis and district coaching and mentoring strategies. Quite a bit of analysis on the progress in the districts at the mid-stage of the Activity had been undertaken for the report. The report ranked all 10 districts in terms of progress and DRR performance at the end of the All District Visit. Rankings have since been further updated as a result of subsequent visits and are presented in Table 3.

(3.2) An additional coaching and mentoring visit was made to the Seluma District on 10 July 2017 (Figure 10). A session was chaired by the Deputy Head of District Dr. Rusyikin, with the heads of most OPD<sup>15</sup> agencies in attendance, as well as Police, Military, and UNIB. The Head of Parliament (Husni Thamrin – an alumni of the StIRRRD program) also attended, and he gave a frank assessment that the district has not done enough to implement activities identified in the Action Plan. He urged OPD heads to work with BPBD, as well as other community leaders. He also urged them to lobby decision-makers for an increased budget for DRR-related work. A useful discussion was held, with updates from OPD staff on relevant work. Two key outcomes were participants agreeing to establish a district DRR forum<sup>16</sup> to monitor and evaluate all DRR activities, and that coordination between agencies / institutions needs to be improved. BPBD provided a summary report of this meeting – see <http://bpbd.selumakab.go.id/berita/audiensi-dan-diskusi-stirrrd/>.



**Figure 10** Commitment to the actions outlined in the Seluma DRR Action Plan was confirmed during the July visit, with the Head of BPBD (Pak Azwardi), Deputy Head of District (Pak Rosyikin), and Bu Yudhy Harini Bertham from University of Bengkulu signing the document. This ceremony was arranged to encourage Seluma District to take ownership of the Action Plan, and commit to implementing it. (Source: Michael Goldsmith)

<sup>14</sup> Daly, M.C.; et al (2017) *StIRRRD All Districts Visit – March 2017: Summary Report*, GNS Science International Consultancy Report 2017/11. 92 p.

<sup>15</sup> OPD = Local government functional departments or agencies (e.g. Forestry, Environment, Social, Health etc.)

<sup>16</sup> This has since been established, and Seluma BPBD have worked hard to improve their coordination with other OPD agencies.



BPBD has a good working relationship with the local PMI team (Red Cross), which has a focus on implementing 'Safe Village' and 'Safe Schools' programs, and also mapping risks at the village level. BPBD reported that the tsunami shelter in Rawa Indah had been damaged and equipment stolen, but that plans were in place to hold regular community events at the shelter, and also to employ security guards.

Overall, this visit highlighted that the district had not been making sufficient progress on DRR initiatives, but that the key players (including OPD heads) were prepared to work together to start making improvements. Progress in the district since this visit has been impressive, as illustrated in Appendix C.

(3.2) An additional coaching and mentoring visit was made to Kota Bengkulu on 11 July 2017. DRR activities in the city are being well coordinated by the local BPBD office. A tsunami "Blue Line" project has already been implemented (Figure 11), and further work is planned to develop this concept along the city's coastline - to improve evacuation routes, upgrade signage, and raise community awareness. The city is also working to create alternative evacuation routes, and develop muster points.



**Figure 11** Tsunami Safe Zone signs and Blue Line, Bengkulu City (Source: Michael Goldsmith)

A meeting was held to discuss the concept of a 'lifelines' group, comprising agencies which provide critical infrastructure services to the community (e.g. water, electricity, transport). Representatives from OPD (including Public Works) and utility companies attended, and were supportive of such a concept.

(3.2) Coaching and mentoring visits were also made to the West Sumatran districts of Agam, Pesisir Selatan, and Padang between 12 and 14 July 2017. The visits were structured to reflect the district strategies and focused on specific activities which would benefit each district, such as Action Plan socialisation and Action Plan updates, university mentoring, and community projects.

In Agam, the local BPBD office hosted a workshop with a wide range of agencies involved in DRR work. This included the private sector, NGO's, university staff from Padang and Agam, 'disaster-ready' journalists, Police, several local government agencies, the tourism office, and a number of sub-district heads. The workshop demonstrated the widespread support for DRR work in Agam. Their approach starts from the 'bottom' and works up – i.e. to ensure that well-educated communities and local government staff are able to take the initiative and implement their own DRR



programs, in a coordinated and timely manner. A key message that was re-iterated several times was that DRR is everyone's responsibility, not just BPBD's.

In Pesisir Selatan, a meeting was held with the Bupati, Head of Parliament and the District Secretary. The district leaders are keen on further development, and requested help to advocate to central government for additional inland roading networks. These would also allow evacuation from low-lying land into the hills. OPD agencies including public health, environment, water resources and social affairs reported on their work programs. They are committed and have a good understanding of the challenges they face, but have inadequate resources, and there is limited coordination between agencies on DRR activities. Further work will be required to improve the capacity of people in Pesisir Selatan, to reduce risk from disasters.

BPBD Padang have enthusiastically embraced the tsunami 'Blue Line' concept, which was originally developed in Wellington, New Zealand. Initiatives in the project include:

- Large-scale maps showing tsunami hazard zones and the location of buildings which can be used as vertical evacuation shelters.
- Determining future locations for blue lines across the city.
- Technical design specifications for signs and the lines themselves.
- Working with other agencies to add lighting so the lines can be seen at night.
- A comprehensive socialisation program, with actions to enable risk reduction activities in various social settings, including homes, villages, schools, campuses, tutor's buildings, mosques, hospitals, markets, malls and hotels. They also use TV and radio to disseminate information.
- As part of this program, BPBD staff are visiting individual homes, and helping them to make their own plan for a tsunami. Once trained, the household receives an information sticker to put on a window, and a record of the visit is made.

(3.2) An additional coaching and mentoring visit was made to Morowali district on 14 and 15 August (Figure 12). On Friday 11 August, Morowali parliament conducted a staff rotation resulting in the immediate replacement of the current Head of BPBD; Yosar Kardiat. StIRRRD team members accompanied the new Head of BPBD, Nafsahu, to BPBD offices on 14 August. Nafsahu is a UGM alumni and reiterated Morowali's strong support for the StIRRRD programme. Morowali have made significant progress on Action Plan activity implementation since the last visit in March, highlights include:

- The implementation of a text based warning service partnering with BMKG, Telkomsel and Indosat<sup>17</sup> and which has been piloted successfully in Morowali.
- A Disaster Management Plan has been commissioned with the support of BNPB.

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<sup>17</sup> *Telkomsel and Indosat are telecommunication companies*

- A district specific risk assessment has been conducted and is being reviewed by BNPB. This document specifically identifies the Matano Fault risk where the fault location is being used to inform spatial land use plan boundaries.
- A response coordination facility has been erected on Sombori Island.
- Multiple physical works, to reduce the impacts of flooding and coastal waves, have been constructed across the district.

Morowali was presented with its certificate to mark the completion of Phase 1 of the Activity during this visit. This had previously been delayed as Morowali were the last to finalise their Action Plan and therefore hadn't made as much progress with implementation as some other districts had at the time of the certificate ceremonies in March 2017.



**Figure 12** Left) StIRRRD working session with the BPBD in Morowali, and Right) presentation to Morowali District representatives to mark the successful completion of Phase 1 of the Activity (Action Plan completion and start of implementation). (source: Michele Daly, GNS Science)

(3.2) An additional coaching and mentoring visit was undertaken in Mataram and Sumbawa during the week of 16 October 2017. Aims of this visit were to review Action Plan implementation progress, develop relationships with new staff members, and discuss the third Community Project. StIRRRD team members met with Sumbawa BPBD staff on 19 October. The meeting discussed Action Plan progress to date and potential village candidates to implement community project three. The meeting concluded that Sumbawa is making good progress on their DRR activities albeit within a very constrained budget environment. The team met with Mataram BPBD on 20 October. Most staff, including the Head of BPBD, are new in Mataram. This meeting focussed on identifying synergies and alignment of their existing comprehensive DRM programme with the DRR Action Plan. Action Plan activities were updated and like Sumbawa, there are significant budget challenges present in Mataram. In the afternoon, team members met with staff at UNRAM to discuss their DRR activities and progress scope development of Community Project three to be undertaken in Sumbawa. While it was intended to undertake a 'Hazards 101' training for new BPBD staff in Mataram, this was not possible due to difficulties in communication with new BPBD staff prior to the visit.

(3.2) District Coaching Strategies were discussed and updated at the joint team meeting in Yogyakarta in August. Province Coordinators had the opportunity to hear and provide feedback on other district strategies. The updated strategies were included in the All Districts Visit Report, and an implementation plan for the major items within each strategy has been developed (refer the All Districts Report).

Discussions with Wellington and Padang about an MoU or collaboration agreement are progressing. StIRRRD team member Kelvin Berryman has held meetings with Wellington Mayor, Justin Lester (1 September), Wellington City’s International Relations Manager, Tom Yuan (6 October), and Mike Mendonça, Chief Resilience Officer (12 October). Wellington City are very positive about the idea of an MoU or collaboration agreement to work with Padang in the field of DRR, and understand the importance of progressing this as part of the events of the 60th year of collaboration between Indonesia and NZ. A draft collaboration agreement has been prepared and is currently awaiting Wellington City’s input before progressing to discussions with Padang. The Indonesian Embassy in Wellington have become involved and are actively pushing the concept with Wellington City. A visit in March 2018 has been proposed and Padang have confirmed their interest in coming out to NZ at this time. Invitations will need to be issued in January.

**Table 3** Table showing the relative progress of the StIRRRD districts as at December 2017. The districts at the top are making greater progress on DRR initiatives compared to those lower down. Pilot districts Palu and Padang are included for completeness. Note that within each grouping of districts, districts are listed in no particular order.

Agam Donggala Palu Padang Morowali
Sumbawa Bengkulu Seluma
Mataram Pesisir Selatan

***Output 4: District Vulnerability Assessment and Profiles for the New Participating Districts.***

(4.1)(4.2)(4.3) Following discussion about the profiles at the all-district visit in March, it was apparent that uptake and circulation of the vulnerability profiles has been variable. Feedback was received from many districts to customise or add content to the existing profiles. It is intended that the district profiles be ‘living documents’ regularly updated by each district. While the StIRRRD toolkit will have guidance and templates for the development of a vulnerability profile, digital copies will be provided to the current StIRRRD districts so they may update existing versions as they see fit.

(41)(4.2)(4.3) StIRRRD team members Esti Anantasari, Arry Retnowati and Michele Daly have scoped out the contents for a report on the gender component of the programme (i.e. Focus Group Discussion summary, analysis, impacts and implications etc.). It is intended to make progress on the report/paper over the next 6 months.

***Output 5: LG-SAT Adaptation and Application.***

No activity for the reporting period. The next round of the LG-SAT questionnaire is expected to be undertaken in 2019.

***Output 6: DRR Action Plan Support Provided***

This Output has been completed.

***Output 7: Finalising Action Plans***

This Output has been completed.

***Output 8: NZ Comparative Study Visits***

(8.1)(8.2) Both programmed Study Visits have been completed, however reporting is yet to be finalised.

***Output 9: Expert Training – Hazard and Risk Training***

This Output has been completed.

***Output 10: Community Projects***

(10.1) The *Seismometers in Schools* project is underway. The final project scope was included for approval as part of the July 2017 Six-Monthly Report. The seismometer to be used has been selected and the technical specification sheet sent to UGM for translation. The UGM team held a coordination meeting in Palu on 12 October (Figure 13). Representatives from Palu BPBD, Morowali BPBD, Donggala BPBD and UNTAD attended the meeting. The meeting provided participants with an overview of the project scope, identified the roles of respective agencies and confirmed the schools where the project will be implemented. Initially, seismometer installation was scheduled for a visit in late November, however, this has now been deferred to late February or early March 2018. This deferral provides additional time for further engagement, to develop teacher training resources and more effectively conduct surveys.



**Figure 13** Seismometers in Schools coordination meeting in Palu on 12 October (Source: UGM).

(10.2) The Tsunami Awareness project is progressing. The scope has been finalised (Appendix J) and approved by MFAT. The project will take place in the village of Rawa Indah in Seluma, with observers attending from other districts with a similar tsunami risk. During August, Province Coordinators Wahyu Wilopo and Michael Goldsmith made a visit to Seluma to help refine the scope of this project (Figure 14). A workshop session was hosted by BPBD, and useful contributions were received from Red Cross, UNIB, Tagana, KSB, the head of Rawa Indah village, and BPBD Sector Heads.



**Figure 14** StIRRRD working session on the tsunami community project with BPBD, UNIB, Red Cross and others in Seluma (source: UGM)

(10.1) Michele Daly, Faisal Fathani and Wahyu Wilopo attended the Palu-Koru Fault Seminar in Jakarta on 14 December (Figure 15). The Seminar was a scaled back discussion meeting compared to a bigger seminar originally planned to be held over 3 days in Palu. The latter did not proceed due to a lack of budget. The organisers provided information about the upcoming Expedition to walk the fault early next year and confirmed they would be keen to hold a larger seminar perhaps in conjunction with UNTAD's planned Cities at Risk International Conference in October 2018. Michele Daly gave a presentation on StIRRRD and the *Seismometers in Schools* Community Project, which was very well received. Other presenters included the UNESCO team who had been compiling tsunami survivor stories. Overall attendance

at the meeting was about 25, with representation from BPPT (hosts), UNESCO, IAGI, Skala, LIPI (+ others). The StIRRRD presentation was included as an attachment to the December monthly report.



**Figure 15** Palu-Koru Fault Seminar at BPPT Offices in Jakarta (source: Michele Daly, GNS Science)

(10.3) A meeting was held with UNRAM in Mataram in October to progress the third Community Project, which will focus on the community engagement aspects of a catchment management project in Sumbawa. Head of BPBD Sumbawa (Mr. Zainal) welcomed the proposed project noting that it will help to better understand how communities on the island may mitigate the impacts of catchment land use change and the subsequent impact on flooding. The following day, a meeting with staff from UNRAM confirmed commitment from the Centre for Disaster Risk Management to participate in the project, with other faculties, such as social sciences, actively participating in the project. Both meetings identified the village of Alas as a potential candidate for the project. The project is currently being scoped and will be submitted for approval over the coming few months.



## Review of Progress to Date

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### ***Progress Against Costed Workplan (Budget)***

A summary of actual expenditure to date against planned expenditure for the Outputs active in this reporting period can be found in Appendix A. Where the variance is greater than 10% a brief explanation is provided.

Note that Appendix A reports against the new budget (version 9.7) as agreed in the *Letter of Variation* signed 11 April 2016. The total contracted value remains unchanged (NZ\$7.266M), however costs have been redistributed across different outputs.

The total actual spend to date is \$5.607 M against a planned budget of \$6.041M. Overall the budget is 7% underspent to the end of December 2017. This compares to an underspend of 7% at the end of June 2016. Activity has increased significantly in Output 3 (Coaching and Mentoring) with two additional unplanned visits occurring in July and October 2017. However this has been at the expense of developing the Activity Toolkit, and undertaking the first Community Project, both of which are behind schedule.

Significant variances across Outputs (refer Appendix A) are due mainly to overexpenditure in Output 8: NZ Study Tours, which has been offset to a degree by underexpenditure in Output 1: Toolkit (two quarters behind schedule), Output 5: LG-SAT (first stage completed underbudget), Output 6: DRR Action Plan Support (completed underbudget), Output 9: Expert Training (completed under budget) and Output 10: Community Projects (three quarters behind schedule).

While some savings made have offset overexpenditure, savings have also been allocated to additional activities. In this reporting period, a number of activities that are additional to those budgeted have been undertaken. These include:

- Additional visits to Agam, Padang, Pesisir Selatan, Seluma and Bengkulu districts in July 2017, by UGM and GNS Science team members,
- An additional visit to Morowali in August 2017, by UGM and GNS Science team members,
- A combined GNS Science-UGM team workshop in Yogyakarta in August 2017,
- Additional visits to Mataram and Sumbawa in October 2017, and
- A 'special' AGG meeting in December 2017.

All these activities were deemed necessary to achieve outcomes related to the Activity's governance (Output 0.2), Project Management (Output 0.1), DRR Network (Output 2) and also district Coaching and Mentoring (Output 3). These additional tasks were managed carefully to ensure efficiencies in delivery – the visit to Morowali, the team workshop in Yogyakarta and the coordination meeting for the Tsunami Community Project were organised in one visit for members of the GNS Science team

to ensure best use of time and airfares. Additional visits to Mataram and Sumbawa were timed with the National DRR Week event in Sorong in October.

### ***Progress Against Delivery of Outputs***

The six months to the end of June 2017 has been another intense period with a number of activities taking place. Appendix B shows the percentage completion of each high level output.

Some key programmed tasks were undertaken this reporting period and are now 100% completed:

- Finalising the scope for the Tsunami Community Project (Output 10) (refer Appendix J).
- Completion of the All Districts Visit Report (Daly, M.C.; et al (2017) StIRRRD All Districts Visit – March 2017: Summary Report, GNS Science International Consultancy Report 2017/11. 92 p.) (Output 3).

As mentioned above, a number of additional activities were undertaken. These have all proven to be worthwhile in contributing towards meeting outcomes, particularly for Output 3 (Coaching and Mentoring). Additional visits to reinforce key messages around Action Plans (coordination; budgets; leadership; etc) were part of district coaching strategies developed after the All Districts Visit and finalised during the team workshop in Yogyakarta. While most communications between the UGM and StIRRRD teams are managed well remotely (Skype; WhatsApp; email etc), the benefit of spending time together face-to-face to work through tasks and issues can't be underestimated.

The 'special' AGG meeting held in December focussed on the sustainability of StIRRRD as we head into the final 18 months of the Activity. The discussions at this meeting should result in some considered thinking on StIRRRD and future directions by GoI members for the MFAT led Mid-Term Review in February 2018.

The additional effort put into these tasks, combined with other issues, has had the impact of pushing other programmed tasks back which are now behind schedule. These are:



- Community Project 1 (Seismometers in Schools) (Output 10.1). While progressing well and in the process of being implemented, the project is running approximately 8 months behind schedule. The numerous field visits for coaching and mentoring in 2017, plus the Mid-Term Seminar (which was rescheduled from October 2017 to February 2017) meant that effort was diverted from developing the scope of this Community Project. In addition, more time has been needed for coordination meetings and ensuring all stakeholders are engaged. There are no concerns however, as the project is now back on track with no major issues. The delayed start to the project won't affect the overall Activity Outputs or Outcomes. In fact, a delayed start to the project may assist with prolonging the number of contact points between the StIRRRD team and districts participating in the project, which will be beneficial for continuity and sustainability.
- Activity Toolkit (Output 1). The development of the content for the Toolkit is behind schedule. This is mainly due to the effort that has been spent on the additional field visits diverting effort from other areas. Greater engagement with BNPB is needed to ensure that the Toolkit is fit for purpose. There will be challenges moving forward in managing expectations.
- DRR Network (Output 2). A Local Government Activity Governance Group (ALGG) meeting was scheduled to be held during the National DRR Awareness Week meeting in Sorong, however, not many representatives from StIRRRD districts were able to attend due to the costs of holding the meeting in Sorong. In addition, the location (venue) of the event didn't support holding an ALGG meeting. As a result the scheduled meeting was postponed. Planning for how and when to hold another meeting is underway.

Other additional activities have been identified and programmed for the next twelve months. These include:

2. Participation in the MFAT-led Review in Jan-Feb 2018. UGM will accompany the reviewer to three districts in West Sumatra (Pesisir Selatan, Padang) and Nusa Tenggara Barat (Sumbawa) as well as participate in associated workshops and meetings. Both UGM and GNS Science are holding internal team review meetings to enable considered input from the teams into the review. The flight and accommodation costs for UGM are unlikely to be able to met completely from within the StIRRRD budget.
3. Padang City delegation to NZ, March 2018, for development and signing of the MoU between Padang and Wellington City. This relationship has come about as a direct consequence of StIRRRD and the MoU development is being facilitated by both UGM and GNS Science. Mosts of the direct costs of the visit to NZ in March will be funded by Padang (airfares, accommodation etc), however, other costs (venue, catering for technical workshops, internal airfares for GNS Science staff and time costs) will have to be met either from the StIRRRD budget or a mix of StIRRRD and other budgets (GNS Science; MFAT etc).
4. BNPB and UGM delegation to NZ, March 2018, for possible AGG meeting, StIRRRD3 discussions and investigating other NZ Inc project development opportunities. This visit is to take advantage of key BNPB and UGM team members

being in Sydney as part of the ISO accreditation process for UGM's landslide early warning system. Part of the costs for this will have to be met from a mix of StIRRRD and other budgets (GNS Science; MFAT; NZ Inc).

5. Support for and participation in DRR week Medan, October 2018. StIRRRD has traditionally supported this GoI initiative every year for the past 3 years (Solo, 2015; Manado, 2016; Sorong, 2017). Funding to attend two of these events was programmed, the third was additional to budget and was fitted in around other tasks. It is unlikely that the fourth (Medan) can be absorbed within the Activity budget without impacting on the delivery of other Outputs.
6. Participation in Tadulako University's "Cities at Risk" conference in October 2018. Costs are being budgeted for in the *Seismometers in Schools* Community Project. Some project tasks are being programmed to coincide with the conference to take advantage of staff already being in Palu. If conference dates change or project evaluation is delayed, then support for the conference may have to be reconsidered.

Projecting expenditure forward, it is unlikely that all of these additional activities can be absorbed within the remaining funds. Dropping the fourth community project will free up funds to cover some of these activities but not all of them.

Table 4 shows that we anticipate an approximate \$79k deficit should all of these activities be undertaken.

Discussions are underway with MFAT regarding the projected deficit. Our recommendations are:

- The fourth community project is dropped and savings (approx. \$55k) applied to:
  - the MFAT Review to cover UGM disbursements and some of both GNS Science and UGM time inputs,
  - support the Padang visit to NZ.
- MFAT considers funding StIRRRD involvement in Medan in October as a separate additional task.
- MFAT considers partial funding of the BNPB/UGM visit to NZ in March 2017.

A Variation to the Contract will be required to drop the fourth Community Project and reallocate associated funds across other tasks.

**Table 4** Budget required to complete additional activities identified for 2018. Dropping the fourth community project still leaves a budget shortfall of approximately \$79K.

<b>Additional Cost StIRRRD - Jan 2018</b>				
<b>Current Estimated costs Community Projects</b>				
Activity	Title	Budget	Estimated	Variance
10.1	CP1 - Seismometers in Schools	143000	179814	-36814
10.2	CP2 - Tsunami - Seluma	141000	151330	-10330
10.3	CP3 - Flooding - Sumbawa	92000	92000	0
10.4	CP4 - Landslides	102265	0	102265
<b>Potential Surplus/Savings</b>				<b>55121</b>
<b>Additional Activity Costs</b>				
Activity	Title	Budget	Estimated	Variance
0.15	Review input	0	35782	35782
2.8	Additional Activities - Liaison, BNPB visit to NZ, March 2018	0	45912	45912
2.8	Additional Activities - Liaison, Padang visit to NZ, March 2018	0	13330	13330
2.9	Additional Activities - DRR week Medan, Oct 2018	0	38910	38910
<b>Total Additional Activities</b>				<b>133934</b>
<b>Potential Budget shortfall</b>				<b>78813</b>

Some reporting is still behind schedule (Kemendesa Workshop and NZ Study Visit Reports). Substantial drafts exist but their finalisation has been held up due to other programme priorities taking staff time. Additional resources have been brought into the programme to help with the reporting backlog which is gradually being reduced.

### ***Progress Against the Results Framework Table***

Progress against the Results Framework can be found in Appendix D. Generally the Activity is tracking well against those indicators able to be measured at this time.

Two new indicators were added by MFAT in the last reporting period (end December 2016):

- Long Term Outcome: Government of Indonesia's Risk Index: tracking the districts change to this index in expectation StIRRRD will make a positive difference in reducing each district's numerical rating. Some work will be required to understand how this index is compiled in order to interpret any changes.
- Output 2: The number of Women's Focus Group Discussions (FGD): to track how StIRRRD is contributing to encouraging women's participation in DRR.

Both of these indicators have been added at MFAT's request and are reported on in this reporting period (Appendix D).

Two indicators were changed in the last reporting period (end December 2016):

- Short Term Outcome: Number of good-practice case studies introduced in Action Plan Workshops. This has been changed to the inclusion of good-practice case studies at the Mid-Term and Final DRR Seminars, where there will be a greater audience than at the Action Plan Workshops.
- Output 3: Establishment of a Response Log to track issues discussed in each district. Issues and management options are now reported via the AGG Issues and Policy Recommendations Matrix (Appendix J) and the indicator has been changed to reflect this.

Two further indicators are recommended to be changed for future reporting periods:

- The Long-term Outcome “strengthened DRR planning and implementation by local government” has an indicator that looks at whether OPD Planning documents (specifically Bappeda and PU) include risk reduction and/or refer to BPBD’s DRR Action Plans. It’s recommended this be replaced by an indicator that assesses the district’s Mid-Term Development Plans (RPJMD) for DRR content. These are higher level strategic plans. OPD operational plans are subordinate to these and must be consistent with them. RPJMD are also easier to access and therefore evaluate. The RPJMD will be assessed within the next 12 months and will be reported on in the next 12 month report.
- The way the numbers attending various trainings are counted and reported needs reassessing. Currently the counts are confusing in terms of what’s included/ not included. Also, later trainings associated with the coaching and mentoring component of the Activity (Phase 2) aren’t being captured and therefore total numbers receiving some form of training are under-reported. This is also affecting the gender representation as women’s participation at later trainings aren’t captured in the counts. A consequence of this situation is that the two indicators MFAT are using to report against its own indicator framework (DRI 11.1D and DRI 11.3D) aren’t capturing the full picture.

### ***Progress with Action Plan Implementation***

A comprehensive progress report on Action Plan implementation was part of the All Districts Visit in February 2017 and reported in the All Districts Report (Daly, M.C.; et al (2017) StIRRRD All Districts Visit – March 2017: Summary Report, GNS Science International Consultancy Report 2017/11. 92 p).

Further Action Plan updates are obtained where possible during visits to the districts for coaching and mentoring purposes. In the 6 months to end December 2017, updates to Action Plans in Seluma, Mataram and Sumbawa have been obtained (Appendix G).

Significant progress has been made in Seluma. A good part of this progress can be attributed to the additional coaching visit in July and re-commitment by the district to give Action Plan implementation a high priority (refer Figure 10). Specific areas where progress was noted during this reporting period include:

- Institutional knowledge: GIS training was undertaken by BPBD, and the District has introduced a GIS mapping program. BPBD now have the ability to provide hazard maps as GIS layers, and have started to create these.
- Budgeting for DRR initiatives: The Public Works agency (PU) has increased its budget for works which have a DRR benefit, and some strategic planning for this work has been undertaken. Additional funding was also sourced to create a flood Early Warning System (EWS).
- DRR Program: A range of initiatives have been progressed here. This includes increasing the availability of hazard maps, compiling a list of damage and losses from disasters for 2017, disaster-preparedness work by PMI with local schools, installation of the flood EWS, evacuation route improvements (including bridge construction), coastal protection works, and monitoring / evaluation of DRR activities.
- Human Resources: Disaster-preparedness training has been undertaken for volunteer groups (Tagana, Rapid Response Team, and Disaster-Prepared Village volunteers). In addition, 3 villages participated in tsunami awareness and preparedness training.

There was little progress on DRR activities between March and October 2017 in Mataram. This lack of progress has been due to a very constrained budget environment and a significant staff rotation at BPBD. The October 2017 visit provided an opportunity for team members to meet with the new Head of BPBD and staff to discuss alignment of the action plan activities with their overall DRM work programme.

Despite significant budget pressure, Sumbawa made good progress on action plan activities between March and October 2017. Specific areas where progress was noted during this reporting period include:

- Institutional knowledge: BPBD has focussed DRR training activities in three villages (Baru Tahan, Songkar and Kugin Villages) over this period. DRR training is being systematically delivered alongside the Resilient Village initiative in Sumbawa.
- Programmed DRR Activities: Socialisation of DRR activities was undertaken in Maronge district and alongside the Resilient Village programme. Resilient villages were established in Berora, Lopok, Kalimango and Baru villages.
- Human Resources: BPBD have facilitated specific training to increase the capacity of fire fighting staff to better respond to wildfires.

## Learning and Action Points Arising from the Services

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1. As reported in the last six-monthly report (30 June 2017), the Activity Governance Group (AGG) meetings have not been as effective as they could be despite various changes to the Agenda and reporting to keep meetings on track and focussed. The AGG has been fulfilling an important role as a coordination meeting for member Ministries, who are using the opportunity to bring each other up to speed with work programmes. There do not seem to be many other opportunities for the Ministries to do this, which should be addressed at some stage. While a useful outcome for the Ministries, there has not always been enough focussed discussion on StIRRRD.

A 'special' AGG meeting was held in December 2017 on a specific topic (StIRRRD Sustainability), which meant progress reporting was kept to a minimum. This format seemed to work well as there was a full and frank discussion on the topics of sustainability, StIRRRD 3 and the Mid-Term Review. These topics are likely to dominate the agendas for the next few AGG meetings.

Action Points:

- Continue to hold issue specific meetings for the AGG.

2. The additional coaching visits to the districts have proven to be important in keeping DRR and Action Plan implementation at the forefront of the priorities of the districts visited. The upcoming Community Projects provide additional opportunities to engage with the districts and demonstrate the commitment StIRRRD has in supporting them.

Action Points:

- Continue to look for opportunities to visit districts in person (either by UGM or by both UGM and GNS Science together).

## Significant Highlights

Significant highlights this reporting period include the following:

- The progress Morowali District has made in the last six months has been very encouraging. Morowali has since been moved into the list of 'well-performing' districts (Table 3). Seluma has also made improvements, particularly with a renewed commitment to their Action Plan. Seluma has been moved into the list of 'mid-performing' districts (Table 3).
- At the National DRR Awareness Week event in Sorong, Bappenas gave a presentation in which it was apparent that StIRRRD featured prominently in its work programme moving forward. This is a positive indicator for the sustainability of StIRRRD (Figure 16).

**KEGIATAN StIRRRD (Strengthened Indonesian Resilience: Reducing Risk from Disaster)**

	Tahun	Kegiatan	Lokasi	Mitra Kerja	Isu	Rekomendasi
Kegiatan StIRRRD: Kerja sama UGM & GNS Science New Zealand	2011 - 2012	Sosialisasi Kebencanaan, Penyusunan Renaksi Daerah, Kunjungan dan Pelatihan serta Implementasi Renaksi	Kota Palu dan Kota Padang	BNPB, Kemenkeu, Kemendagri, Kemendes PDTT, dan Bappenas	Daerah didudukkan sebagai penerima manfaat (pasif)	Diharapkan kegiatan StIRRRD bukan sekedar <i>project</i> penghasil <i>lesson-learned</i> tapi juga dapat menjadi acuan replikasi dan memiliki <i>exit strategy</i> yang bisa diperhatikan
	2013 - 2017		Kab. Donggala, Kab. Morowali, Kota Mataram, Kab. Sumbawa, Kota Bengkulu, Kab. Seluma, Kab. Pesisir Selatan, dan Kab. Agam			
Sumber Pendanaan: Ministry of Foreign Affairs Trade (MFAT) New Zealand						
Tujuan: Untuk mewujudkan pengurangan risiko bencana dan peningkatan kesiapsiagaan di tingkat daerah	2017 - sekarang	Pembuatan <i>spatial dynamics modelling</i> investasi pengurangan risiko bencana	Nasional (sebagai bahan pendukung penyusunan RIPPB 2015 – 2045)	BNPB dan Bappenas	Penentuan model <i>system dynamics</i> kebencanaan yang kompleks	<i>Spatial Dynamics</i> Modelling akan terus dikembangkan sebagai model skenario kebencanaan untuk investasi PRB

**Figure 16** Relevant slide from Dr Sumedi Mulyo's presentation about Bappenas' work programmes moving forward. Sorong, October 2017.

- Professor Dwikorita Karnawati's appointment to the Head of BMKG we believe will also have important implications for the sustainability of StIRRRD. Prof. Dwikorita was a founding member of StIRRRD while at UGM and this knowledge about the programme while at a leading DRM institution in Indonesia bodes well for future projects.

- Assoc. Prof. Faisal Fathani has received the Adibrata Award, which is a prestigious national award for technological innovation. It was awarded in a ceremony as part of National Technology Day (Hakteknas) in Makassar on 10 August 2017 (Figure 17). The selection process was comprehensive, with a visit to UGM by the team of assessors. StIRRRD featured in the assessment and questioning and Pak Faisal's leadership role no doubt played a part in contributing to this award. More information can be found at <http://sumberdaya.ristekdikti.go.id/index.php/2017/08/12/academic-leader-sebuah-dedikasi-para-dosen-produktif-dan-kreatif/>



**Figure 17** Assoc. Prof. Faisal Fathani, one of two recipients, receiving the Adibrata Award from the Director General of Science and Technology, Ali Ghufron Mukt (Source: UGM)

- UGM invited Lilik Kurniawan (BNPB), Dr. Sumedi Mulyo (Bappenas) as well as colleagues from Basarnas and LAPAN to give a training session on Competency Improvements in DRM. This was held on 22-24 August 2017 at UGM (Figure 18). 50 participants with 10 trainers attended and the session was fully supported by UGM. A competency framework for DRM has been advocated by StIRRRD for some time (it appears on the AGG Policy Framework Matrix). It's good to see some competency training starting to be provided.



**Figure 18** Training on Increasing Competence in Disaster Management at UGM (Source: UGM)



- The commitment to StIRRRD and DRM shown by the Indonesian Ambassador to New Zealand was a highlight in September. The Ambassador is keen to promote StIRRRD to the Indonesian parliament. An offer has been made by the Embassy to help arrange this in 2018.
- The Palu-Koru Fault project in Palu has been established as a multi-stakeholder platform to improve awareness about, and knowledge of the fault. The platform has been modelled on the *It's Our Fault* research programme in Wellington, New Zealand, which was introduced to Kota Palu BPBD and UNTAD (Tadulako University) participants during the StIRRRD pilot back in 2012. It was very satisfying to the StIRRRD team to learn of impacts that the StIRRRD programme is still having some years down the track.
- A mini-StIRRRD Activity<sup>18</sup> was held at Trenggalek District in the Province of East Java on 15 September 2017 (Figure 19). StIRRRD Team members Faisal Fathani and Wahyu Wilopu presented on DRR and held a focus group discussion with 70 participants. UGM are increasingly in demand to help set-up such workshops in non-StIRRRD districts.



**Figure 19** Mini-StIRRRD Activity in Trenggalek District, with UGM team members Wahyu Wilopu and Faisal Fathani presenting and facilitating. (Source: UGM).

<sup>18</sup> We refer to 'Mini-StIRRRD' activities or projects as scaled back implementation of the StIRRRD methodology which is occurring in some other districts.

## Other Related Activities

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Michele Daly undertook hazard training for AHA Centre ASEAN NDMOs on 7-8 August as part of NZ's support for the AHA Centre and its ACE Leadership Programme (Figure 20). This Activity is being coordinated by the University of Canterbury (UoC) and Auckland University of Technology (AUT). The Jakarta based training preceded a visit by the group to NZ in September, during which there was a further opportunity to present to the group. There will be a DRR component to the training, which will provide good connections for StIRRRD into other ASEAN countries.



**Figure 20** AHA Centre participants during training in Jakarta. (source: Michele Daly, GNS Science)

Bappenas have expressed interest in developing a tool(s) to help them identify the investment needed (in what, where and how much) to reduce the Risk Index, which is a key government priority over the next several years. They have approached StIRRRD to help them to develop their thinking in this area. To date two meetings (8 September, 28 November 2017) have been held with StIRRRD team members plus a NZ economist (Garry McDonald). A third meeting was held on 15 December in Jakarta between Michele Daly and Ms. Aruminingsih from Bappenas to determine next steps. Bappenas is currently developing a concept for next steps. These include:

- an internal (cross-government) workshop to ascertain interest, capability and to identify the range of models currently in use,
- A visit by Garry McDonald and members of his team from Market Economics Ltd to have a look at the models currently in use, and underpinning data. This will identify strengths and gaps and lead to recommendations for further work. Further work could include data gathering (i.e. development of social accounting matrices), a review of current indicators in use, and a pilot study which sees an economic model developed for one or more of the cities in Indonesia.

## Significant Issues or Risks

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The Activity's risk register can be found in Appendix F. Significant risks and other issues are identified below:

1. The degree to which the Government of Indonesia (principally BNPB) is committed to continuing the programme in some form, whether this be through a roll-out to other districts, and/or uptake of some components of the Activity in training materials, has been difficult to ascertain. An Engagement Strategy has been prepared in conjunction with MFAT and UGM to see how this risk can be better managed. This comprises:
  - a. Focused AGG meetings on GoI role post the Activity (the first of these was held in December 2017),
  - b. Development of a Partnership Agreement with BNPB under which StIRRRD sits. It can then be registered as an Activity with the Ministry of Finance. This will give the Activity more visibility and increase the ability for alignment with GoI work programmes. MFAT is leading this task.
  - c. Arranging a meeting between the Head of BNPB, the NZ Ambassador and the Rektor of UGM, to reconfirm the commitment of each organisation to the Activity and it's continuation in some shape or form. Changes at the most senior levels at BNPB and UGM mean that there is not the awareness of StIRRRD at these levels as there once was. MFAT and UGM are leading this task.
  - d. An invitation to senior BNPB staff to visit NZ on the back of an ISO visit to Australia in March 2018 in conjunction with UGM. This will enable further discussions about BNPB's role in the sustainability of StIRRRD as well as start discussions about areas BNPB would like StIRRRD support with beyond the formal completion of the Activity in 2019. GNS Science and UGM are leading this task.
  - e. The Mid-Term Review will assist the StIRRRD team to identify areas for improved performance over the remainder of the Activity. BNPB and other GoI Ministries will be participating in this. MFAT is leading this task.
2. The Massey University lead Activity on DRM and climate change in eastern Indonesia has the potential to be closely aligned with StIRRRD activities and even displace future StIRRRD activity. To date there hasn't been much of an opportunity to ascertain the degree to which StIRRRD learnings and information can assist this project, nor what potential role UGM in particular might have to contribute. Considerable investment has been made by MFAT in UGM (both through StIRRRD and the CARED project) and there is potential for this new project to leverage off the skills and expertise of the UGM team (particularly through GAMA-InaTEK). To date UGM has not been contacted by the Massey team.

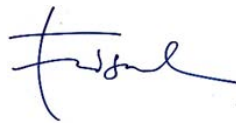
3. The Activity Toolkit has fallen behind schedule. Additional resources have been pulled in to address this. Of concern is the lack of engagement the team has had with BNPB and the Training Department. Only one meeting has been held to date and an urgent follow-up meeting is required. The Toolkit is essentially a collection of tools, templates and case studies used to illustrate how the approach has been applied in the StIRRD districts. Managing expectations as to what the Toolkit will contain will need to be carefully managed.

## Authorisation

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Michele Daly  
Programme Director (GNS Science)



Teuku Faisal Fathani  
Programme Director (UGM)

We declare that the information contained in this report is true and correct.

## Appendices

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This report includes the following appendices:

- Appendix A: Progress Against Agreed Workplan and Budget
- Appendix B: Progress Towards Completing Outputs
- Appendix C: Activity Impacts per District
- Appendix D: Activity Results – Results Framework
- Appendix E: Activity Governance Group Action Log
- Appendix F: NZ Organisations involved in StIRRRD as at 31 December 2018
- Appendix G: District Action Plans: Implementation Progress to 31 December 2017
- Appendix H: Activity Risk Matrix
- Appendix I: Activity Governance Group Issue & Policy Recommendations Matrix
- Appendix J: Tsunami Preparedness Community Project Scope
- Appendix K: Abbreviations

## Appendix A: Progress Against the Agreed Workplan and Budget

### StIRRRD – As at 31 December 2017 Financial Report

#### Combined (UGM and GNS Science) Financial Report

Reasons for variances are given where variance > ±10%

Output	Description	Actual Expenditure		Planned Expenditure		Total Actual Expenditure	Total Planned Expenditure	Total Variance	Reason for Variance
		Time	Disbursement	Time	Disbursement				
<b>Output 0 Project Management</b>		<b>873,644</b>	<b>106,917</b>	<b>812,750</b>	<b>133,265</b>	<b>980,561</b>	<b>946,015</b>	<b>4%</b>	
	0.1 Project Management	454,434	21,982	335,400		476,415	335,400	42%	LoV, invoicing & budget monitoring has taken more time than expected. Disbursements are flights for GNS staff attending project team mtgs in NZ.
	0.2 AGG Meeting	73,165	40,092	57,600	80,040	113,257	137,640	-18%	Some disbursement costs (i.e. flights) have been recorded against other activities (i.e. meetings in Jakarta have been arranged around other visits).
	0.3 Liaison Jakarta	105,468	28,303	209,800	35,340	133,771	245,140	-45%	Not as many mtgs have been held as planned due to people not being available when we are in Jakarta. Mtgs will be programmed in for future visits. MFAT has not held a joint donor meeting for some time.
	0.4 Activity Communications Plan	50,788	13,268	28,500	6,050	64,055	34,550	85%	More time spent than planned on communications (website updates; blogs; videos etc) and printing StIRRRD brochures. Offset in part by underexpenditure in 2.7. Time spent presenting at conferences on StIRRRD is captured here.
	0.5 Reporting – Monthly, Quarterly, Task, Annual, Completion	125,080	196	93,000	315	125,275	93,315	34%	Reporting requirements are taking more time than budgeted.
	0.6-0.14 Major milestone reporting	60,958	3,077	88,450	11,520	64,035	99,970	-36%	Most reports have been completed under budget, however a couple of reports are still only partially complete.
	0.15 Midterm Review	3,664				3,664		100%	Additional unbudgeted task.
	Output 0. Project Management	89				89			(internal adjustment)
<b>Output 1 Activity Toolkit</b>		<b>51,143</b>	<b>7,151</b>	<b>149,950</b>		<b>58,295</b>	<b>149,950</b>	<b>-61%</b>	
	1.1 Prepare Draft Activity Template	22,422	5,730	29,250		28,152	29,250	-4%	
	1.2 Annual reports learnings	13,661	1,422	48,000		15,082	48,000	-69%	Behind schedule. Learnings are also being captured in other Outputs (0.5-0.14)
	1.3 Activity Toolkit - Draft	15,061		72,700		15,061	72,700	-79%	Behind schedule.
<b>Output 2 DRR Network</b>		<b>329,607</b>	<b>224,182</b>	<b>359,000</b>	<b>348,510</b>	<b>553,789</b>	<b>707,510</b>	<b>-22%</b>	
	2.1 Development of University MoU's and letters of support	19,200		19,200		19,200	19,200	0%	
	2.2 MoU Finalisation and sign-off	12,000	2,100	12,000	2,100	14,100	14,100	0%	
	2.3 2014 KPDT 70 District workshop - UGM	40,694	34,126	88,850	83,775	74,820	172,625	-57%	The workshop was 1.5 days instead of 2 days as budgeted. Airfares were lower than expected. Fewer NZ specialists participated due to timing and changed format.
	2.4 Bi annual DRR meetings	3,198	72	19,100	49,880	3,270	68,980	-95%	Airfares budgeted have been associated with other outputs. The mtgs have been shorter than planned due to timing with the Hazards 101 training and the Mid-Term seminar. A meeting planned to coincide with the national DRR event in Sorong in Oct17 did not take place due to the low number of attendees at that event. Additional DRR meetings will need to be scheduled to compensate.
	2.5 Mid term Workshop	145,615	146,020	151,350	149,915	291,635	301,265	-3%	
	2.7 Other Activities - website, newsletters	0	2,400	26,250		2,400	26,250	-91%	Included in part under 0.4 Communications Plan. Communications with districts is mostly through WhatsApp and not via website or newsletters as originally envisaged.
	2.8 Additional Liaison (Provinces & National DRR Events)	92,394	39,464	42,250	62,840	131,858	105,090	25%	Time costs higher than budgetted, offset in part by reduced disbursements.
	Output 2. DRR Network	16,507				16,507			(internal adjustment)
<b>Output 3 Coaching &amp; Mentoring</b>		<b>401,405</b>	<b>158,335</b>	<b>336,220</b>	<b>68,608</b>	<b>559,740</b>	<b>404,828</b>	<b>38%</b>	
	3.1 All District Visit	218,248	100,870	202,870	47,608	319,118	250,478	27%	Costs for this visit exceeded budget.
	3.2 Ongoing Support – Other	114,962	29,797	133,350	21,000	144,759	154,350	-6%	
	3.3 July 17 West Sumatra coaching visit	45,648	18,807			64,455		100%	Additional unbudgeted task.
	3.4 Aug17 Seluma Morowali Coaching Visit	22,547	8,861			31,408		100%	Additional unbudgeted task.



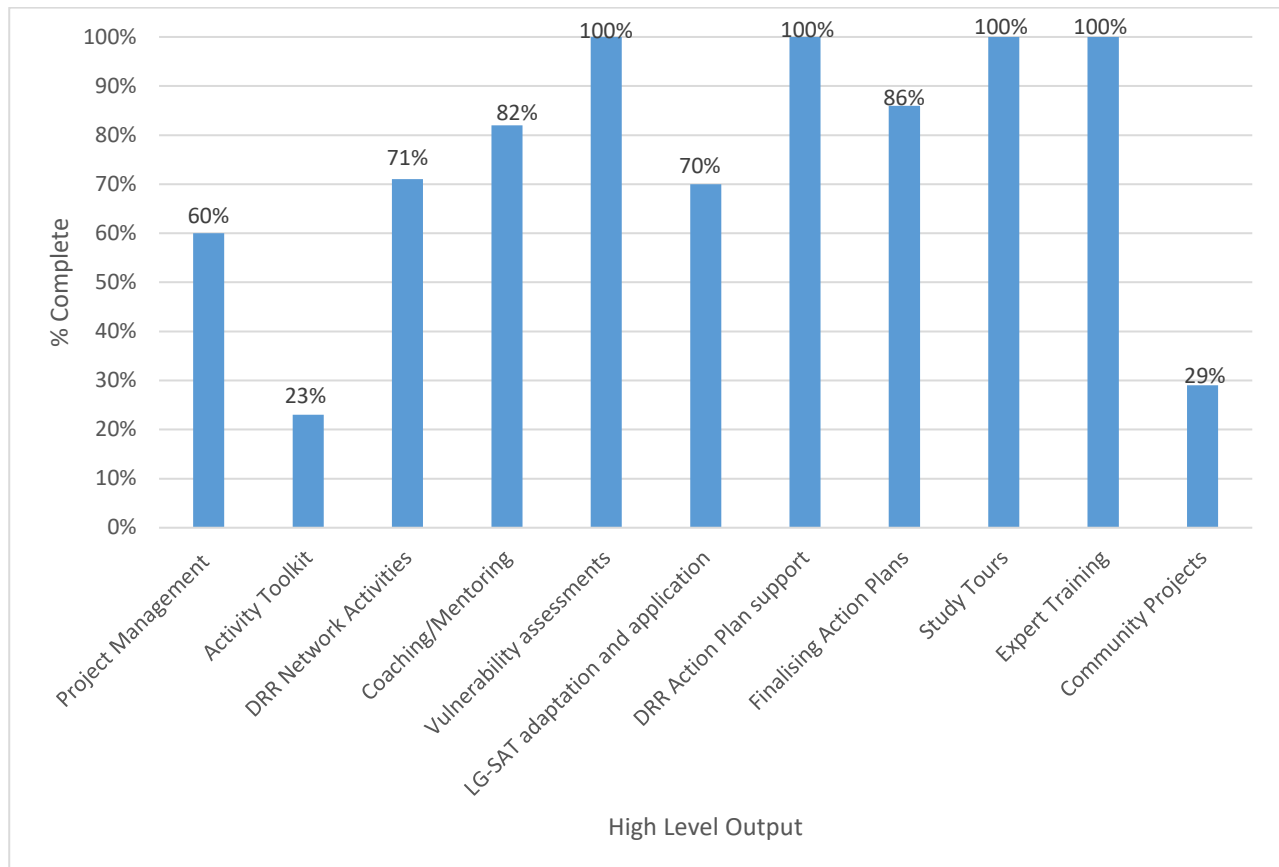
<b>Output 4 District Vulnerability Assessment &amp; Profiles - Donggala, Agam, Bengkulu</b>	<b>432,275</b>	<b>108,547</b>	<b>347,250</b>	<b>148,338</b>	<b>540,822</b>	<b>495,588</b>	<b>9%</b>	
4.1 Vulnerability assessment - Donggala, Pessel, Bengkulu, Mataram	249,716	59,524	187,650	91,568	309,240	279,218	11%	More time has been spent on profiles than budgeted. Offset by savings in airfares.
4.2 Vunerability assessments – Bengkulu Seluma, Sumbawa	71,293	14,292	92,400	28,407	85,586	120,807	-29%	Time charged to other outputs (4.1). Savings made in airfares.
4.3 Vunerability assessments – Morowali, Agam	100,127	34,730	92,400	28,363	134,858	120,763	12%	More time and travel costs needed for Morowali.
4.4 National, Province, District Budget			14,800			14,800	-100%	Budget analysis has been recorded in other outputs (0.5). No budget analysis has been undertaken at Natl. and Provincial levels to date.
Output 4 District Vulnerability Assessment & Profiles - Donggala, Agam, Bengkulu	11,139		-40,000		11,139	-40,000		(internal adjustment)
<b>Output 5 LG-SAT Adaptation &amp; Application</b>	<b>69,416</b>	<b>5,385</b>	<b>117,900</b>	<b>7,350</b>	<b>74,801</b>	<b>125,250</b>	<b>-40%</b>	
5.1/5.2 Review & Revise ISDR	20,498	2,865	18,800	1,680	23,362	20,480	14%	Completed under budget.
5.3/5.4 LG-SAT Palu & Padang	7,200	1,680	22,800	1,680	8,880	24,480	-64%	Completed under budget. Co-funded by Kemendes.
5.5 Distribute, Collect, input baseline data	28,331	840	15,300	840	29,171	16,140	81%	Analysis took more time than expected. Time from (5.6) is also captured in part here.
5.6 LG-SAT Survey and Analysis	20,811		61,000	3,150	20,811	64,150	-68%	Time charged to other outputs (5.5).
Output 5. LG-SAT Adaptation & Application	-7,423				-7,423			(internal adjustment)
<b>Output 6 DRR Action Plan support provided</b>	<b>498,592</b>	<b>300,774</b>	<b>604,550</b>	<b>389,858</b>	<b>799,366</b>	<b>994,408</b>	<b>-20%</b>	<b>COMPLETED</b>
6.1 Action Plan template	6,016	315	14,700	315	6,331	15,015	-58%	Completed under budget.
6.2 Preliminary Action Plan Workshop 1 - Donggala, Pesisir Selatan, Bengkulu Kota, Mataram Kota	205,412	144,153	270,800	158,283	349,565	429,083	-19%	Airfares and simultaneous translation costs were less than budgeted.
6.3 Preliminary Action Plan Workshop 2 - Seluma, Sumbawa	37,779	82,125	157,800	106,515	119,904	264,315	-55%	Airfares and simultaneous translation costs were less than budgeted. Efficiencies in time were able to be made.
6.4 Preliminary Action Plan Workshop 3 - Morowali, Agam	83,569	74,181	161,250	124,745	157,750	285,995	-45%	Airfares and simultaneous translation costs were less than budgeted. Efficiencies in time were able to be made.
Output 6 DRR Action Plan support provided	165,816				165,816			(internal adjustment)
<b>Output 7 Finalising Action Plan</b>	<b>393,891</b>	<b>122,483</b>	<b>355,720</b>	<b>161,849</b>	<b>516,374</b>	<b>517,569</b>	<b>0%</b>	<b>COMPLETED</b>
7.1 Finalising Action Plan - Group 1 Workshop	150,176	57,850	166,050	81,304	208,026	247,354	-16%	Less GNS time inputs than budgeted (staff unable to travel at last minute)
7.2 Finalising Action Plan - Group 2 Workshop	206,688	64,099	170,670	78,445	270,787	249,115	9%	
7.3 Analysis of training attendance records	0	534	19,000	2,100	534	21,100	-97%	Time has been captured in other tasks (0.5)
Output 7 Finalising Action Plan	37,027				37,027			(internal adjustment)
<b>Output 8 Study Tour</b>	<b>320,820</b>	<b>615,534</b>	<b>413,350</b>	<b>496,490</b>	<b>936,354</b>	<b>909,840</b>	<b>3%</b>	<b>COMPLETED</b>
8.1 NZ Study Tour 1 Donggala (A2), Pesisir Selatan(B2), Bengkulu Kota(C1), Mataram Kota (D1), Bengkulu, NTB Universities	237,089	282,161	202,850	244,740	519,250	447,590	16%	Budget required was underestimated.
8.2 NZ Study Tour 2 Morowali(A3), Agam (B3), Bengkulu Seluma (C2), Sambawa (D2), Bengkulu, NTB Universities	278,583	333,373	210,500	251,750	611,956	462,250	32%	A change to the scope (a move away from city to more rural locations) for this Visit resulted in higher costs.
Output 8 Study Tour	-194,852				-194,852			(internal adjustment)
<b>Output 9 Expert Training in Base isolation &amp; Riskscape</b>	<b>238,206</b>	<b>272,262</b>	<b>206,722</b>	<b>294,123</b>	<b>510,468</b>	<b>500,845</b>	<b>2%</b>	<b>COMPLETED</b>
9.1 Base isolation project	54,980	110,757	56,450	109,853	165,738	166,303	0%	
9.2 Riskscape Implementation	107,046	100,405	160,550	121,820	207,451	282,370	-27%	Time inputs were reduced due to volcanic ash problems reducing the length of the workshop.
9.3 Hazard & Risk 101 - Yogyakarta	27,691	61,100	32,750	62,450	88,791	95,200	-7%	
Output 9. Expert Training in Base isolation & Riskscape	48,489	0	-43,028		48,489	-43,028		(internal adjustment)
<b>Output 10 Community Projects</b>	<b>40,038</b>	<b>36,480</b>	<b>246,228</b>	<b>43,415</b>	<b>76,518</b>	<b>289,643</b>	<b>-74%</b>	
10.1 Community Proj. 1 Seismometers in School	22,720	4,161	108,250	34,865	26,881	143,115	-81%	Behind schedule - Implementation has been pushed out by 6 months.
10.2 Community Proj. 2 Tsunami Preparedness	1,794	4,235	54,950	8,550	6,029	63,500	-91%	Behind schedule - Implementation has been pushed out by 3 months.
10.3 Vision Matauranga	15,524	28,084	40,000	0	43,608	40,000	9%	
Output 10 Community Projects			43,028		0	43,028		(internal adjustment)
<b>Grand Total</b>	<b>3,649,039</b>	<b>1,958,051</b>	<b>3,949,640</b>	<b>2,091,806</b>	<b>5,607,089</b>	<b>6,041,446</b>	<b>-7%</b>	



## Appendix B: Progress Towards Completing Outputs – December 2017

### StIRRRD PROGRAMME OVERVIEW

% Complete per Output (for entire duration of programme to date)



# StIRRRD PROGRAMME OVERVIEW

Scheduled tasks completed to date

Output No.	Work plan by Output (to highlight period output will be produced)	Start Date	End date	Year 1				Year 2				Year 3				Year 4			
				Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
				Jul to Sep 2014	Oct to Dec 2014	Jan to Mar 2015	Apr to Jun 2015	Jul to Sep 2015	Oct to Dec 2015	Jan to Mar 2016	Apr to Jun 2016	Jul to Sep 2016	Oct to Dec 2016	Jan to Mar 2017	Apr to Jun 2017	Jul to Sep 2017	Oct to Dec 2017	Jan to Mar 2018	Apr to Jun 2018
0	Project Administration	1-Oct-2014	30-Jun-2019																
1	Activity Toolkit	1-Jul-2015	31-Dec-2018																
2	Risk Reduction Network support	1-Jan-2015	31-Dec-2018																
3	Coaching and Mentoring Support	1-Oct-2014	30-Sep-2018																
4	District Vulnerability assessments	1-Oct-2014	31-Dec-2018																
5	LG-SAT adaptation and application	1-Oct-2014	31-Mar-2019																
6	DRR Action Plan support provided	1-Oct-2014	30-Jun-2016																
7	Finalising DRR Action Plan Workshop	1-Oct-2015	31-Mar-2017																
8	Study Tours	1-Apr-2015	30-Jun-2016																
9	Expert Training in Base Isolation and	1-Oct-2014	31-Mar-2015																
10	Community Projects	1-Jan-2017	31-Mar-2018																

Showing behind schedule are:

Activity Toolkit, Risk Reduction Network Support, and Community Projects.

### Tasks 100% Completed in the six months to 31 December 2017

0	<b>Project Administration</b>	0.1	Project administration as scheduled
		0.2	7 <sup>th</sup> AGG meeting (= #11 since the Pilot)
		0.3	Jakarta liaison as scheduled
		0.5	6 monthly reports
		0.52	Annual Report (to end Dec 2016)
		0.604	2 <sup>nd</sup> ALGG Meeting Minutes (Report)
		0.605	Mid-Term Workshop Report
		0.607	All Districts Visit Report
2	<b>DRR Network Activities</b>	2.5	Mid-Term Workshop
3	<b>Coaching and Mentoring</b>	3.1	All Districts Visit
		3.2	Coaching as scheduled
9	<b>Expert Training</b>	9.3	Hazard & Risk 101 Training
10	<b>Community Projects</b>	10.1.1	Concept for Community Project #1
			10.1.2

### Tasks 100% Completed to date

0	<b>Project Management</b>	0.1	Project administration as scheduled
		0.2	7 AGG Meetings
			Liaison-Jakarta as scheduled
			Activity Communications Plan
		0.3	Monthly reports as scheduled
			2 Quarterly Reports
		0.4	2 Annual Reports
3 Six-monthly Reports			
0.5	RiskScape Training Report		
	Base Isolation Training Report		
		0.5	ALGG Meeting Minutes (x2) Mid-Term Workshop Report All Districts Visit Report
2	<b>DRR Network Activities</b>	2.2	MoU finalisation and sign-off
		2.3	KDPDTT (Kemendesa) DRR Workshop
		2.4	First bi-annual DRR district meeting
		2.5	Mid-Term Workshop
3	<b>Coaching and Mentoring</b>	3.1	All Districts Visit
		3.2	On-going Support as scheduled
4	<b>Vulnerability assessments</b>	4.1-4.3	Introductory visits and profiles: Donggala, Pesisir Selatan, Mataram, Bengkulu, Seluma, Sumbawa, Morowali, Agam

5	<b>LG-SAT</b>	5.1 5.2 5.3 5.4 5.5	LG-SAT review and revision LG-SAT deployment (trial) Finalise LG-SAT tool Collect baseline data – all 8 districts LG-SAT survey analysis
6	<b>DRR Action Plan Support</b>	6.1 6.2-6.3	Finalise Action Plan template First Action Plan workshops; Bengkulu, Donggala, Pesisir Selatan, Mataram, Seluma, Sumbawa, Morowali, Agam
7	<b>Finalising Action Plan Workshops</b>	7.1 7.2	Pesisir Selatan, Bengkulu, Donggala, Mataram Sumbawa, Morowali, Seluma, Agam
8	<b>NZ Comparative Study Visit</b>	8.1 8.2	First NZ Comparative Study Visit Second NZ Comparative Study Visit
9	<b>Expert Training</b>	9.1 9.2 9.3	Base Isolation Training Riskscape Training Hazard & Risk 101 - Yogyakarta
10	<b>Community Projects</b>	10.1.1 10.2.1	Concept for Community Project #1 Concept for Community Project #2

### Key Tasks Deferred to Next Reporting Period

0	<b>Project Management</b>	2.3	KDPDTT (Kemendesa) Workshop Report
1	<b>Activity Toolkit</b>	1.1	Collate learnings from annual reports.
		1.3	Draft Guideline
8	<b>NZ Study Visit</b>	8.1-2	Reports
10	<b>Community Projects</b>	10.1.3	Community Project 1 - implementation

### Tasks Undertaken Additional to Scope in the six months to 31 December 2017

0	<b>Project Management</b>	0.2	An additional AGG meeting (7 meetings to date compared to 6 budgeted at this stage in the Activity).
3	<b>Coaching and Mentoring</b>	3.2	Two additional coaching visits by both UGM and GNS to western districts (Agam, Pesisir Selatan, Padang, Bengkulu and Seluma) and eastern districts (Mataram, Sumbawa and Morowali)

## Appendix C: Activity Impacts per District and in Other Areas

The following contains a summary of impacts (and sizeable natural events) recorded to date in each of the StIRRRD districts and elsewhere. This Appendix may eventually be replaced by the Action Plan Progress reports for the eight new StIRRRD Districts. However, impacts reported in the Pilot Districts (Padang and Palu) as well as in other districts and by central government agencies will continue to be recorded here. With the Action Plans only recently finalised, implementation is still in the early stages. Recording impacts and collecting evidence will be a focus for Phase 2 of the Activity.

### West Sumatra Province

<p><b>Pesisir Selatan</b></p> 	
<p>31 Dec 2017</p>	<ol style="list-style-type: none"> <li>1. BPBD worked with Salido Saiyo village – a coastal community - on a tsunami simulation (received from Dally Usman) during October 2017.</li> <li>2. In September, KSB from Pesisir Selatan participated in the West Sumatra Jamboree where they gained further skills and knowledge on disaster preparedness and management.</li> <li>3. BPBD Pesisir Selatan were unable to participate in DRR activities in Sorong as part of DRR month.</li> <li>4. In November, staff from BPBD Pesisir Selatan held focus group meetings to share knowledge about DRR with women groups</li> </ol>
<p>30 June 2017</p>	<ol style="list-style-type: none"> <li>1. Some coastal villages have been supported by ASB (Arbeiter Samariter Bund - a German aid and welfare organisation) to help increase their DRR capacity. This work complements other DRR activities planned by BPBD Pesisir Selatan, and they worked with ASB to coordinate this project.</li> <li>2. On 26 April, BPBD Pesisir Selatan coordinated the 'Disaster Preparedness Day'.</li> </ol>

<p>31 Dec 2016</p>	<ol style="list-style-type: none"> <li>1. Capacity is being developed for a Disaster Preparedness Group, which involves local government, representatives from the sub-districts and BPBD. There is a stipulation that at least 30% of the participants be female. The first meeting was held on 22 October, 2016</li> <li>2. BPBD Pessel received a speed boat from BNPB. In a ceremony, the Head of Pessel District handed over the key to BPBD Pessel on 28 October 2016.</li> <li>3. As part of the implementation stage of the action plan, BPBD Pessel proposed 9 activities for preparedness funding to the parliament.</li> <li>4. Because of central government budget reductions, there is concern within the BPBD that their budget will be severely cut.</li> <li>5. BNPB have established a collaboration with UGM to install landslide early warning systems.</li> </ol>
<p>30 June 2016</p>	<ol style="list-style-type: none"> <li>1. UGM have received an invitation from Pesisir Selatan to provide training in the construction of earthquake resistant houses for local artisans. This invitation followed the earthquake of February 2016 and demonstrates the growing relationship between UGM and BPBD.</li> <li>2. Pesisir Selatan's DRR Action Plan contained an action to improve women's involvement in DRR. To progress this action, a meeting was held on 24 May 2016 in Painan, Pesisir Selatan to develop a set of actions relating specifically to women's participation in DRR. The meeting was attended by over 100 women. Outcomes of the meeting were that women and associated groups were willing to be DRR agents in their homes, starting from their core family and will endeavour to: <ul style="list-style-type: none"> <li>- initiate designing an action plan for their village and Nagari (sub-district), and</li> <li>- speak their thoughts and to be involved in more activities related to capacity building.</li> </ul> <p>BPBD Pesisir Selatan will facilitate these activities related to DRR.</p> </li> </ol>

<p>31 Dec 2015</p>	<ol style="list-style-type: none"> <li>1. BNPB look likely to fund a pilot in Pesisir Selatan based on the "Blue-Line" tsunami preparedness initiative in Wellington.</li> <li>2. The budget for Activities planned for the first year of the Action Plan, 2016, has been approved by the district parliament.</li> <li>3. Feedback from central government and other districts during the NZ comparative study visit encouraged Pesisir Selatan to prioritise Action Plan items and to change focus from response to DRR.</li> <li>4. The discussions conducted during the introductory visit and communication via telephone, emails, and meetings during the base isolation training in Padang has generated awareness for the government staff/personnel to focus their disaster management on DRR instead of emergency response and recovery. The head of Pesisir Selatan District (Bupati) is very keen to support the StIRRRD Activity and is willing to facilitate related activities. Based on the results of the base isolation training, a pilot programme in the form of public hospital construction using base isolation technology is planned. Funding could be sourced from a mix of NZ MFAT and JICA. UGM-GNS Science-Beca could facilitate the design and the training, and JICA could support the provision of base isolation.</li> </ol>
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## Agam



31 Dec  
2017

1. Between September and October, the head of BPBD - Bambang Warsito – was rotated out. His replacement is M. Lufti.
2. BPBD Agam hosted the West Sumatra Jamboree in October.
3. BPBD Agam actively participated in DRR month and attended the meeting in Sorong.
4. Agam has a program to empower women for DRR, the link <https://kaba12.co.id/2017/02/23/peran-perempuan-penting-prb/>

30 June  
2017

1. On 26 April, BPBD Agam coordinated the 'Disaster Preparedness Day', which involved a wide range of sectors and agencies.
2. On 22 April, BPBD Agam signed an MoU with a local university from Bukittinggi. This was followed by a joint workshop on 29-30 April, with a theme of 'DRR based on a spiritual perspective'.
3. On 4 June, there was a series of explosions on the Marapi volcano <http://volcano.si.edu/volcano.cfm?vn=261140>. The alert level remained at 2 (on a scale of 1-4), and people were advised not to enter an area within 3 km of the summit. BPBD Agam continues to monitor activity on the volcano, and are prepared for emergency events.
4. To raise awareness and help reduce risk associated with landslides, BPBD Agam issued a map showing 'landslide prone areas', in preparation for Eid Mubarak in May. This initiative was particularly focused on areas where heavy traffic passes through steep and landslide-prone land.
5. In February, a group of Maori travelled to Agam to share cultural aspects of DRR as a part of the Vision Matauranga programme.

<p>31 Dec 2016</p>	<ol style="list-style-type: none"> <li>1. An active socialisation programme has begun that includes staff from BPBD Agam travelling to schools to discuss the hazards posed by earthquakes, volcanic eruptions, floods, landslides, and tsunami and how to be prepared for their impacts.</li> <li>2. A fire simulation exercise involving BPBD Agam and the local community was conducted on the slopes of Gunung Marapi on 25 October, 2016.</li> <li>3. Discussions occurred between BPBD Agam, the locally active NGO (Jamari Sakato), Law Bureau and representatives of the sub-districts/villages regarding the disaster management regulation on 27 October, 2016.</li> <li>4. In conjunction with the aforementioned NGO, BPBD Agam are involved in capacity building with coastal area communities, especially in relation to tsunami planning.</li> <li>5. Three new BPBD staff were inaugurated on 12-13 November 2016.</li> <li>6. BPBD staff were involved in a socialisation programme related to the new landslide early warning system in Lubuk Basung, Agam on 27 November 2016.</li> <li>7. Early December BPBD Agam together with related stakeholders, including Nagari government, responded to landslide in Malalak, Maninjau, Balinka. The Head of District responded and visited the site. This is a good example of regional government involvement and good networking.</li> <li>8. BNPB have established a collaboration with UGM to install landslide early warning systems.</li> </ol>
<p>30 June 2016</p>	<ol style="list-style-type: none"> <li>1. Good support from Head of District, including fronting a disaster preparedness music video.</li> <li>2. Improving preparedness facilities and infrastructure, for instance to be able to utilise landslide EWS to be installed by UGM.</li> <li>3. Budget has been assigned to develop a purpose built BPBD building in 2016 indicating that DM is being prioritised.</li> <li>4. Most sub-districts are engaged, as are NGOs, as represented at the AP workshop. There are 12 sub-districts that have become disaster preparedness groups (KSB), one of them located in Sungai Puan sub-district whose head of the district used to be BPBD officer. Working with local and international NGOs for DRR activities.</li> <li>5. Jamboree for disaster preparedness groups adopting National activities to district level. The participants come from trained KSB of 16 sub-districts.</li> <li>6. Regional act and regulations for Disaster Management were approved in May 2016 and are being "socialised"</li> </ol>
<p>31 Dec 2015</p>	<ol style="list-style-type: none"> <li>1. Following The Introductory Visit in August, Agam BPBD paid from their own budget, representatives to attend the DRR Week in Solo and to RiskScape Training in Palu.</li> </ol>

**Padang  
(Pilot District)**





31 Dec 2017	<ol style="list-style-type: none"> <li>1. In July, the head of BPBD Padang hosted a mini-Jamboree, which gathered a range of agencies and stakeholders responsible for the implementation of DRR activities.</li> <li>2. BPBD Kota Padang participated in the DRR meeting in Sorong and gave a short presentation of their experience.</li> <li>3. Agreement has been obtained to establish a formal collaboration between Padang and Wellington cities concerning DRR. A Collaboration Agreement has been drafted and plans are underway for a visit to NZ in March 2018.</li> </ol>
30 June 2017	<ol style="list-style-type: none"> <li>1. BPBD Padang are establishing a comprehensive "Blue Line" project, to address the significant risk from tsunami in this city of 1 million people. Although the project has its origins in the StIRRRD project (see below), BPBD have taken the concept to a new level (Disaster Smart City) by undertaking widespread socialisation and detailed technical analysis and plans.</li> <li>2. DRR practitioners in Padang have grasped the need for good communication and coordination between agencies. An inclusive DRR forum is hosted on a monthly basis by BPBD, and includes NGO's, universities, community representatives, scouts, meteorologists / hydrologists, and various OPD agencies.</li> <li>3. Discussions have begun regarding a potential Sister City relationship with Wellington City with an emphasis on DRR. Both cities have adopted the Blue Line initiative.</li> </ol>
31 Dec 2016	<ol style="list-style-type: none"> <li>1. Pak Rudy Rinaldi has been rotated to the Head of BPBD Padang. Pak Rudy was Head of Bappeda for the Pilot Project and then was moved to the district financial investment office.</li> <li>2. A Tsunami Blue Line project has been implemented in Padang. As at 30 December 2016 two main roads had been targeted together with evacuation route signage. Additional roads will be added in 2017. Consultation to date was undertaken with stakeholder agencies including ITB, UNAND and LIPI. This project was inspired by the Blue Line project in NZ, which Pak Rudy learned about during the Pilot Project's Study Visit to NZ in June 2012.</li> </ol>
30 June 2016	<ol style="list-style-type: none"> <li>1. Regulations are being put in place to require that all buildings over 20 m height within the tsunami allocation zone be designated as vertical evacuation shelters.</li> </ol>
31 Dec 2015	-

Previous	<ol style="list-style-type: none"><li data-bbox="319 145 1444 407">1. Tsunami inundation maps – Andalas University successfully facilitated a session whereby BPBD and other stakeholders agreed to settle on one version of tsunami inundation maps for the district. Several had been prepared by various organisations/donors with slightly different results and there was confusion as to which one should be used. This particular task was in the Action Plan developed as part of the pilot activity.</li></ol>
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## Other West Sumatra Province Activity



31 Dec 2017	1. No updates for this reporting period
30 June 2017	2. StIRRRD alumni from Andalas University have been doing some DRR work in Padang-Pariaman retro-fitting residential houses to make them more safe to earthquakes. An extension of this programme is being considered for Agam.
31 Dec 2016	<p>1. StIRRRD was invited to Sawahlunto District by BPBD West Sumatera Province to present at a DRR workshop of all Head of BPBDs and Head of DRR Divisions. Presenters included: Pak Wisnu and Pak Medi BNPB, the Vice Governor, Pak Faisal UGM, Pak Hakam UNAND, Head of Bappeda Province, and Head of BPBD West Sumatera. The province wanted to know why StIRRRD only worked in three districts and did not support the DRR activities at all districts. Faisal explained about budget and time limitations, the possibility of all districts adopting the concept and the role of UNAND in extending the activity in West Sumatra. Outcomes of the workshop were:</p> <ul style="list-style-type: none"> <li>- UNAND will establish a Master's programme in disaster management with the support from UGM and GNS Science. BPBD staff are willing to enrol in this Master's programme.</li> <li>- Provincial BPBD staff will conduct a meeting with UNAND and if possible will visit UGM for further discussions.</li> </ul> <div style="display: flex; justify-content: space-around; margin-top: 10px;">   </div> <p style="text-align: center; margin-top: 10px;">(a). Participants at the West Sumatra DRR Workshop. (b) Pak Faisal and Pak Hakam (nearest camera) attended and presented at the Workshop.</p> <p>2. West Sumatra had a BPBD District Jamboree at the end of September 2016. Agam District won the jamboree.</p>

## Bengkulu Province

### Bengkulu City



31 Dec  
2017

1. A major storm event in October resulted in flooding and damage to roading infrastructure. The image shows the loss of a bridge on the Bengkulu – Lampung (westbound) road, on 15 October, due to exceptionally high flows.
2. Political support for DRR activities remains strong, with commitment expressed publicly by DPRD and the Mayor of Bengkulu.
3. There has been further progress to develop and implement DRR regulations. A mayoral regulation on Disaster Management has been prepared, although still in a draft format. A Regional Disaster Regulation has also been developed, to improve institutional capacity.
4. Kota Bengkulu BPBD continue to undertake a range of DRR-related activities. Some of these are related to specific activities identified in the Action Plan, while others have been informed by general StIRRRD-related activities. These activities include:
  - a. The gradual roll-out of the Blue Line project, which is intended to improve tsunami awareness and help inform evacuation route planning. Evacuation drills involving all stakeholders have also been undertaken.
  - b. Regular discussions with related OPD and UNIB, to help coordinate DRR activities.
  - c. Dissemination of DRR material, and presentations / discussions with schools. This occurs on a regular basis (every Monday morning), at different schools throughout the city.
  - d. Engagement with the private sector on DRR activities, including media agencies, hotels and universities.
  - e. Collaboration between BPBD and UNIB, to encourage students to undertake DRR-themed community service activities.



	<ol style="list-style-type: none"> <li>5. Pak Farid from UNIB, an alumni of the StIRRRD program, published reports on disaster mitigation and preparedness.</li> <li>6. BPBD has a MoU with Putri Gading Hotel in Sepanjang Beach for utilized the hotel a shelter during tsunami or evacuation drill.</li> <li>7. BPBD of Bengkulu Province has added six sirens, a tsunami early warning tool for coastal communities. A total of six sirens to be placed in densely populated coastal areas spread over 7 districts / cities in Bengkulu.</li> </ol>
30 June 2017	<ol style="list-style-type: none"> <li>1. Support for the StIRRRD programme from city politicians and parliament remains strong, and a competent BPBD leadership team (Head: Selupati / 2IC: Noprisman) was appointed in January.</li> <li>2. An informal DRR forum is in place, including representatives from Red Cross and OPD's such as Sosial, BPBD, Bappeda, Public Works and Health. Plans are also in place to host the forum in a formal setting, once DRR regulations are approved by the parliament.</li> <li>3. Links with public and private utility agencies are improving, and there is a growing realisation about the important role of utility and infrastructure providers, both pre- and post-disaster. Recent improvements include the creation of new evacuation routes, and asphaltting of existing routes from coastal areas to higher ground; and replacing damaged or missing evacuation route signs.</li> <li>4. Knowledge about the characteristics of natural hazards continues to improve, particularly around flooding. Methods to reduce risk from those hazards (rather than just waiting to respond following an event) are increasingly being given consideration. For example, the Mayor has stated he would like to target the construction of reservoirs in flood prone catchments across the city, to help minimise flooding <a href="http://www.bengkulukota.go.id/berita-648_cegah-banjir-walikota-target-bangun-waduk-di-2017.html">http://www.bengkulukota.go.id/berita-648_cegah-banjir-walikota-target-bangun-waduk-di-2017.html</a>. Bengkulu BPBD have also committed to implementing more tsunami 'Blue Lines' along the coast, and working with local communities to raise awareness and upgrade signage.</li> <li>5. UNIB are looking to facilitate the establishment of a Lifelines Group in Bengkulu and/or Seluma and undertake research around lifelines vulnerability.</li> </ol>
31 Dec 2016	<ol style="list-style-type: none"> <li>1. Pak Farid remains interested in facilitating the construction training for Seluma and Bengkulu at UNIB.</li> <li>2. The tsunami Blue Line project is going ahead in Bengkulu along with evacuation drills and training as part of the Resilient Village programme. Socialisation is including parts of the community, school students and NGO's. The Blue Line will be implemented around 10-20 December, 2016 with Support of BNPB. Pak Wahyu will visit as part of the project implementation - hopefully some information on the calculated distances will be clarified by BNPB</li> <li>3. The budget for the BPBD has been slashed by ~50 % due to central government budget restrictions. Some complaints were made to local government but changes are unlikely.</li> <li>4. Flooding has been affecting parts of the city. 8/11/2016 Padang Serai Village, Stables, West Loop Villages of Tanjung Agung, Tanjung Jaya, Bumi Ayu, Swamp and Bentiring</li> </ol>



	<p><a href="http://harianrakyatbengkulu.com/ver3/2016/11/10/banjir-landa-kota-dan-seluma/">http://harianrakyatbengkulu.com/ver3/2016/11/10/banjir-landa-kota-dan-seluma/</a></p> <p>5. All sectors were involved in EQ and tsunami simulation activities conducted 24-26 October 2016. UNIB represented StIRRRD.</p>
30 June 2016	-
31 Dec 2015	<ol style="list-style-type: none"> <li>1. Kota Bengkulu Parliament endorsed Action Plan in principle.</li> <li>2. There is support from city politicians for the programme and from parliament to support budget for DRR activity.</li> <li>3. There is a commitment to hold more regular coordination meetings for all stakeholders in the city for DRR.</li> <li>4. The local university do not play a prominent role in DRR in Kota Bengkulu, but good relationships are being developed between University of Bengkulu and local government regarding targeted research, especially for flood, DRR education for students, student community service and earthquake resistant construction.</li> </ol>

## Seluma



31 Dec  
2017

There were 2 StIRRRD visits to the Seluma District in the 2<sup>nd</sup> half of 2017 (July and August), and regular telephone / email communication to both UGM and GNS. Support and commitment from DPRD and the Mayor for DRR activities has also remained strong. As a result, there have also been some significant DRR improvements and impacts, as outlined below.

1. The district has made considerable effort to coordinate and communicate with central government on DRR initiatives. As a result, several activities have been supported through BNPB, Kemendesa, or other government ministries.
2. There has also been increased private sector involvement in DRR activities, particularly the palm oil industry.
3. Seluma BPBD are also working hard to improve their coordination with other OPD agencies and UNIB, on a regular basis. A DRR forum has now been established, which was a major focus of the StIRRRD visit in July 2017. One consequence of this important milestone is that PU (Public Works) has invited BPBD to provide advice, regarding the revision of spatial regulations.
4. Collaboration between BPBD and UNIB has resulted in students undertaking DRR-related community service in the Seluma District.
5. There have been improvements made to the district's hazard risk maps (particularly for tsunami), and vulnerability maps.
6. The vertical evacuation shelter at Rawa Indah was a focus for StIRRRD efforts in 2017, and a community project in this village is planned for 2018. Seluma BPBD have recruited local personnel to undertake security / cleaning / maintenance work at the shelter, which will help to ensure this facility is kept in a good state of preparedness.
7. A tsunami evacuation exercise, organised by Seluma BPBD, and involving Tagana (Social Welfare unit); PMI (Seluma Red Cross), Pramuka (Boy scout), Police, Army, etc.
8. The Ministry for Villages (Kemendesa) provided assistance to install a reasonably sophisticated early warning system for flooding. The system provides rainfall and water level information directly to the BPBD office.
9. Two existing roads, identified as important evacuation routes, have been upgraded from gravel to macadam.
10. BPBD have improved their GIS capability (another important StIRRRD focus during 2017). They have used their skills to determine village evacuation routes, particularly for vulnerable groups.

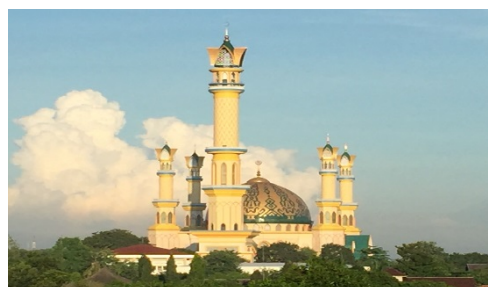
	<ol style="list-style-type: none"> <li>11. BPBD have developed a good relationship with PMI Seluma (Red Cross). PMI have undertaken presentations to more than 100 schools in the district, on the importance of preparing for disasters. A register of the main vulnerabilities of each school has also been prepared as part of this work.</li> <li>12. BPBD Kabupaten Seluma has installed a detection device in Air Periukan area supported by Kemendesa. This detection device has a siren-equipped capable of reaching a radius of 5 km.</li> </ol>
30 June 2017	<ol style="list-style-type: none"> <li>1. There was a landslide in Talo Sub-District, Seluma on May 19, 2007 <a href="http://penanggulangankrisis.kemkes.go.id/Tanah%20Longsor-di-SELUMA-BENGGKULU-19-05-2017-28">http://penanggulangankrisis.kemkes.go.id/Tanah%20Longsor-di-SELUMA-BENGGKULU-19-05-2017-28</a></li> <li>2. UNIB are looking to facilitate the establishment of a Lifelines Group in Bengkulu and/or Seluma and undertake research around lifelines vulnerability.</li> <li>3. Responsibility for the tsunami vertical evacuation shelter at Rawa Indah was transferred to Seluma's Regional Government on 16 June. The District now needs to allocate a budget for it's maintenance and security. BPBD have submitted a plan to recruit 5 officers from the village, and if approved by regional government, this would comprise a mix of guards to ensure security of this asset, and coordinators to ensure that the shelter is utilised fully.</li> </ol>
31 Dec 2016	<ol style="list-style-type: none"> <li>1. Recent rainfall events have caused significant flooding that has destroyed some bridges leaving some villages isolated and requiring assistance. Temporary bridges are being built in the interim.</li> <li>2. There has been some progress with the private sector including the Palm Oil sector. This may open up the possibility of greater cooperation in other DRR related activities.</li> <li>3. BNPB is providing support to Seluma for developing structures for coastal erosion mitigation (around 9 billion Rupiah).</li> <li>4. BNPB have established a collaboration with UGM to install landslide early warning systems.</li> <li>5. Kemendesa are providing financial support to Seluma for water supply and sanitation distribution (around 1 billion Rupiah).</li> </ol>
30 June 2016	<ol style="list-style-type: none"> <li>1. DRR mainstreaming amongst social groups and family is now being prioritised along with Disaster preparedness schools. Initial roll out has started.</li> <li>2. Landslide EWS equipment has been delivered from UGM to be installed at a location prone to landslide or debris flood as part of the BNPB rollout.</li> <li>3. Some areas have not been included into evacuation route map. BNPB and regional government built the route to the evacuation shelter. Evacuation shelter from public works cost IDR 14 billion, and in 2016 another shelter will be built. Some warning signs have been made and set up.</li> <li>4. Participative plan for earthquake resistant construction clinics has been developed.</li> </ol>

31 Dec  
2015

1. Good engagement in Action Plan workshops.

## Nusa Tenggara Barat Province

### Mataram



31 Dec 2017	<ol style="list-style-type: none"> <li>1. No update for this reporting period.</li> </ol>
30 June 2017	<ol style="list-style-type: none"> <li>1. Minor changes occurred at the second level of BPBD Kota Mataram. Pak Kurnia was appointed as the coordinator of the Prevention and Preparedness Unit.</li> <li>2. A mayoral regulation (Perwal) on DRR has been approved by the mayor.</li> <li>3. A special committee of Perda RTRW (Rencana Tata Ruang Wilayah/Spatial Planning) was formed to ensure that the DRR concept has been accommodated in the draft of the Perda RT RW amendment, covering the zoning of abrasion prone areas.</li> <li>4. RJPMD Kota Mataram (Regional Medium-Term Development Plan) has already covered the perspective of disaster.</li> <li>5. The MOU between UNRAM and BPBD Kota Mataram is currently being approved by the mayor.</li> <li>6. The Centre for Disaster Risk Management of UNRAM were asked by the Bima District Government to participate in finding the solution of Bima's flood issues. The centre will conduct this by compiling three research activities in flood mitigation in Sumbawa, Bima, and Mataram.</li> </ol>
31 Dec 2016	<ol style="list-style-type: none"> <li>1. Major changes occurred in staffing at the senior level of Kota Mataram, BPBD late 2016. The Head of BPBD (Pak Supardi) passed away in September 2016. Pak Dedy Supriyadi appointed in the interim with formalisation scheduled for January 2017. The coordinator of Prevention and Preparedness Unit, Ir. Nasruddin passed away in November 2016. The Secretary of BPBD, Drs. Gusti Pahriawan, retired in December 2016.</li> <li>2. Risks to the project associated with the changes in staff reported above are to be mitigated by a UGM team visit to Mataram in January 2017 to meet the newly appointed BPBD officials.</li> <li>3. Budget cuts from central government impeded progress for some of the existing Action Plan tasks.</li> <li>4. Mataram's Parliament supports the proposed MOU between UGM, Kota Mataram and UNRAM</li> <li>5. New mayoral regulation (Perwal) supported by Parliament and to be prepared and submitted in 2017.</li> <li>6. Mataram's Bappeda supports additional funds for DRR activity for BPBD</li> </ol>

30 June 2016	<ol style="list-style-type: none"> <li>1. DRM (incl. DRR) bylaw has been approved by parliament and district. This is one of the first local regulations to include DRR in Indonesia.</li> <li>2. The Centre for Disaster Risk Management has been established at UNRAM in the Engineering Faculty. University staff from the Centre are arranging a meeting with the local district to discuss priority issues which will feed into the Centre's implementation plan.</li> </ol>
31 Dec 2015	<ol style="list-style-type: none"> <li>1. As a result of the discussions at the women's Focus Group Discussion, disaster risk reduction will be recommended to be included on the agenda of the village women's committees (BKK).</li> <li>2. StIRRRD invited lectures provided by Iman Satyarno, Faisal Fathani (UGM) and Nico Fournier (GNS) on DRR at UNRAM (Mataram university). This fed into the wider effort to raise UNRAM's profile and encourage the creation of a centre for disaster studies. The setup of the Centre is advancing. A key discussion point is whether it is to be hosted under the Faculty of Engineering or outside any faculties. StIRRRD has provided input into these discussions.</li> </ol>

## Sumbawa



31 Dec  
2017

1. The Regional Regulation No 5 Year 2016 on Disaster Management was approved in October. The regulation strengthens the policies related to the DRR efforts as the legal umbrella. The establishment of disaster resilient villages, hazard prone villages mapping is expected to bring positive investment in Sumbawa.
2. DRR training for three Resilient Villages (Baru Tahan, Songkar and Kugin vilages) was held on 10 to 18 July. The focus of the sessions was to increase the capacity of the memembers of the Resilient villages in DRR activities.
3. Sumbawa BPBD are working with BNPB to develop landslide and flood contingency plans. One four day meeting has been held to progress this project.
4. One more safe school was established in the village of Alas. BPBD are using this programme to raise the profile of DRR and promote public education activities.
5. Four more Resilient Villages, located in disaster prone areas, were established in Berora Village, Lopok Village, Kalimango Village and Baru Village.
6. Training has been delivered to fire fighter staff to increase their competence and knowledge of fire hazards.
7. Training with 30 volunteers in Maronge village was conducted in July. Volunteers had previously been trained by OXFAM to facilitate disaster response activities but they required a refresher. Training helps to identify vulnerable groups in the villages, such as pregnant women, to improve response activities such as evacuations.



30 June 2017	<ol style="list-style-type: none"> <li>1. Severe flooding triggered by heavy rain occurred in the Sumbawa district (NTB) on the 12th December 2016. Thousands of homes were submerged but no casualties were reported. Discussions during a meeting held in January 2017 between BPBD, Government staff, Sumbawa Parliament and UGM-based StIRRRD team members concluded that the lack of casualties were a credit to the Resilient Village project and the general DRR effort in the region. A range of activities including community training and stakeholders engagement, some of which are part of the Action Plan monitored through the StIRRRD project, contributed to the general increase in resilience to natural disasters in the district.</li> <li>2. The DRR Action Plan (March, 2017) workshop which invited all of Sumbawa's OPDs (Sumbawa district government agencies) inspired them to allocate budget for DRR. This is planned to be followed up with a Perbup (district regulation) to regulate all OPD to allocate budget for DRR activities.</li> <li>3. Coastal safety has been built in Alas sun district and the Alas Timur subdistrict and coastal area. This is supported by the Public Works agency.</li> <li>4. Jempol beach has had coastal protection works added (sea wall and resulting promenade) to protect the beach from erosion and also to turn the area into a tourism destination. The promenade provides for vehicle and foot traffic and offers coastal protection to restaurants and markets.</li> </ol>
31 Dec 2016	<ol style="list-style-type: none"> <li>1. Major changes occurred in staffing at the senior level of Sumbawa, BPBD late 2016. The Head of BPBD (Pak Mukmin) was transferred to the Department of Transportation in September 2016. Pak Zainal Abidin was appointed interim Head of BPBD. He was previously Head of Sanitation and is accustomed to work and interact with local communities. Zainal also worked as Parliamentary Secretary and is well acquainted with the members of the Parliament. Pak Dedy Supriyadi appointed in the interim with formalisation scheduled for January 2017. Other changes in staffing include a new Secretary, Logistics Unit Coordinator, and Coordinating Unit for Rehabilitation and Reconstruction</li> <li>2. Risks to the project associated with the changes in staff reported above are to be mitigated by a UGM team visit to Sumbawa in January 2017 to meet the newly appointed BPBD officials.</li> <li>3. BNPB is providing support to Sumbawa for developing structures for coastal erosion mitigation.</li> </ol>
30 June 2016	<ol style="list-style-type: none"> <li>1. New bylaw being created with greater focus on mitigation and DRR (vs. response only previously).</li> <li>2. Coastal infrastructure (seawall and road) extended in Sumbawa to mitigate erosion.</li> </ol>

31 Dec 2015	<ol style="list-style-type: none"><li>1. The project has attracted a strong level of support by the local government. Both the Head of Parliament and the Vice Head of the District opened the Action Plan workshop and strongly encouraged participation and engagement.</li><li>2. Two directors from central government (P. MediHerlianto - BNPB and P. Hasman Ma'ani - KPDT) participated in the Action Plan workshop in Sumbawa and provided support for the activities. BNPB challenged BPBD and other local government agencies to become an example that other districts and provinces could follow.</li><li>3. Sustained involvement in activities from Mataram University (UNRAM).</li><li>4. BPBD is now more conscious that all three groups of stakeholders must be involved in discussions and activities (Government, Community and Private sector).</li></ol>
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## Central Sulawesi Province

### Donggala



31 Dec  
2017

1. On 14 September, Donggala BPBD conducted post-disaster training sessions in collaboration with UNTAD.
2. On 3 October, 'Disaster Management Community Groups' (kelompok masyarakat penanggulangan Bencana (KMPB)) were established in six villages in Sindue sub-district. As a part of this initiative, 'Fast Response Teams' undertake tree planting activities every Friday.
3. On 11 October, student and teacher disaster education sessions were held at SMP Negeri (Public Junior High School) 2, Sindue subdistrict and at SDN (Public Primary School) 2, Lero Village, Sindue subdistrict.
4. The Government of Donggala in collaboration with Balai Wilayah Sungai (BWS) (River Basin Management Organisation) III Sulawesi undertook normalisation works in rivers to anticipate flooding, landslides or coastal erosion. BWS III Sulawesi also constructed breakwater structures in Lembasada, Timbe and Riopakava as a part of coastal management programme on 20 October 2017.
5. Head of Donggala district inaugurated Zone II Disaster Preparedness Units new building (see photo). The opening ceremony was followed by the establishment of a 'Disaster Management Community Group Committee'.



6. UNTAD, in collaboration with Palu BPBD and Central Sulawesi Provincial BMKG held a coordination meeting to discuss the deployment of further seismic monitoring equipment (microtremor) in Palu City in 2018.

30 June 2017	<ol style="list-style-type: none"> <li>1. Hazards and DRR training was delivered by UGM and UNTAD to BPBD, OPD and Sub-district Heads in March at the request of BPBD.</li> <li>2. The Environment Office will involve BPBD in the evaluation of environmental impact assessments for activities e.g. mining, agriculture, buildings. This provides an opportunity for DRR issues to be considered in the early stages of projects.</li> <li>3. BPBD are recruiting one person in every village to be a local liaison officer to deliver DRR and preparedness socialisation.</li> <li>4. Local building regulations have been reviewed and updated as a result of StIRRRD.</li> <li>5. A physical Centre of Communications, Operations and Logistics has been established.</li> <li>6. The Environmental Office is now collaborating with BPBD to encourage community participation for better environmental outcomes which will also have good outcomes for DRR e.g. reducing waste in streams and rivers.</li> </ol>
31 Dec 2016	<ol style="list-style-type: none"> <li>1. BPBD Donggala held a coordinating meeting, inviting 40 participants from related stakeholders: public works, social agency, health agency, environmental agency etc. Pak Akris (Head of BPBD) explained the achievements of the 2016 Action Plan one by one: priorities, innovations, obstacles and their plan for 2017. Donggala have in place a structured programme which is well reported and well documented.</li> <li>2. Budget for DRM in Donggala has increased from IDR 3 billion in 2014 to IDR 16 billion in 2017.</li> <li>3. BNPB is providing support to Donggala for developing structures for coastal erosion mitigation.</li> <li>4. BNPB have established a collaboration with UGM to install landslide early warning systems.</li> </ol>
30 June 2016	<ol style="list-style-type: none"> <li>1. BPBD and PU staff seem to have successfully lobbied for spatial control of aggregate mining activities along the coast.</li> <li>2. Physical coastal protection measures have been constructed at one of the beaches on advice from StIRRRD experts present during the Action Plan Workshop.</li> </ol>

<p>31 Dec 2015</p>	<ol style="list-style-type: none"> <li>1. The Head of Parliament, (Mr. Yasin) opened and attended the DRR Action Plan workshop in February 2015, and was able to stay for a number of presentations. He stated his support for DRR prior to leaving the workshop, promising to discuss the importance of DRR with Parliament.</li> <li>2. The Donggala fieldtrip was an opportunity for BPBD staff to seek on-the-spot technical advice on a number of issues they were facing: <ul style="list-style-type: none"> <li>- UGM staff were able to advise on an appropriate course of action concerning stabilising a landslide adjacent to one of the main roads in the district.</li> <li>- UGM and GNS staff were able to advise on where to best locate seawalls for storm surge protection. Existing seawalls had been constructed in the wrong place and were proving ineffective and in one case would cause ponding behind the wall (landward side) as surge water would be unable to escape. Bathymetric data needed for seawall design (and other coastal protection) was relatively easy to collect and could be done for each village by villagers themselves with the assistance of staff from Tadulako University.</li> <li>- Villagers in Limboro were concerned about the loss of mangroves (which over the years they had felled for firewood and construction materials) and after a discussion undertook to start planting more mangroves with the assistance of BPBD.</li> </ul> </li> <li>3. Tadulako University is already starting to share information with the local government. UNTAD is attempting to bridge the information gap between the government and NGOs and villages. The disaster situation in the province is added to courses at the university. Tadulako is particularly active in geology, engineering, environment and disasters.</li> </ol>
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## Morowali



<p>31 Dec 2017</p>	<ol style="list-style-type: none"> <li>1. From May to July, UNTAD have influenced land use plans regarding disaster prone areas, the management of the airport and the 'Integrated Industry Area'.</li> <li>2. Over the same period, UNTAD and public works have been consulting on earthquake resilient infrastructure construction.</li> <li>3. Between June and November, UNTAD and Public Works established an 'Advisory Team for Building Development (TABG)' (Tim Ahli Bangunan Gedung).</li> <li>4. In July, an MoU was developed between Morowali BPBD and BNPB regarding post-disaster grant assistance.</li> <li>5. Also in July, normalisation activities were undertaken on the Kontobamalanga River.</li> <li>6. In late July, a MoU between Morowali BPBD and Telkomsel was formed for the dissemination of text messages as a means of early warning. Morowali is one of Indonesia's pilots districts for this technology. A test of the technology was implemented during the national DRR month event in October.</li> <li>7. Morowali BPBD has developed agreements with the army, head of subdistricts and head of villages regarding DRR activities.</li> <li>8. A river revetment was constructed on the Umbele River in August while breakwaters and river revetments were constructed in Keura Village in Septmeber.</li> </ol>
<p>30 June 2017</p>	<ol style="list-style-type: none"> <li>1. May was a shaky month for Central Sulawesi with 2 significant earthquakes and a number of aftershocks. On 24 May a 5.7 magnitude earthquake struck in Morowali district. This was shallow (10km) and caused some building damage. On 29 May there was a 6.6 magnitude earthquake near Poso. This larger event was deeper (38km) and also caused some damage to some buildings in and around Poso. More info can be found on the StIRRRD website: <a href="https://stirrrd.org/2017/07/02/may-a-shaky-month-for-central-sulawesi/">https://stirrrd.org/2017/07/02/may-a-shaky-month-for-central-sulawesi/</a></li> <li>2. Morowali BPBD have partnered with Telkomsel and Indosat (national mobile providers) to develop better alerting systems e.g. emergency text messages.</li> <li>3. Staff from the Information Agency are working to establish clear information about mining impacts to clarify misunderstanding that mining is the sole cause of river flooding; this initiative has been inspired by discussions during StIRRRD visits.</li> <li>4. Morowali Parliament are reviewing the consideration of hazard and risk information in spatial planning which includes land use policies (RTRW).</li> <li>5. A project to develop a Perda (District Decree) for DRR is underway being led by BPBD and Parliament.</li> </ol>

	<ol style="list-style-type: none"> <li>6. A review has been conducted of the Morowali risk assessment document and is being reviewed by BNPB this year.</li> <li>7. A disaster management plan has been developed by a consultant on behalf of BPBD as a result of StIRRRD activities. BNPB are supporting the development of this plan.</li> <li>8. BPBD have constructed a structure on Sambori Island to be used as a tsunami vertical evacuation shelter targeted for tourists.</li> <li>9. Numerous physical works have been undertaken on river channels to reduce flood risk including; Katrmbalana River, Siungbatu River (Bahadopi), Bahoruruk channel, Pebotoka River, Umbele River and Keurea River.</li> <li>10. Breakwaters to reduce the impacts of waves in coastal areas have been constructed in Bahomotepe, Kamurea and Bahururu.</li> </ol>
31 Dec 2016	<ol style="list-style-type: none"> <li>1. A meeting was held with senior staff from Indonesia Morowali Industrial Park (IMIP) in Jakarta on 22 July. The meeting identified that flooding is a major problem for the mining company in Morowali. They recognise they play a role in broader DRR delivery for the community. As such, they invited us on site to meet at their nickel mine the following week.</li> <li>2. A meeting on site at IMIP was held on 26 July. The mining company are very keen to see better education on hazards and are open to working with BPBD. They have invited BPBD and StIRRRD representatives back to discuss future opportunities for IMIP's involvement in DRR and discuss future private sector initiatives. This meeting is expected to be held in March 2017.</li> <li>3. There is a desire from Morowali parliament representatives to develop DRR regulations for the district. This has been included in the AP.</li> <li>4. BNPB is providing support to Morowali for developing structures for coastal erosion mitigation (around 38 billion rupiah).</li> </ol>
30 June 2016	<ol style="list-style-type: none"> <li>1. Advice was provided to local government members and Head of Parliament to reconsider physical stream works on a particular debris fan. Proposed works could initiate land movement and exacerbate flood and debris flooding for downstream communities. Alternative debris management methods were recommended to manage the impact of future debris flooding.</li> <li>2. Meetings have been scheduled with the Morowali Mining company in Jakarta and in Morowali to discuss DRR initiatives and community concerns. To be held in July 2016 visit.</li> </ol>
31 Dec 2015	-



**Palu City  
(Pilot District)**



<p>Dec 2017</p>	<ol style="list-style-type: none"> <li>1. Significant progress has been made in cementing relationships and cooperation as a result of the coordination meeting concerning the <i>Seismometers in Schools</i> Community Project. Agencies involved include Palu BPBD, UNTAD, the local office of BMKG, LIPI, UGM and the schools involved.</li> <li>2. The Palu-Koru Fault Seminar was moved to Jakarta and held in December 2017. The event was unable to take place as scheduled in Palu in November due to a lack of funding. It is hoped that the event can take place sometime in 2018.</li> </ol>
<p>30 June 2017</p>	<ol style="list-style-type: none"> <li>3. The Palu-Koru Fault Expedition project has been initiated by NGO Skala. This project seeks to raise awareness of the fault amongst multi-stakeholders. It comprises a number of activities, including field visits, books, videos and a seminar (scheduled for November 2017). This project has its origins in the StIRRRD Pilot project when Dr. Abdullah from UNTAD visited. He was taken by the multi-stakeholder research platforms in NZ. The Palu-Koru Fault Expedition is based on the Wellington <i>It's Our Fault</i> programme.</li> <li>4. On 14th April 2017, Pak Rahmad Kawaroe (Head of BPBD Kota Palu during the StIRRRD Pilot; more recently Head of the Licensing Agency) passed away. Pak Rahmad has been a big supporter of StIRRRD and was responsible for many of the DRR initiatives and progress made in Palu over recent years.</li> </ol>
<p>31 Dec 2016</p>	<ol style="list-style-type: none"> <li>1. There has been significant staff rotation in Palu City this year. <ul style="list-style-type: none"> <li>- Pak Singgih has moved from the head of Spatial Planning to the Head of Public Works. He had this position back in the Pilot in 2012.</li> <li>- Pak Rahmat has moved from the Head of Public Works to the Head of the licensing Agency. He was previously the head of BPBD in the Pilot in 2012.</li> <li>- Pak Asri has moved from the Head of BPBD to the Mayor's Secretary.</li> <li>- Pak Presely Tampubolon has moved from the Head of the Industry Agency to the Head of BPBD.</li> </ul> </li> <li>2. BNPB have established a collaboration with UGM to install landslide early warning systems.</li> </ol>
<p>30 June 2016</p>	<p>-</p>

<p>31 Dec 2015</p>	<p>1. UNTAD had considerable input into RiskScape training in Palu in October 2015. Spatial Planning and BPBD from Palu endorsed the training and representatives from both organisations attended. There was commitment by participants to continue to develop risk modelling in the StIRRRD Districts, and in particular from Palu City and UNTAD.</p>
	<p>1. Pak Singgih B Prasetyo, Head of Spatial Planning, Kota Palu attended the DRR week in Solo (October 2015) and outlined some of the impacts of the StIRRRD programme. These include:</p> <ul style="list-style-type: none"> <li>- Compilation of Threats / Disaster Prone Maps (liquefaction, landslides, debris floods, tsunamis),</li> <li>- Rapid screening of lifeline facilities to gauge resilience to hazards,</li> <li>- Evacuation Management in Public Buildings,</li> <li>- Disaster socialization problems through various media (television, radio, leaflets),</li> <li>- The establishment of a Regional Planning Department, in the faculty of Engineering UNTAD,</li> <li>- The formation of geological engineering study programmes at the Faculty of Engineering UNTAD in 2014,</li> <li>- The formation of a geology department at UNTAD,</li> <li>- Adding special education courses on DRR in the Physics Department (UNTAD) and in City Government departments.</li> </ul>

## Other Impacts



31 Dec  
2017

1. A mini-StIRRRD Activity was held at Trenggalek District in the Province of East Java on 15 September 2017. StIRRRD Team members Faisal Fathani and Wahyu Wilopu presented on DRR and held a focus group discussion with 70 participants. UGM are increasingly in demand to help set-up such workshops in non-StIRRRD districts.
2. UGM invited Lilik Kurniawan (BNPB), Dr. Sumedi Mulyo (Bappenas) as well as colleagues from Basarnas and LAPAN to give a training session on Competency Improvements in DRM. This was held on 22-24 August 2017 at UGM. 50 participants with 10 trainers attended and the session was fully supported by UGM. A competency framework for DRM has been advocated by StIRRRD for some time (it appears on the AGG Policy Framework Matrix).
3. At the National DRR Awareness Week event in Sorong, Bappenas gave a presentation in which it was apparent that StIRRRD featured prominently in its work programme moving forward. This is a positive indicator for the sustainability of StIRRRD

30 June  
2017

1. UGM has established a Centre of Excellence (Gama-Inatek) which focuses on Technical Innovations in Disaster Mitigation. It will pull a number of UGM's disaster risk management programmes together under one umbrella (including StIRRRD and CaRED). The Centre will play a key role in the sustainability of StIRRRD into the future. This initiative positions UGM as a leading university in this field.
2. Member of the StIRRRD team, Avantio Pramaditya has been accepted for a NZ Aid programme scholarship to NZ. He starts in January 2018 and will attend Canterbury University working on aspects of liquefaction.
3. The Springer Academic Publication on DRR in Indonesia was published in May 2017. It contains a Chapter written by StIRRRD team members on the LG-SAT and discusses results of the baseline survey of StIRRRD districts. Lead author Esti Anantasari has already been approached by other researchers, including from Australia. Encouraging StIRRRD team members to write papers about StIRRRD's activities is assisting their professional development. Academic (and other) publications are required to be identified and reported through to UGM's Management and is a requirement in order for staff to be permitted to allocate time for participation in programmes like StIRRRD.

<p>31 Dec 2016</p>	<ol style="list-style-type: none"> <li>1. Kemendesa are looking to establish a resilience district programme similar to the StIRRRD programme. This programme would support the resilience village programme (DESTANA) in place by BNPB.</li> <li>2. In Central Java Province, a StIRRRD inspired DRR programme has been implemented in three districts (Cilacap, Purworejo and Karangaanyar). These programmes do not cover the full range of StIRRRD activities due to limited budgets. The programmes in these districts are referred to as "Mini-StIRRRD."</li> <li>3. During the MOHA Nasional meeting, the minister urged the Head of districts/provinces not to replace head/staff of BPBD who are already experienced. UGM are seeking support to make this a regulation in future.</li> <li>4. Some staff from BNPB have been accepted to take a Masters degree at university in New Zealand supported by NZAID. Final acceptance is conditional on English language requirements being met. <i>(update: English requirements were not met)</i></li> </ol>
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## Appendix D: Activity Results – Outcomes and Outputs

The tables below record the **results** achieved or progressed during this assessment period **(to end December 2017)**

<i>From agreed Results Measurement Table in the Activity Design Document</i>				<i>Data up to and including this reporting period</i>	
<b>Outcomes</b>	<b>Indicators</b>	<b>Targets (planned)</b>	<b>Baseline</b>	<b>Results (actual)</b>	<b>Variance explanation (incl. information sources)</b>
<b>Long-term outcomes</b>					
Disaster resilience strengthened and risks reduced	No. of districts that have “active” disaster risk reduction plans (active meaning regular review)	10 by June 2019 <i>(or 8 excluding the Pilot districts)</i>	2 (pilot phase)	<u>2017</u> All 8 new districts have undertaken at least one complete review of their Action Plans in the reporting period.  Three districts (Seluma, Sumbawa and Mataram) have been through 2 review cycles this reporting period.	Sources: All Districts Visit Report (GNS Science International Consultancy Report 2017/11), coaching visits and direct communication.  Note: Pilot districts Padang and Palu Action Plans are not being actively monitored by the Activity.
	Disaster risk reduction policy between national government and districts synchronised	Changes to policy in National DRR and DRM Plan, regulations and/or guidelines that have been influenced by this Activity.	Status quo	Some changes to policies are being discussed at AGG. None formally adopted yet.	Sources: AGG Policy and Recommendations Matrix and Minutes of AGG Meetings.
	National Risk Index for the districts is reducing <sup>19</sup> .	All 10 districts have reduced Risk Indices by the end of the Activity.	Risk Index as at 2013.	<u>2013 (Baseline)</u> Palu: 181 Donggala: 189	

<sup>19</sup> New Indicator introduced in 2016.

From agreed Results Measurement Table in the Activity Design Document				Data up to and including this reporting period	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)	Variance explanation (incl. information sources)
				Morowali: 177 Sumbawa: 150 Mataram: 149 Padang: 209 Pesisir Selatan: 190 Agam: 209 Bengkulu: 170 Seluma: 191	Source: National Disaster Risk Index for Indonesia for 2013 (BNPB, 2014).  Note that the next iteration (for 2016) has not yet been published, so an update has not been able to be provided for this reporting period.
Effective DRR activities – improved practice (buildings, land-issues, etc.)	No. of DRR implementation projects operational	20 implementation projects operational by June 2019	None	<u>2017</u> Palu: not assessed Donggala: 23/37 (at March 2017) Morowali: 4/34 (at March 2017) Sumbawa: 20/27 (at March 2017) Mataram: 14/29 (at March 2017) Padang: not assessed Pesisir Selatan: 11/33 (at March 2017) Agam: 27/40 (at March 2017) Bengkulu: 16/20 (at March 2017) Seluma: 24/33 (at Dec 2017) TOTAL = 139	Source: District Action Plans  Count refers to number of actions with some level of implementation, out of a total number of actions listed.
	Evidence of policy / regulation changes in relation to DRR in BPBD, Bappeda and	1 policy and/or regulation change in each district by June 2019.	None	<u>2017</u>	

<i>From agreed Results Measurement Table in the Activity Design Document</i>				<i>Data up to and including this reporting period</i>	
<b>Outcomes</b>	<b>Indicators</b>	<b>Targets (planned)</b>	<b>Baseline</b>	<b>Results (actual)</b>	<b>Variance explanation (incl. information sources)</b>
	PU (e.g. buildings, land-use etc.)			<p>DRM/DRR regulations are in place in the following StIRRRD districts:</p> <p>Mataram (2015)</p> <p>Sumbawa (2016 – draft)</p> <p>Agam (2016)</p> <p>Seluma (2016)</p> <p>Pesisir Selatan (2016)</p> <p>Padang (date unknown)</p> <p>Bengkulu (2017 - draft)</p>	<p>Source: Communications with the Districts. All report the regulations have been inspired by StIRRRD.</p> <p>No analysis of the regulations has been done yet to determine content.</p>
<b>Medium-term Outcomes</b>					
DRR strengthening model applied to other districts	No. of new districts that are implementing new DRR strengthening model.	20 by June 2019	10 (this Activity)	<p><u>2017</u></p> <p>The following districts have adopted a modified version of the StIRRRD programme:</p> <p>Temanggung (Central Java)</p> <p>Purworejo (Central Java)</p> <p>Klaten (Central Java)</p> <p>Trenggalek (East Java)</p> <p>Gunungkidul District (Yogyakarta Special Province)</p> <p>In addition, StIRRRD has influenced:</p> <p>Ternate City (North Maluku), DRR being implemented in collaboration with the Faculty of Geography (UGM)</p>	<p>UGM staff (GAMA-INATek) are involved in implementation unless stated otherwise.</p> <p>Source: Communications with the Districts and UGM.</p>

<i>From agreed Results Measurement Table in the Activity Design Document</i>				<i>Data up to and including this reporting period</i>	
<b>Outcomes</b>	<b>Indicators</b>	<b>Targets (planned)</b>	<b>Baseline</b>	<b>Results (actual)</b>	<b>Variance explanation (incl. information sources)</b>
				Sawahlunto District (West Sumatra) – is working with Andalas on DRR projects.  Total = 17 (including baseline)	
Strengthened DRR planning and implementation by Local Government	No. of districts that separate risk reduction budget and DRM budget figures	Specific budget items for DRM and risk reduction in at least 5 districts	Budget splits at beginning of Activity in each district	<u>2017</u> A total of four districts have reported a separate DRR budget (Pesisir Selatan, Sumbawa, Palu, Morowali) Refer to Appendix C for the graph of the budget differentiation. Budget reporting is variable across the districts.  <u>2016</u> 2 Districts (Palu City and Donggala)	Source: Pilot Project Completion Report (GNS Science Client Report 2012/306)  Action Plan progress presentation from Donggala.  Direct request for budget information from each district.
	<del>No. of Bappeda and local PU plans that include risk reduction and refer to BPBD Risk Reduction Action Plans and Activity Risk Reduction Guideline.</del> No. of RPJMD plans that contain DRR policy and actions.	<del>Bappeda and local PU plans RPJMD in 10 districts refer to BPBD contain risk reduction policies and plans Action Plan and/or Activity Risk Reduction Guideline by June 2019.</del>	None	<u>2017</u> In the process of being assessed.	It is recommended that this indicator be changed to assess RPJMD rather than OPD plans as the latter are subordinate to the RPJMD.



<i>From agreed Results Measurement Table in the Activity Design Document</i>				<i>Data up to and including this reporting period</i>	
<b>Outcomes</b>	<b>Indicators</b>	<b>Targets (planned)</b>	<b>Baseline</b>	<b>Results (actual)</b>	<b>Variance explanation (incl. information sources)</b>
Effective implementation of DRR Action Plans	% of districts that have increased DRM budgets (Increased district funding both from within government and external sources for disaster risk management).	50% of districts have increased their DRM budget by Dec 2018	Budget spending on DRM initiatives at beginning of Activity in each district	<p><u>2017</u></p> <p>Summary graphs of DRM budgets and trends can be found in Appendix C below.</p> <p>7 districts out of 10 (70%) (Agam, Bengkulu, Donggala, Palu, Pesisir Selatan, Seluma, Sumbawa).</p> <p><b>Agam:</b> 2,932,770,294 (2014) and 10,285,152,917 (2016) 251% increase.</p> <p><b>Bengkulu:</b> 1,066,880,000 (2014) and 1,512,608,750 (2017) 42% increase.</p> <p><b>Donggala:</b> 2,585,000,000 (2014) and 9,835,436,000 (2016) 280% increase.</p> <p><b>Mataram:</b> 3,441,963,302 (2014) and 2,355,615,000 (2017) 32% decrease.</p> <p><b>Morowali:</b> 16,507,983,279 (2014) and 1,710,175,000 (2017) 90% decrease.</p> <p><b>Padang:</b> No data.</p> <p><b>Palu:</b> 408,120,950 (2014) and 2,769,480,700 (2017) 579% increase.</p> <p><b>Pesisir Selatan:</b> 7,622,883,936 (2014) and 8,202,086,304 (2016) 8% increase.</p> <p><b>Seluma:</b> 3,225,511,500 (2014) and 4,498,266,000 (2016) 39% increase.</p>	<p>Source: Pilot Project Completion Report (GNS Science Client Report 2012/306).</p> <p>Source: District communications.</p> <p>Note: budgets are fluctuating from year to year. We will need to establish an overall trend. In 2016, results were impacted by central government budget cuts which impacted on district budgets in a number of functional areas.</p> <p>There is substantial variation in the reporting of DRM and DRR budgets across all districts therefore, the stated results have been determined on the best information available.</p>

From agreed Results Measurement Table in the Activity Design Document				Data up to and including this reporting period	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)	Variance explanation (incl. information sources)
				<p><b>Sumbawa:</b> 6,070,375,364 (2014) and 6,078,000,000 (2017) &lt;1% increase.</p> <p><u>2016</u></p> <p>3 districts out of 10 (30%) (Donggala, Pesisir Selatan, Seluma)</p> <p><b>Donggala:</b> 2015 IDR 12,238,022,536 and 2016 IDR 14,162,552,045 (15.7% increase)</p> <p><b>Pesisir Selatan:</b> the overall budget of BPBD decreased, but the budget for DRR increased 50%, the budget for DRR included the budget from BNPB.</p> <p><b>Seluma:</b> the budget from the district government decreased but BPBD Seluma received funding from BNPB (IDR 9 billion for a rock groyne construction) and from Kemendesra (IDR 900 million for sanitation)</p> <p><u>2012</u></p> <p>10% (Palu)</p>	
	Staff self-assessment of effectiveness of DRR planning in district.	Increase in LG-SAT scores.	LG-SAT scores at beginning of Activity in each district.	Baseline (2015) radar plots can be found at the end of this Table.	<p>Source: Anantasari et al, 2017.</p> <p>Second LG-SAT assessment will be undertaken in 2019.</p>

From agreed Results Measurement Table in the Activity Design Document				Data up to and including this reporting period	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)	Variance explanation (incl. information sources)
<b>Short-term Outcomes</b>					
Increased stakeholder awareness and buy-in of DRR approach	No. of districts with risk reduction forums that include local government agencies, universities, and NGOs	10 districts by June 2018	None	<p><u>2017</u> = 4 districts</p> <p>Of the 5 western districts, 4 out of 5 have an active DRR forum: Agam, Padang, Bengkulu and Seluma.</p> <p>Mataram, Sumbawa and Donggala have established forums at the sub-district level. No progress by Morowali to March 2017. Therefore, no eastern district has a functioning district DRR forum.</p>	Source: District communications
	Mid-Term and Final DRR Seminars <del>No. of district training workshops that</del> include good practice case studies from other districts	At least ± 3 good practice district risk reduction case study from other districts per DRR Seminar.	One (Sleman)	<p><u>2017</u> (Mid Term Seminar) 15 in total. 10 from StIRRRD districts + 5 from other districts.</p> <p>Topics covered: DRR Forums (Agam), Community engagement (Agam, Padang, Yogyakarta x2), spatial planning (Morowali), community based DRR (Yogyakarta), budgeting (Donggala), regulations (Agam), DRR approach in small island communities (Ende and Huamuai), DRR Action Planning (Pesisir Selatan, Seluma, Donggala, Sumbawa)</p> <p><u>2016</u></p> <p>Not able to be assessed (Mid-Term Seminar deferred to Feb 2017)</p>	Provision for a specific case study in each training workshop as originally envisaged has not been made, due to time limitations and also costs associated with district representation. Emphasis will instead shift to the sharing of case studies at the DRR Seminars.
	No. of collaborative research projects	At least one collaborative university/local	One (in Palu)	<u>2017</u>	Source: District and university communications.

From agreed Results Measurement Table in the Activity Design Document				Data up to and including this reporting period		
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)
	being undertaken to better understand and manage hazards	government research project is underway in each district by 2019.		Central Sulawesi: 4 NTB: 0 West Sumatra: 1 Bengkulu: 3 National: 1 <b>Total = 8</b> (incl. one national project and the baseline project)		Refer list of projects at the end of this Table.  Note: counts are being reported on a Province basis rather than district as some projects overlap districts.
Local Government staff have skills and knowledge to support DRR	No. of local and national staff (male / female) trained in cross-cutting issues (gender, human rights, environment)	360 by 2018 of which 33% are female.	None	<u>2017</u> Agam 82 Bengkulu 69 Donggala 62 Mataram 68 Morowali 68 Pesisir Selatan 74 Seluma 48 Sumbawa 80 Other districts 22 (from 14 districts) <b>TOTAL</b> Central govt. 12 people from 5 Institutes.  <u>%Women</u>	573	Count includes only government staff and parliamentarians for all training workshops, including NZ Study Visits, FGD and Mid-Term Seminar (excludes university, private sector, NGO, and attendance at specialist training workshops RiskScape and Base Isolation as this is counted separately – see below)  Source: Training Attendance Records

From agreed Results Measurement Table in the Activity Design Document				Data up to and including this reporting period		
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)
				Agam	25%	
				Bengkulu	21%	
				Donggala	27%	
				Mataram	9%	
				Morowali	15%	
				Pesisir Selatan	18%	
				Seluma	22%	
				Sumbawa	13%	
				<b>Total (average)</b>	<b>19%</b>	
	% of trainees that are senior decision makers trained	25% of trainees are senior decision makers by June 2019	None	<u>2016</u>	%Senior	
				Agam	57%	
				Bengkulu	47%	
				Donggala	68%	
				Mataram	52%	
				Morowali	63%	
				Pesisir Selatan	56%	
				Seluma	67%	
				Sumbawa	33%	
				<b>Total (average)</b>	<b>55%</b>	
				<u>2017</u>	%Senior	
				Bengkulu	47%	

From agreed Results Measurement Table in the Activity Design Document				Data up to and including this reporting period		
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)
				Donggala	40%	
				Mataram	41%	
				Morowali	50%	
				Seluma	26%	
				Sumbawa	36%	
				<b>Total (average)</b>	<b>40%</b>	
	% of staff with improved knowledge of risk reduction concepts	Improved scores in LG-SAT, post training questionnaire results by 2019.	LG-SAT scores for each district at the beginning of Activity.	<u>2017</u> Baseline (2015) radar plots can be found at the end of this Table.  Training records not yet assessed (behind schedule)		Source: Anantasari et al, 2017.  Second LG-SAT assessment not yet undertaken (due 2019).
DRR Action Plan finalised	No. of DRR Action Plans agreed by stakeholders	10 in total	2 (pilot phase)	<u>2017</u> 9 (out of 10, incl. Pilot districts) Agam, Bengkulu, Seluma, Morowali, Mataram, Sumbawa, Donggala.		Sources: Final Action Plan Visit notes; All Districts Visit Report (GNS Science International Consultancy Report 2017/11)
	Qualitative assessment of DRR Action Plan (i.e. context, focus, participatory approach, etc.)	All DRR Action Plans meet assessment standards	None	<u>2017</u> An analysis of Action Plan content against 9 criteria was undertaken, a summary of which can be found at the end of this Table.		Sources: Final Action Plan Visit notes; All Districts Report (GNS Science International Consultancy Report 2017/11).

<i>From agreed Results Measurement Table in the Activity Design Document</i>				<i>Data up to and including this reporting period</i>	
<b>Outcomes</b>	<b>Indicators</b>	<b>Targets (planned)</b>	<b>Baseline</b>	<b>Results (actual)</b>	<b>Variance explanation (incl. information sources)</b>
Expert knowledge and skills applied to support DRR	No. of instances where Base Isolators and RiskScape knowledge and skills have been applied to practice	Increasing number of instances	None	<u>2017</u> None specifically known. Base Isolation was attempted at 3 hospitals as a result of StIRRRD (Palu, Bengkulu, Rejang Lebong) but contracting conditions and lack of funds precluded the take up of the technology.	Source: District Communications
Improved community awareness of hazards and risks	Evidence of increasing levels of community engagement.	Increasing number of engagements	None	<u>2017</u> All 8 Action Plans identify specific actions that relate to the socialisation of risk reduction concepts and activities (e.g. with villages, schools, OPD's, religious groups).	Source: District Action Plans
	No. of community-based actions in district Action Plans	At least 1 community-based action planned in each district BPBD Action Plan.	None	<u>2017</u> All districts except Bengkulu identify at least 1 community development activity in their Action Plans (e.g. developing social capital, local DRR forums). Although not specifically identified in its Action Plan, Bengkulu does undertake this type of work.	Source: District Action Plans
	Staff self-assessment of level of community engagement and awareness of hazards and risks	Improved scores in LG-SAT	LG-SAT scores for each district at the beginning of Activity.	<u>2017</u> Baseline (2015) radar plots can be found at the end of this Table.	Source: Anantasari et al, 2017. Second LG-SAT assessment not yet undertaken (due 2019).

From agreed Results Measurement Table in the Activity Design Document				Data up to and including this reporting period	
Outputs	Indicators	Targets (planned)	Baseline	Results (actual)	Variance explanation (incl. information sources)
1. Activity Toolkit - guidance, methodology developed and training workshop provided (P2)	Activity Toolkit produced (to agreed quality)	Produced by June 2018	None	N.A	Too early in the Activity.
	No. of local and national staff trained in application of the Toolkit approach and material.	Minimum 26 staff trained (2 each district; 1 each province; 2 national) by June 2018	None	N.A	Too early in the Activity.
2. Risk Reduction Network support – incl. seminars and workshop (P2)	No. of Risk Reduction Network (committee) meetings held.	2 in total	None	<u>2017</u> 2 (Jan 2016; Feb 2017)	Source: ALGG Report, 2016, ALGG meeting minutes 2017
	No. of people that attend Risk Reduction meetings (and disaggregation of participants – gender, key organisations and districts).	20 attend by June 2018 (and identified representations achieved) <i>(agencies attending at a minimum include: BPBD, Bappeda and Provincial level representative)</i>	None	<u>2017</u> Second meeting: 17 February 2017 Total number of attendees (ex UGM & GNS) = 6 Total number of women (ex UGM & GNS) = 0 Organisations represented = 2 (BPBD & Ketua DPRD) 6 districts (Agam, Seluma, Palu, Pesisir Selatan, Mataram, Sumbawa) <u>2016</u> First Meeting: 21 January 2016 Total number of attendees (ex UGM) = 7 Total number of women (ex UGM) = 0 Organisations represented = 1 (BPBD) 7 districts (Mataram, Sumbawa, Pesisir Selatan, Padang, Agam, Seluma, Donggala)	Source: ALGG Meeting Minutes 2017  Source: ALGG Meeting Minutes, 2016



<i>From agreed Results Measurement Table in the Activity Design Document</i>				<i>Data up to and including this reporting period</i>		
<b>Outputs</b>	<b>Indicators</b>	<b>Targets (planned)</b>	<b>Baseline</b>	<b>Results (actual)</b>		<b>Variance explanation (incl. information sources)</b>
				<b>Total Attending = 13</b>		
	No. of women's Focus Group Discussions held	1 in each of 8 districts (i.e. 8).	None	<u>2017</u> 11 (one in each new district (8) plus 2 additional meetings in Pesisir Selatan and 1 in Agam)  BPBD Pesisir Selatan conducted "Socialization of Women Capacity Building in Disaster Response" on May 24th, 2016 which was followed up by the preparation of a gender specific activity plan. Further workshop and training was carried out in November 2017.  Agam has a program to empower women for DRR, <a href="https://kaba12.co.id/2017/02/23/peran-perempuan-penting-prb/">https://kaba12.co.id/2017/02/23/peran-perempuan-penting-prb/</a>		Source: Action Plan workshop reports
	No. of Risk Reduction Network seminars held.	2 in total (or 3 incl. KPDT workshop)	None	<u>2017</u> 2 (held in 2014 and 2017)		Kemendesa (KPDT) HRNA workshop held Nov. 2014 - this included a national DRR module.  Mid-Term Seminar held in Feb. 2017.
3. Coaching and mentoring support provided to districts (P2)	No. and frequency of visits to districts to check progress and provide advice	2 visits per district per year for first 3 years	None	<u>2016</u> <b>Agam</b> 3 (Intro; Prelim AP; Final AP) <b>Bengkulu</b> 4 (Intro; Prelim AP; Visa; Final AP) <b>Donggala</b> 4 (Intro; Prelim AP; Visa; Final AP) <b>Mataram</b> 4 (Intro; Prelim AP; MoU1; MoU2)	2017 3 (Jan visit; All Districts Visit; July visit)  3 (Jan visit; All Districts Visit; July visit)  3 (Jan visit; All Districts Visit; Community Project visit)  3 (Jan visit; All Districts Visit; Aug visit)	Source: Monthly Reports

From agreed Results Measurement Table in the Activity Design Document				Data up to and including this reporting period		
Outputs	Indicators	Targets (planned)	Baseline	Results (actual)	Variance explanation (incl. information sources)	
				<b>Morowali</b> 3 (Intro; Prelim AP; Final AP) <b>Pesisir Selatan</b> 3 (Intro; Prelim AP; Final AP) <b>Seluma</b> 3 (Intro; Prelim AP; Final AP) <b>Sumbawa</b> 3 (Intro; Prelim AP; Final AP) <b>Palu</b> 2 (side visit; Riskscape) <b>Padang</b> 3 (side visit; Base Isolation; Mou1)	3 (Jan visit; All Districts Visit; Aug visit) 3 (Jan visit; All Districts Visit; July visit) 4 (Jan visit; All Districts Visit; July visit, Community Project visit) 3 (Jan visit; All Districts Visit; Aug visit) 2 (side visit; Community project) 2 (side visits)	Note: Some additional visits by UGM to some of the districts may not have been all accounted for here. This will be attempt to be rectified for the next report.
	No. of monthly progress contacts with districts	12 per district per year	None	<u>2017</u> Agam Bengkulu Donggala Mataram Morowali Pesisir Selatan Seluma Sumbawa  <u>2016</u> Agam Bengkulu Donggala Mataram Morowali Pesisir Selatan Seluma Sumbawa  Palu	Achieved 57 35 35 44 63 35 31 37  Achieved 31 33 23 33 25 25 23 17  1 (not assessed for 2016)	Source: Monthly Reports  Note that only the 8 StIRRRD districts are reported on consistently.

From agreed Results Measurement Table in the Activity Design Document				Data up to and including this reporting period		
Outputs	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)
				Padang	1 (not assessed for 2016)	
	District learning/ support issues log and response process maintained	Log and response process maintained - on-going	None	<u>2017</u> Not achieved as originally envisaged (too time consuming and late in the Activity).		An issues and policy matrix has instead been established which is reviewed regularly by the AGG. This is appended to the Annual Report as Appendix I.
4. District vulnerability assessments and profiles produced (P1)	No. of district vulnerability assessments completed	8	None	<u>2017</u> <u>Achieved</u> 8 (short profiles in both English and Bahasa Indonesia)		Source: Monthly Reports and StIRRRD website.  Short profiles are on the website. Note that these are now being referred to as District DRR Profiles.
	No. of district profiles produced	8	None	<u>2017</u> <u>Achieved</u> 8 long profiles (in English)		Source: Monthly Reports and StIRRRD website.
5. LG-SAT adaptation and application (P1)	LG-SAT document status	Upgraded LG-SAT by Dec 2017	Current LG-SAT	<u>2017</u> LG-SAT questionnaire has been finalised but requires some adjustments.		Source: Anantasari et al, 2017 ( <i>in press</i> ).
	No. of districts with LG-SAT assessments	LG-SAT assessments for 10 districts by June 2017	None	<u>2017</u> <u>Achieved</u>		The scheduled pilot LG-SAT assessments in Palu and Padang were replaced by LG-SAT assessments in the KPDT districts.

From agreed Results Measurement Table in the Activity Design Document				Data up to and including this reporting period	
Outputs	Indicators	Targets (planned)	Baseline	Results (actual)	Variance explanation (incl. information sources)
				8 StiRRRD districts have completed LG-SAT Assessments (Bengkulu, Pesisir Selatan, Donggala, Agam, Seluma, Mataram, Sumbawa and Morowali). An additional 5 districts (Sigi, Lombok Timur, Bima, Kaur and Padang Pariaman) have had LG-SAT assessments completed as part of the KDPDTT DRR policy study undertaken by UGM in Dec14.  Total to date =13	Source: Monthly Reports  Baseline (2015) radar plots can be found at the end of this Table.
6. DRR Action Plan support provided (P1)	No. of district letters of support for Activity obtained	10 letters of support (one per district) by Dec 2015	Two districts as part of Pilot	<u>2017</u> <u>Achieved</u>  10 (including Pilot districts)	Source: Monthly Reports and copies of letters.
	Memoranda of Understanding between local university, province and UGM signed	4 in total	Two as part of Pilot	<u>2017</u> <u>Achieved</u>  Total = 4	Source: Monthly Reports and copies of MoU.  Note: 2/4 have expired and a third expires in 2018.
	No. of people attending training in DRR workshops (in Indonesia)  <b>DRI 11.1 D</b>	200 by 2018	40 (pilot phase)	<u>2016/2017</u>  Total number from all workshops to date (incl. Pilot) =  Agam 88 Bengkulu 73 Donggala 56 Mataram 87	Count includes <u>all</u> participants at Intro Visit Workshop, and Preliminary AP Workshop - excludes FGD, NZ Study Visits and Final AP Workshop (see output 7 below)

From agreed Results Measurement Table in the Activity Design Document				Data up to and including this reporting period		
Outputs	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)
				Morowali	157	Note: this count doesn't change from year to year as the trainings are associated with <i>drafting</i> the Action Plans. The total count here would need to be combined with Outcome 7 below for a more complete total.  Source: Training Attendance Records
				Pesisir Selatan	61	
				Seluma	60	
				Sumbawa	96	
				<b>Sub-total</b>	<b>678</b>	
				<b>Pilot</b>	<b>40</b>	
				<b>Total</b>	<b>718</b>	
	% of workshop participants that report increased specialist knowledge (pre-post workshop testing)	85% of participants by Dec 2016	Scores in pre workshop questionnaire	<u>2017</u> Not yet assessed (behind schedule)		Post workshop training surveys have been completed for all training. A comparative analysis of the data has not yet been undertaken.
	No. of draft DRR Action Plans completed	10 by Dec 2016	2 (pilot phase)	<u>2017</u> Achieved at end 2016 10		Source: All Districts Visit Report (GNS Science International Consultancy Report 2017/11).
	Assessment of key stakeholder participation in developing draft DRR Action Plan  <b>DRI 11.3 D</b>	Identified stakeholder representations achieved  <i>(agencies attending at a minimum include: BPBD, PU, Bappeda, province, sub-district, private sector, NGO)</i>	None	<u>2017</u> BPBD	147	Count includes <u>all</u> participants at Intro Visit Workshop and Preliminary AP Workshop - excludes FGD, NZ Study Visits and Final AP Workshop (see output 7 below).  Source: Training Attendance Records
				Bappeda	8	
				Province	17	
				University	51	
				NGO	47	
				Other Govt. Depts.	250	

From agreed Results Measurement Table in the Activity Design Document				Data up to and including this reporting period		
Outputs	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)
				Sub-district	41	Note: this count doesn't change from year to year as the trainings are associated with drafting the Action Plans. The total count here would need to be combined with Outcome 7 below for a more complete total.
				KSB Disaster Prepared Group & Forums	22	
				Press	2	
				Village	21	
				State Bank	4	
				<b>Total</b>	<b>610</b>	
7. Finalising DRR Action Plan Workshop – incl. Study Tour learnings (P1)	Assessment of key stakeholder participation in DRR Action Plan workshop	Identified stakeholder participation achieved <i>(agencies attending at a minimum include: BPBD, PU, Bappeda, province, sub-district, private sector, NGO)</i>	None	<u>2017</u>		Count includes <u>all</u> participants at NZ Study Visits, Final AP Workshop, Mid-Term Seminar + All Districts Visit  Source: Training Attendance Records
				BPBD	111	
				Bappeda	9	
				Province	41	
				University	96	
				NGO	9	
				Other Govt. Depts.	85	
				Sub-district	1	
				KSB Disaster Prepared Group & Forums	2	
				Press		
				Village	1	
				State Bank	1	
				Central Govt	22	
				Parliament/ Head of District	21	

<i>From agreed Results Measurement Table in the Activity Design Document</i>				<i>Data up to and including this reporting period</i>		
Outputs	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)
				<b>Total</b>	<b>399</b>	
	No. of people attending training	150 by Dec 2016	30 (pilot phase)	<u>2017</u> 399 <u>2016</u> 152		Count in 2017 includes that for 2016 plus <u>all</u> attendees at Mid-Term Seminar and the All Districts meetings.  Count in 2016 includes <u>all</u> participants at NZ Study Visit and Final AP Workshops.  Source: Training Attendance Records
	% of training participants that report increased specialist knowledge (pre-post workshop testing)	XX% of participants by x date	Scores in pre workshop questionnaire	<u>2017</u> Not yet assessed (behind schedule)		Post workshop training surveys have been completed for all training. A comparative analysis of the data has not yet been undertaken.
	Evidence of study tour learnings being applied to DRR Action Plans	Increasing evidence	None	<u>2016</u> <b>Study Visit 1</b> = 100% of survey respondents report that they had made some or many changes to their Action Plans as a result of the Study Visit.  <b>Study Visit 2</b> = 100% of survey respondents report that they had made some or many changes to their Action Plans as a result of the Study Visit.  <u>2017</u>		Sources:  Study Visit 1 Report (GNS Science Intl Consultancy Report 2015/10).  Study Visit 2 Report (GNS Science Intl Consultancy Report 2016/xx).  Action Plan Implementation Progress Report (Annual Report)

<i>From agreed Results Measurement Table in the Activity Design Document</i>				<i>Data up to and including this reporting period</i>	
<b>Outputs</b>	<b>Indicators</b>	<b>Targets (planned)</b>	<b>Baseline</b>	<b>Results (actual)</b>	<b>Variance explanation (incl. information sources)</b>
				<p>The Action Plans now include a good range of activities for themes which were emphasised during the study tours. These include Risk Reduction activities, Regulations, Networking, and Education and Training.</p> <p><u>Actual implementation:</u></p> <p>Refer Action Plan Implementation Progress Report (Annual Report)</p>	
8. Study Tour (and extension training) provided (P1)	No. of people that attend Study Tour (and disaggregation of participants – gender, key organisations and districts).	69 attend by June 2016 (and identified level of representation achieved)	15 (pilot phase)	<p><u>2017</u></p> <p><u>Achieved (less 1)</u></p> <p><b>Pilot = 15</b></p> <p><b>Study Visit 1 = 25 (8 female)</b> (3 central govt; 1 provincial govt; 2 parliamentarians; 5 district BPBD; 1 district PU; 7 local university; 6 UGM)</p> <p><b>Study Visit 2 = 28 (8 female)</b> (3 central govt; 4 parliamentarians/Head of Districts; 5 district BPBD; 2 district Bappeda; 6 local university; 8 UGM)</p> <p><b>Total = 68 (incl. baseline)</b></p>	<p>Source: Study Visit Report (GNS Science Intl Consultancy Report 2015/10)</p> <p>Study Visit 2 Report (GNS Science Intl Consultancy Report 2016/xx).</p>



<i>From agreed Results Measurement Table in the Activity Design Document</i>				<i>Data up to and including this reporting period</i>	
<b>Outputs</b>	<b>Indicators</b>	<b>Targets (planned)</b>	<b>Baseline</b>	<b>Results (actual)</b>	<b>Variance explanation (incl. information sources)</b>
	No. of people that attend extension training (and disaggregation of participants – gender, key organisations and districts).	27 attend by June 2016 (and identified level of representation achieved)	9 (pilot phase)	<u>2017</u> <u>Achieved</u> <b>Pilot = 9</b> <b>Study Visit 1 = 13</b> (3 female) (UNTAD: 1; UNAND: 2; UNRAM; 2; UNIB: 2; UGM: 6) <b>Study Visit 2 = 14</b> (6 female) (UNTAD: 2; UNAND: 1; UNRAM; 1; UNIB: 2; UGM: 8) <b>Total = 36</b> (incl. baseline)	Source: Study Visit Report (GNS Science Intl Consultancy Report 2015/10)  Study Visit 2 Report (GNS Science Intl Consultancy Report 2016/xx).
	% of Study Tour and extension training participants that report increased specialist knowledge (pre-post study Tour testing)	85% of participants by June 2016	Scores in pre workshop questionnaire	<u>2016</u> <u>Achieved</u>  <b>Study Visit 1</b> Expectations exceeded $\geq 8/10 = 83\%$ Will help with work $\geq 8/10 = 100\%$ Overall quality and usefulness $\geq 8/10 = 94\%$ <b>Study Visit 2</b> Expectations exceeded $\geq 8/10 = 86\%$ Will help with work $\geq 8/10 = 100\%$ Overall quality and usefulness $\geq 8/10 = 100\%$	Source: Study Visit Report (GNS Science Intl Consultancy Report 2015/10)  Study Visit 2 Report (GNS Science Intl Consultancy Report 2016/xx).
9. Expert training in Base Isolation and RiskScape (P1)	No. of people that attend expert training (and disaggregation of participants – gender, key organisations and districts).	20 attend by June 2015 (and identified level of representations achieved)	None	<u>2017</u> <u>Achieved</u>	

<i>From agreed Results Measurement Table in the Activity Design Document</i>				<i>Data up to and including this reporting period</i>	
Outputs	Indicators	Targets (planned)	Baseline	Results (actual)	Variance explanation (incl. information sources)
	<b>DRI 11.1 D</b>			<p><b>Base Isolation Training</b> in Padang, Feb 2015 attended by 45 people, 15 females, (22 Universities, 19 government, 4 private sector) – Universitas Bung Hatta, Universitas Negeri Padang, Universitas Andalas, Universitas Putra Indonesia, Universitas Mataram, Universitas Tadulako, dan Universitas Bengkulu. From Government, Public Works Agency, Spatial Planning and Development Agency, BPBDs, Transport Agency, and from private Sector is the National Association Indonesian Consultant.</p> <p><b>Risk Scape Training</b> in Palu, October 2015 attended by 40 people, 5 females (16 universities, 24 government) - Universitas Tadulako (UNTAD), Universitas Andalas (UNAND), Universitas Mataram (UNRAM), and Universitas Bengkulu (UNIB), and from the Emergency Management (BPBD -</p> <p>15) and Spatial Planning (9), offices of 9 StIRRRD Districts; Palu, Donggala, Morowali, Padang, Agam, Pesisir Selatan, Kota Bengkulu, Seluma and Mataram</p>	<p>Source: Base Isolation Training Report (GNS Science Intl Consultancy Report 2015/05)</p> <p>Source: Riskscape Training Report (GNS Science Intl Consultancy Report 2015/16)</p> <p>Source: Training attendance records</p>
	% of expert training participants that report increased specialist knowledge (pre-post training testing)	80% of participants by June 2015	None	<p><u>2017</u> <u>Achieved in part</u> <b>Base isolation</b> expectations exceeded <math>\geq 8/10 = 86\%</math> Will help with work <math>\geq 8/10 = 91\%</math> Overall quality and usefulness <math>\geq 8/10 = 97\%</math> Average = 91%</p>	<p>Source: Base Isolation Training Report (GNS Science Intl Consultancy Report 2015/05)</p>

<i>From agreed Results Measurement Table in the Activity Design Document</i>				<i>Data up to and including this reporting period</i>	
<b>Outputs</b>	<b>Indicators</b>	<b>Targets (planned)</b>	<b>Baseline</b>	<b>Results (actual)</b>	<b>Variance explanation (incl. information sources)</b>
				<b>Riskscape</b> expectations exceeded $\geq 8/10 = 76\%$ Will help with work $\geq 8/10 = 75\%$ Overall Quality and usefulness $\geq 8/10 = 83\%$ Average = 78%	Source: Riskscape Training Report (GNS Science Intl Consultancy Report 2015/16)
10. Community projects – design and implementation (P2)	No. of community project designed and implemented	2 community projects by June 2017.	None	<u>2017</u> 2 community projects have been designed and are currently being implemented. Implementation is behind schedule but on track to revised timeframes.	

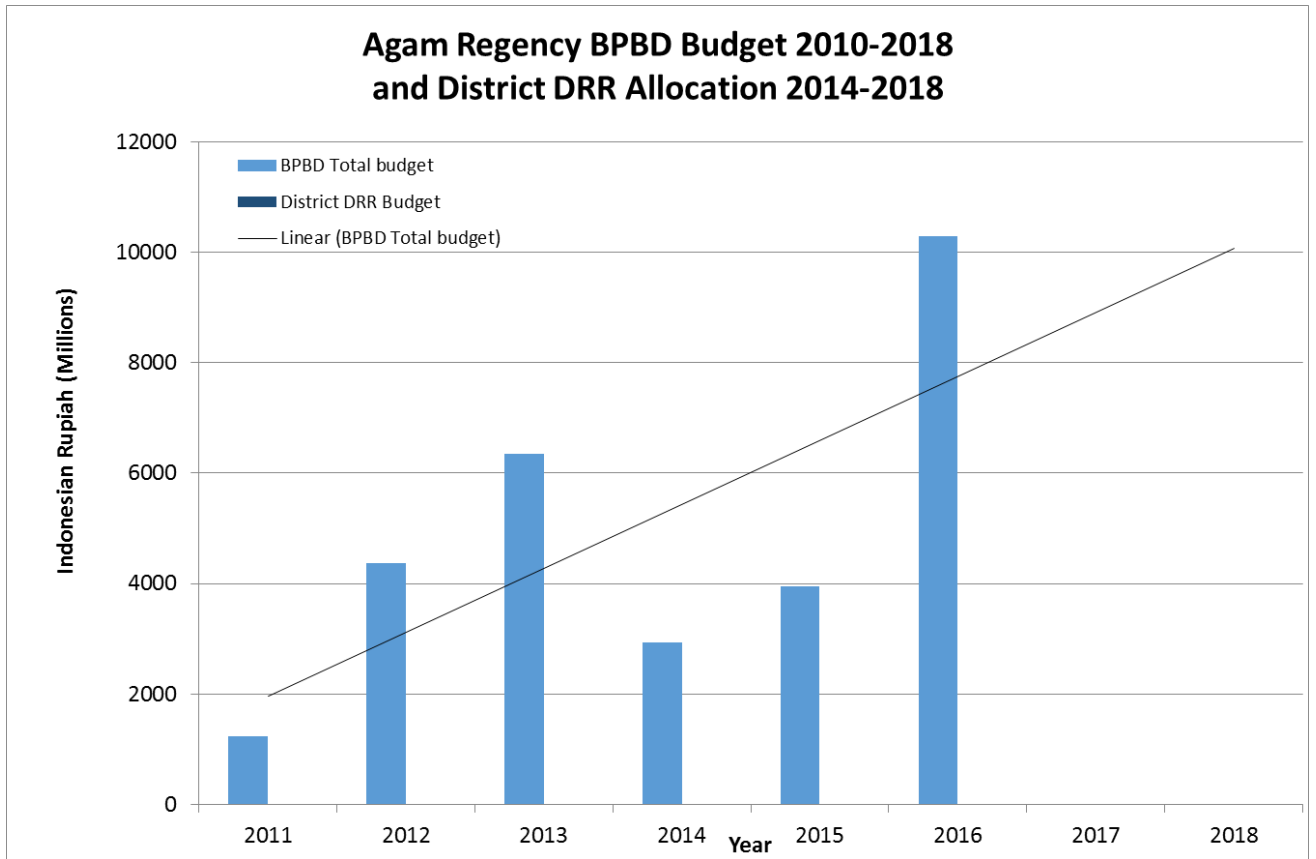
A. LG-SAT (Local Government Self-Assessment Tool) – Baseline as at 2014-2016



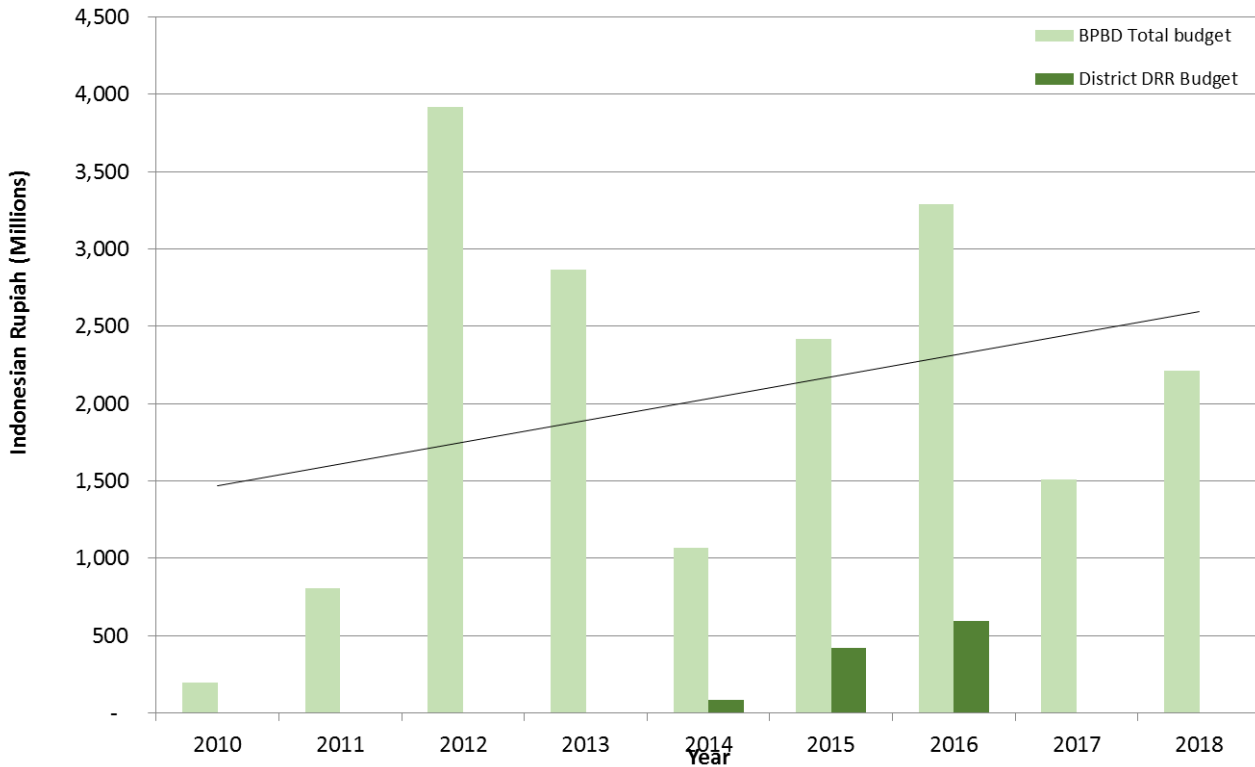
## B. List of Research Projects as at end 2017

<i>Location</i>	<i>Collaborators</i>	<i>Research project/ Activity</i>
Seluma 2017	UNIB BPBD	Workshop with BPBD for Involvement of Disaster Risk Reduction with Private Sector. <a href="http://harianrakyatbengkulu.com/ver3/2016/12/15/bpbd-ajak-perusahaan-kerjasama-tanggulangi-bencana/">http://harianrakyatbengkulu.com/ver3/2016/12/15/bpbd-ajak-perusahaan-kerjasama-tanggulangi-bencana/</a>
Bengkulu 2017	UNIB BPBD	Joint research between BPBD with Universitas Bengkulu for student community service (KKN) related to disaster risk reduction. <a href="https://bpbd.bengkuluprov.go.id/bpbd-provinsi-bengkulu-memberikan-materi-kebencanaan-dalam-kegiatan-pembekalan-kkn-universitas-bengkulu-periode-79-tahun-2016/">https://bpbd.bengkuluprov.go.id/bpbd-provinsi-bengkulu-memberikan-materi-kebencanaan-dalam-kegiatan-pembekalan-kkn-universitas-bengkulu-periode-79-tahun-2016/</a>
Central Sulawesi 2017	UNTAD-UGM Central Sulawesi Province	Analysis of the Brittle Geological Structure Development between Lesaropo Fault and Matano Fault, Southeast Sulawesi. Ph.D. student: Muhammad Nasir Lukman and supervisor: Dr. Agung Setianto (StIRRRD Province Coordinator)
West Sumatra 2017	UNAND West Sumatra Province	The assessment of new transportation facilities (bridges and roads) in some districts within West Sumatra (e.g. Solok, Painan, Pasaman, and Bukit Tinggi). Some research assessment related to Disaster Risk Reductions in Solok Districts is also carried out.
Morowali 2016 (completed)	UNTAD	Identification of Natural Disaster Causes (Landslide, Flood, Coastal Erosion) in Morowali District
Bengkulu 2016 (completed)	UNIB BPBD	Workshop and evaluation of the Earthquake and Tsunami Contingency Plan for BPBD.
National 2015 (completed)	UGM Kemendesa	Identification and Policy Analysis for Disaster Risk Reduction in Disadvantaged Regions (Donggala, Morowali, Sigi, Bima, Sumbawa, Lombok Timur, Seluma, Kaur, Pesisir Selatan and Padang Pariaman).
Palu 2014 (completed)	UGM	Seismic microzonation project for Palu City.

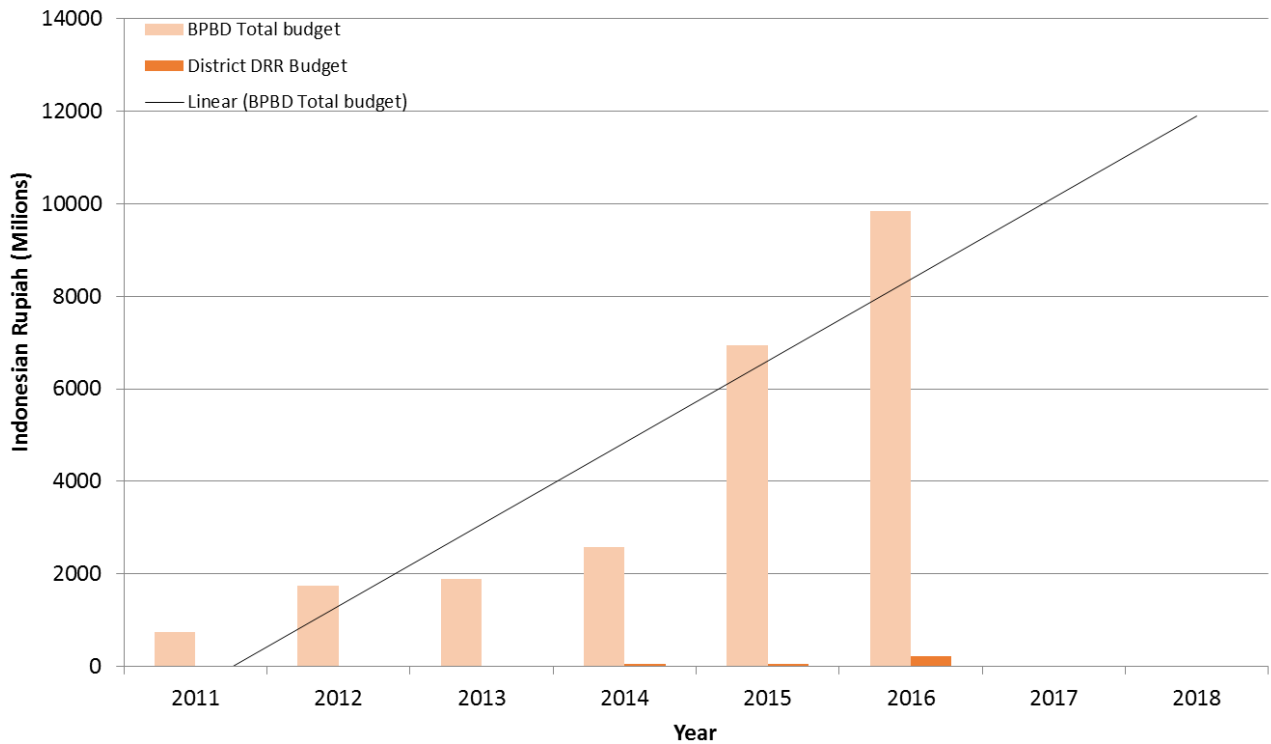
C. Summary of BPBD total budget allocations, district DRR budgets and BPBD budget trend for 2011 to 2018 (where data is available)



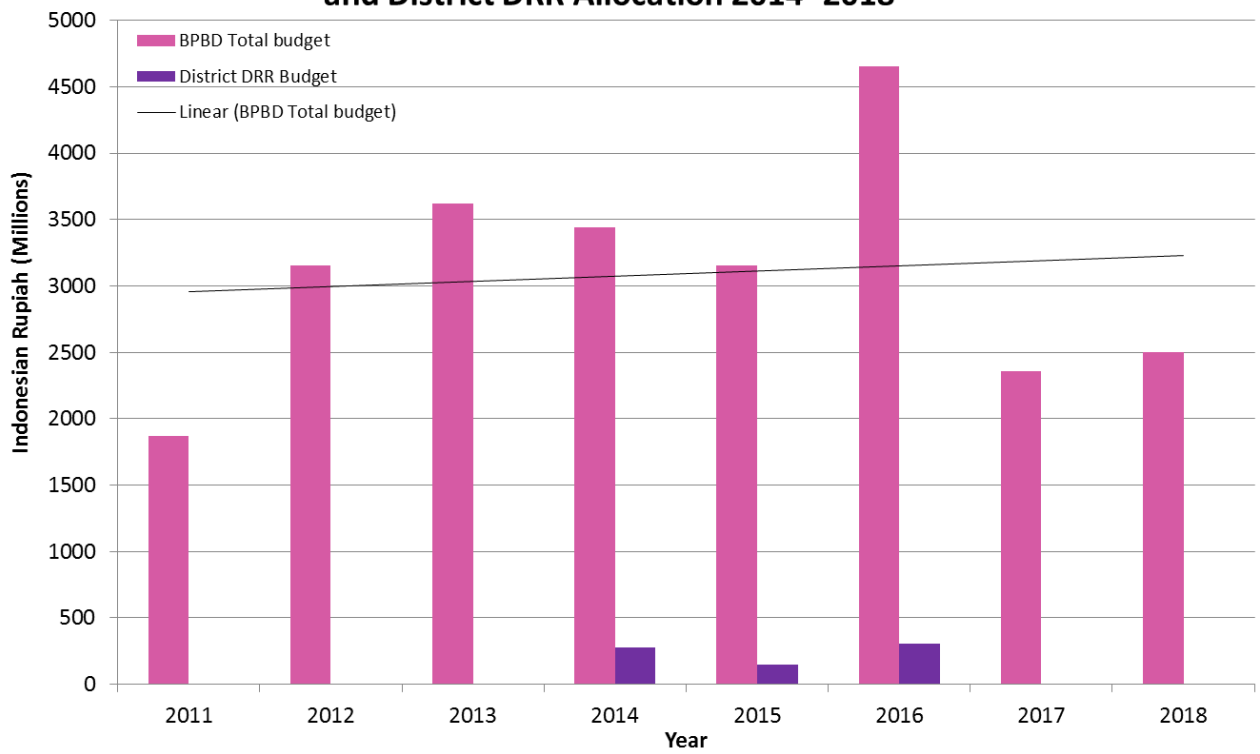
### Bengkulu City BPBD Budget 2010-2018 and District DRR Allocation 2014-2018



### Donggala BPBD Budget 2011-2018 and District DRR Allocation 2014-2018

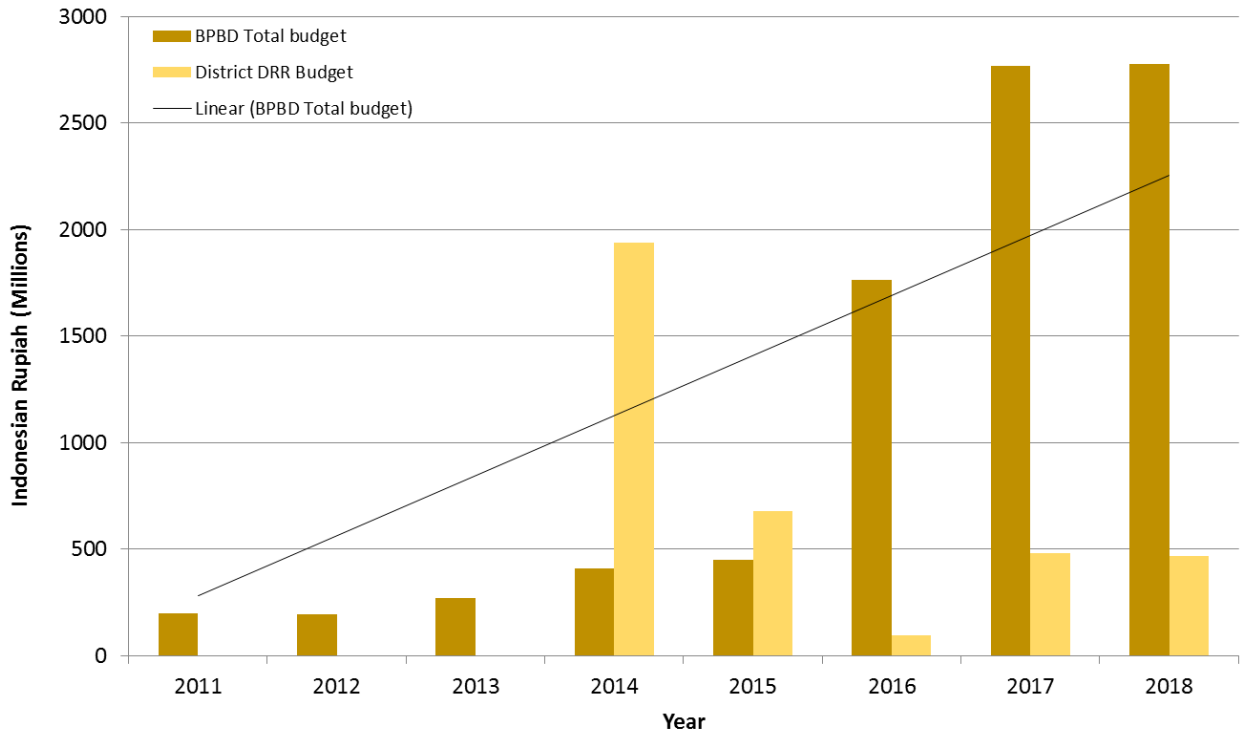


### Mataram BPBD Budget 2011-2018 and District DRR Allocation 2014 -2018

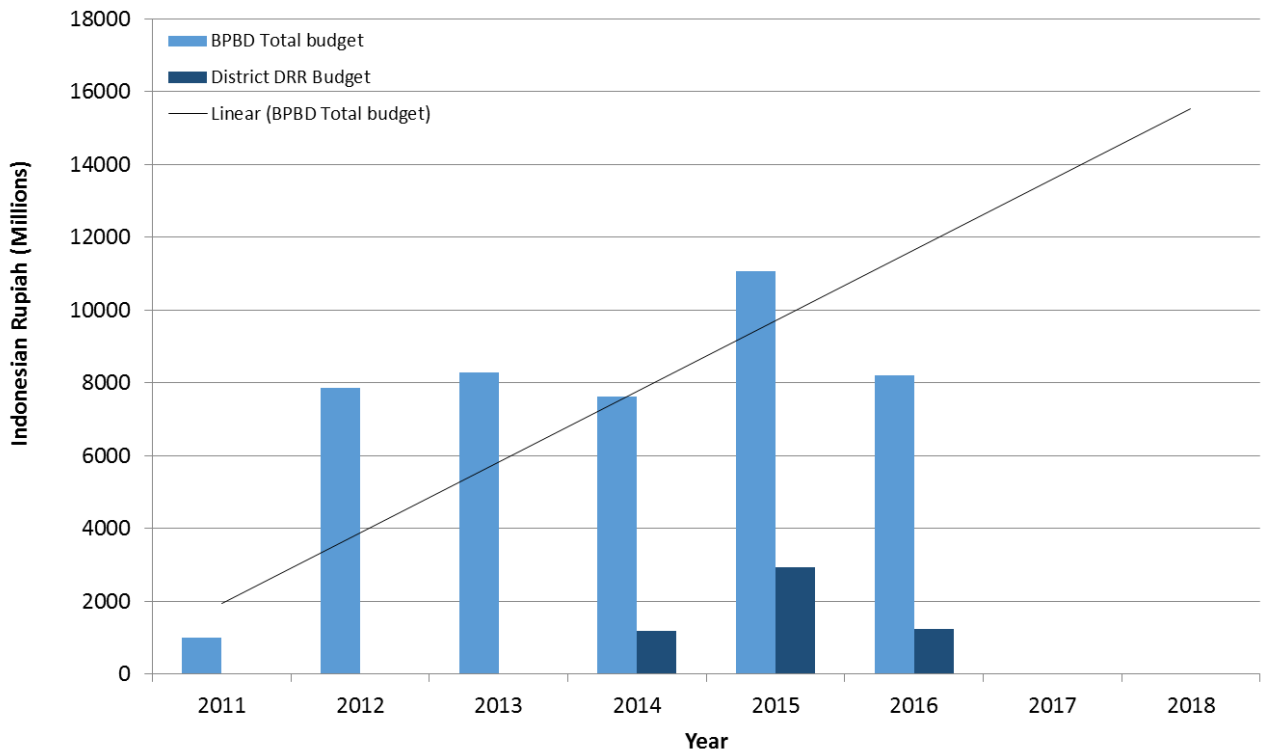




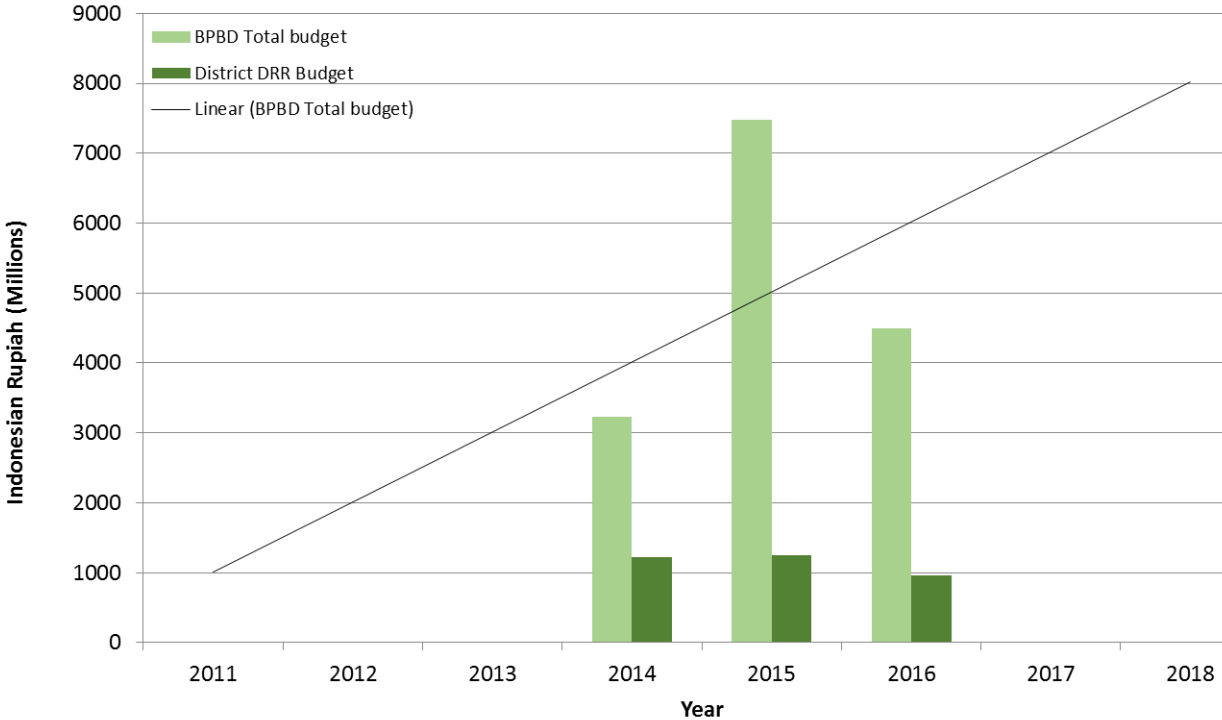
### Palu BPBD Budget 2011-2018 and District DRR Allocation 2014 -2018



### Pesisir Selatan BPBD Budget 2011-2018 and District DRR Allocation 2014-2018



### Seluma BPBD Budget 2011-2018 and District DRR Allocation 2014-2018



## D. Action Plan Content Analysis

### *Introduction.*

An assessment of the types of activities listed in each Action Plan was undertaken, to determine:

1. whether the Action Plans identify activities from appropriate DRR-related 'themes', and
2. whether districts have a particular strength in some themes, but not in others.

A checklist comprising 34 questions was developed to guide the analysis. These questions were grouped into 9 'themes' which corresponded to those in the LG-SAT-DRR. The number of questions within each theme varied: 2 was the minimum, and 8 was the maximum.

Each Action Plan was assessed to determine whether it includes activities that align with each question, and the results are graphed below. The graphs show how the number of positive ('yes') and negative ('no') responses to the questions within each theme. In some cases, it was not clear whether an Action Plan included an activity that aligns with a particular question, and this was coded 'maybe'.

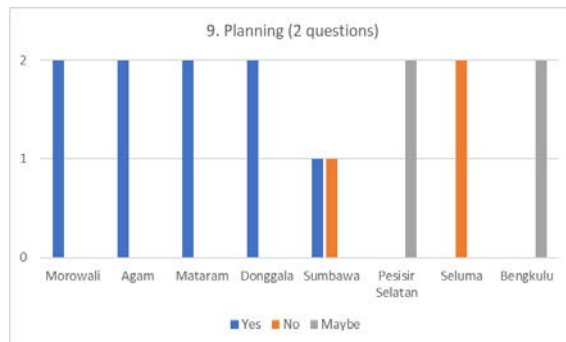
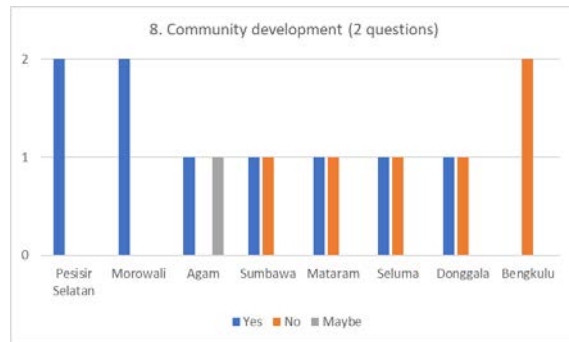
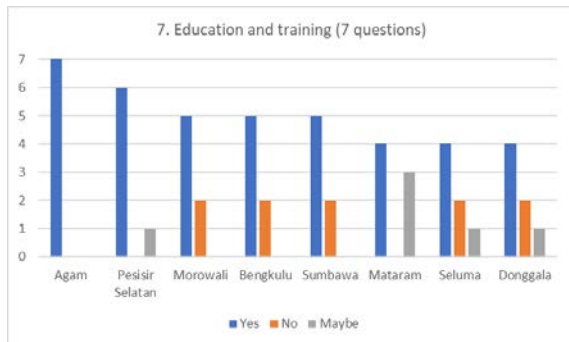
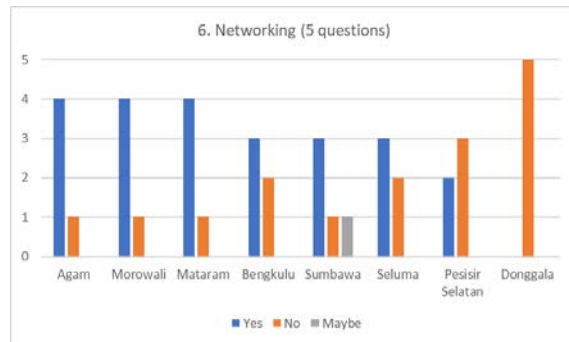
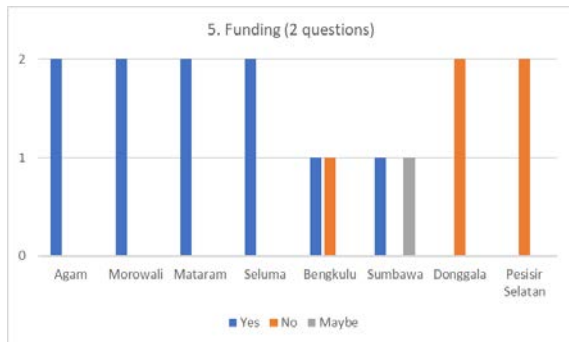
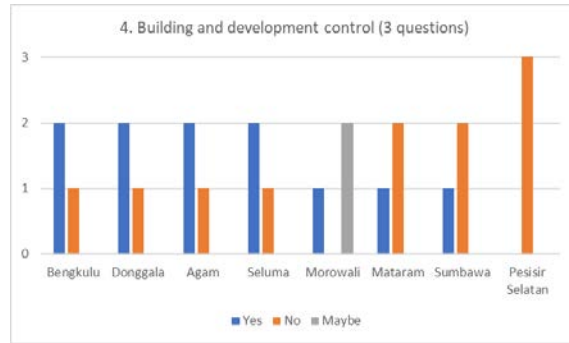
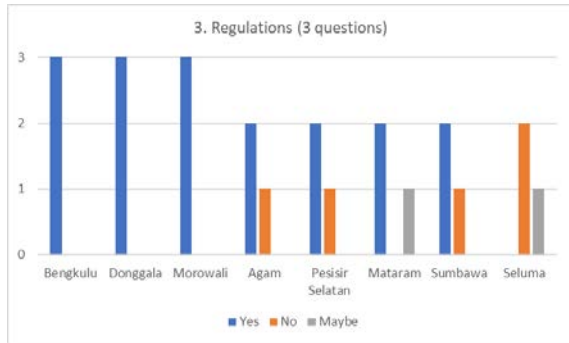
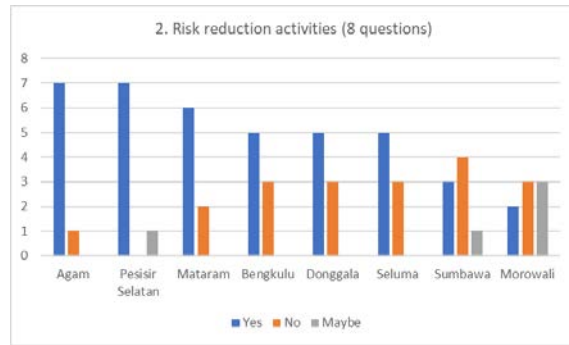
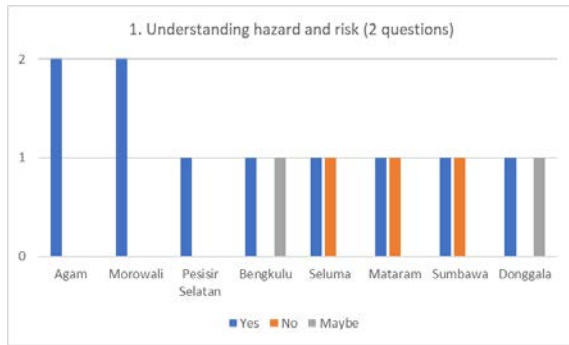
### *Results.*

The graphs show that all Action Plans have a good range of planned activities under Education and Training (Theme #7), which suggests that engaging participants at a community level is a strong focus within all 8 districts. Most Action Plans have a good focus on Risk Reduction Activities (#2), Developing DRR Regulations (#3), Building Strong DRR Networks (#6), and Understanding Hazards and Risk (#1).

However, there are fewer planned activities under the Planning theme (Theme #9), which asked whether there was a clear timeframe for implementing DRR activities, and whether actions had been assigned to a range of agencies.

*Research objectives:* The reason for undertaking the analysis was to understand whether each plan had a comprehensive list of activities which will help to reduce the risk associated with disasters in that district. It is noted that if a district's Action Plan doesn't have the right content, then the district is unlikely to make the kind of DRR progress envisaged by the StIRRRD program. It is also noted that this analysis does not assess whether a district is actually making good DRR progress, or evaluate the quality of the activities, but rather assesses whether it has a good range of DRR activities listed in its Action Plan and is therefore on the right track. The Plan Content Analysis will be used to inform the development of district specific coaching and mentoring strategies - identifying where further training and support might be needed.

Where districts have not included many activities within a theme (e.g. Understanding hazard and risk), it may indicate there was no perceived gap in this theme and consequently not many required actions to be taken. The Plan content analysis above therefore needs to be used in conjunction with knowledge about the district acquired by each of the Province Coordinators to determine whether gaps are intentional or whether they reflect a lack of appreciation about the importance of that theme in reducing risk.



## Appendix E: Activity Governance Group Action Log

As at 31 December 2017.

AGG meeting	Action	Comment	Progress
15 Dec 2017	Recommendation that StIRRRD again participate in the next DRR Awareness Week.	Will need additional budget to do this.	Approval and additional budget requested from MFAT.
	Continue engagement with Bappenas re spatial dynamic modelling.		-
17 July 2017	Focus for the next meeting should be on ideas for the sustainability of StIRRRD.	Consider holding special AGG meeting sessions on single issues such as sustainability and Toolbox.	Special AGG meeting on this topic held on 15 December 2017.
	Messaging needs to move to cost:benefit of investment in DRR. StIRRRD to look at tools here (e.g. examples).		-
	Policy matrix needs updating in both English and Bahasa.	Both versions exists – they need aligning.	-
	Future AGG meetings to be held at BNPB.		Dec 2017 meeting held at BNPB.
	StIRRRD to investigate how to develop a simple map of districts' strengths and weaknesses	This could be based on the LG-SAT.	-
	StIRRRD to investigate how it can assist in the new National Development Plan (Bappenas)		Two meetings with the Bappenas team were held in the second half of 2017. Engagement continues.
17 February 2017	Pak Wisnu will raise the issue of staff rotation within BPBD (and other SKPD) with MoHA at an upcoming meeting, with a recommendation to limit staff rotations to not less than a two year period.		MoHA have indicated they are looking into this issue.
	The StIRRRD team will simplify the policy recommendations matrix in line with AGG suggestions.	Refer the MoM for suggested format.	Completed.

AGG meeting	Action	Comment	Progress
	BNPB agreed to expedite the handing over of the vertical tsunami shelter in Bengkulu to local government, who are unable to use it until they do.		Completed. The facility has been handed over to local government.
21 July 2016	Consider how the AGG can contribute to evaluating the Action Plans.	Refer MoM which describes how this might take place.	Action Plans have just been completed and are being analysed. The results of the Plan analysis will be presented to a subsequent AGG meeting.
	StIRRRD to include a target showing how it is contributing to lowering the risk index in StIRRRD districts.	BNPB has a target to reduce the disaster risk index in Indonesia. It would be helpful to have StIRRRD contributing to lowering the index in its districts.	Completed.
19 Nov 2015	Introduce a matrix of policy recommendations for consideration at AGG meetings.	A matrix of policy recommendations was developed and circulated with the Nov. 2015 AGG minutes. This will be updated prior to every AGG meeting.	Completed.
	Introduce fire hazard into StIRRRD programme.	Fire was included in the Hazards 101 training (programmed for January 2016) and included in District Profiles.	Completed.
20 April 2015	Actions arising from the first AGG meeting, including the need for AGG members to be updated more frequently on StIRRRD activities potentially via social media.	Updates to AGG members have been provided outside of AGG meetings through regular meeting, phone calls and email between UGM staff with BNPB, Kemendesa and Bappenas. Most likely the AGG members have limited time to access to the StIRRRD blog and website.	Completed.
	Investigate the feasibility of an MOU between Kemendesa and GNS Science	This was investigated with Kemendesa and the decision was made not to pursue as an MoU would be too complicated and time-consuming. Cooperation between GNS and Kemendesa will be achieved via the UGM-Kemendesa MoU.	Completed.

AGG meeting	Action	Comment	Progress
	Incorporate hazard specific training into the DRR Network meetings.	The option of a Hazards-101 course is being investigated by UGM and will be integrated into the first DRR Network Meeting later in 2015.	Completed.
20 April 2015	Explore options for the delivery of additional training in EQ building design (both engineered and non-engineered buildings).	This is being considered as part of the reallocation of budget funds. Content has been included in the NZ Study Visit.	This has been included as an option in the reallocation of budget funds. It still needs to be assessed alongside other possible project options.
	Have MoHA in attendance at the next AGG meeting (November 2015).	MoHA were invited to attend the AGG meeting however they did not attend.	MoHA is now in regular attendance at AGG meetings (since Dec 2016).
	It would seem that BNPB is confused over the relationship between the BNPB LG-SAT and the StIRRRD version. This will need to be addressed at the next AGG meeting and a fuller presentation on the StIRRRD tool, results and relationship to the BNPB version discussed.	This was explained more fully at the Nov. 2015 AGG meeting. UGM have also brought this up in meetings with Pak Lilik. The issue seems to have been addressed.	Completed.
17 Nov 2014	Reporting on progress by districts in meeting the recommendations from the National DRR Seminar held in Nov 2014.	Most of the recommendations from the National DRR Seminar have been adopted into district's action plans. The progress of implementation will be reported in conjunction with the action plan activity reports.	A review of Action Plans against the recommendations needs to occur when all Action Plans have been completed. A review of Plan content is being undertaken in July 2017.  Since Completed.

## Appendix F: NZ Organisations involved in StIRRRD as at 31 December 2017

<i>Main Sub-Contractors</i>		
NIWA	Subject matter expert – flooding; coastal hazards, Risk, RiskScape.	Crown Research Institute
Beca	Subject matter expert – base isolation and EQ mitigation	Consultancy
Otago Regional Council	Subject matter expert – local govt. hazard management; debris flows; coastal hazards	Local Government
Greater Wellington Regional Council	Subject matter expert – local govt. hazard management; flooding; catchment management	Local Government
Absolutely Organised	Event Organisation (NZ Study Visits)	Privately owned company
Block Seven Ltd (Michael Goldsmith)	Subject matter expert – local govt. hazard management. Province Coordinator role (temporary replacement for Phil Glassey)	Privately owned company
<i>Other sub-contractors and/or in-kind participation (NZ Study Visits)</i>		
Ngāi Tāmanuhiri tribe Muriwai Marae	Indigenous knowledge on risks	Iwi
Ngati Porou, Gisborne	Indigenous knowledge on risks	Iwi
Joe McLeod	Facilitation/cultural expert	Self employed
Massey University	Subject matter expert – social sciences and NZ education sector	University
Canterbury University	Subject matter expert – volcanic ash impacts	University
Auckland University of Technology	Function host ; NZ education sector	University
Auckland University	Subject matter expert – volcanic hazards; community participation; resilience in the built environment	University



University of Waikato	Subject matter expert – coastal hazards	University
Canterbury Regional Council	Subject matter expert – Christchurch EQ	Local Government
Christchurch City Council	Subject matter expert – Christchurch EQ	Local Government
Auckland Council	Geographical and subject matter expert – emergency management	Local Government
Wellington City Council	Subject matter expert – tsunami blue line; emergency management; Resilient Cities; Mayoral visit	Local Government
Napier City Council	Geographical & subject matter expert – Napier EQ; Community engagement; emergency management	Local Government
Hawkes Bay Regional Council	Geographical & subject matter expert – Napier EQ; Community engagement; coastal hazards; East Coast Lab; emergency management	Local Government
Gisborne District Council	Geographical & subject matter expert – mayoral visit; iwi-local govt engagement	Local Government
Ministry of Business, Employment and Innovation	Subject matter expert – Building regulations	Government Department
Landcare	Subject matter expert – catchment management	Crown Research Institute
Kestrel Group	Subject matter expert – Lifelines Groups	Consultancy
Earthquake Commission	Subject matter expert – insurance	Government Entity
Dave Peacock	Subject matter expert – coastal hazards	Self employed
Cutriss Consultants	Subject matter expert – Resource consents	Consultancy
Department of Conservation	Subject matter expert – Volcanic hazards management	Government Department

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## Appendix G: District Action Plans: Implementation Progress for Seluma, Sumbawa and Mataram

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Three Action Plans have been updated this reporting period:

1. Seluma (to January 2018)
2. Sumbawa (to October 2017)
3. Mataram (to October 2017)



## RENCANA AKSI PENGURANGAN RISIKO BENCANA KABUPATEN SELUMA

**Implementasi Progress sampai dengan akhir Desember 2016  
dan Rencana Kegiatan untuk 2017**

*Update Terakhir: 31 Maret 2017*

<b>Nama Kota/Kabupaten</b>	Seluma
<b>Provinsi</b>	Bengkulu
<b>Target Capaian</b>	Masyarakat dan Organisasi Tangguh Bencana Seluma
<b>OPD Utama</b>	BPBD, dengan bantuan dari OPD yang lain.
<b>Focal Point</b>	Drs.H. Azwardi, MH (Kepala BPBD Seluma) Dr. Ade Sri Wahyuni (Staf Pengajar Universitas Bengkulu), Prof. Dr. Ir. Yudhy Harini Bertham, M.P (Staf Pengajar Universitas Bengkulu), Dr. Moch. Farid ((Staf Pengajar Universitas Bengkulu), M.Husni Thamrin, SH, MH ( Ketua DPRD Seluma ), Drs. Julian Zuherman, M.Si.( Kepala BAPPEDA Kab. Seluma )

<b>Cakupan</b>	Rencana Aksi mendokumentasikan kegiatan yang direncanakan di seluruh OPD untuk mengurangi risiko bencana. Kegiatan yang teridentifikasi perlu diintegrasikan dengan rencana daerah yang lain. (misal. RPJMD, RTRW, RZWP3K)
<b>Frekuensi Update</b>	Tahunan
<b>Tanda Tangan</b>	
<b>Kepala BPBD</b> .....	Tanggal.....
<b>Universitas Bengkulu</b> .....	Tanggal.....
<b>Mengetahui,</b>	
<b>Sekretaris Daerah</b> .....	Tanggal.....

## A. INSTITUTIONAL

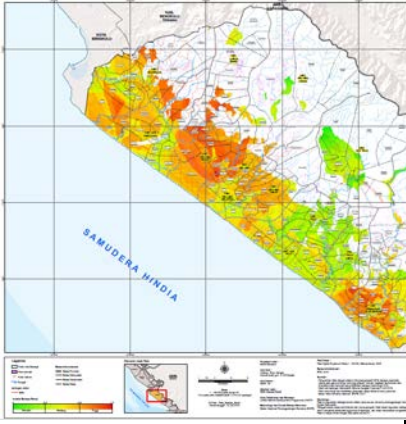

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Frame				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
1.1	Seluma District geographical information system is established	a. Providing geographical information system	Disaster events in Seluma District are monitored in a sustainable manner.	x	x			150 M	Estimated Progress: 30 %	1. BMKG 2. Pusdalops BPBD 3.
		b. Training of GIS operation staff	GIS staff are skilled	x	x			50 M	Estimated Progress: 100 % ( 2 staff -BPBD )	1. Basic GIS Training in Jogja, 2017 2. QGIS Basic Training – Held by PMI Bengkulu
		c. Assistance of GIS staff	GIS activities are run well and properly	x	x	x	x	75 M	Estimated Progress: 25%  Development Planning Agencies Seluma has initiate making a mapping Program (GIS Based) and BPBD will assistance to input Hazard Map as layer	<a href="http://www.pelayanan.selumakab.go.id/pemetaan">www.pelayanan.selumakab.go.id/pemetaan</a>
1.2	Regulation of DRR-related to use of village funding	Drafting district head decree on the allocation to DRR in village budget	5 % of village budget goes for DRR activities	x				75 M	Estimated Progress: 5 %  Approx. 3 out of 200 villages so far have village level regulations.	Pak Azwardi (BPBD) Ds Rawa Indah, Ds Sumber Makmur, Ds Lawang Agung, Desa Penago Baru, Ds Pasar Ngalam.



## B. BUDGET

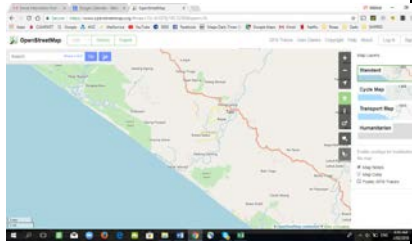
NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
2.1	Mapping alternative funding potentials for DRR activity	a. Developing Work Plan and Budget Implementation Document (DPA) of related agencies	DRR activities are included in work plan and DPA of BPBD	x	x	x	x	50 M	Estimated Progress: <b>80 %</b>  Complete for 2016  1.PU Budget for physical infrastructure (bridges) Agriculture – irrigation system repairs, Water sanitation, evacuation route, retaining wall etc c.2. Revision Of Statagic Plan 2016 – 2021. We revise 5 years Statagic Plan basen on Disaster Risk Study, Disaster Plan dan Spatial Action Plan.	1.Pak Azwardi (BPBD) 2. Bappeda 3. BNPB 4. Kemendes 5, Kemendagri
		b. Collaborating with Private sectors as alternative funding sources	MoU with several potential companies that wish to be involved in DRR CSR activities.  Commitment by businesspeople to make contribution	x				50 M	Estimated Progress: <b>33%</b>  Palm Oil industry have been engaged and response arrangements put in place	Pak Azwardi (BPBD)
		c. Coordination on Funding from the national and provincial government	There is funding to support DRR activities in the region	x	x	x	x	300 M	Estimated Progress: <b>100 %</b> for 2017 budget, due to:  1. BNPB are supporting activities to the level of 9 B Rupiah. 2. Kemendes 1 B Rupiah ( Flood EWS )	

## D. PROGRAM


NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
3.1	Improving disaster information services to reduce	a. Identifying areas prone to flooding, landslide,	There is a map on flood-prone areas					350M	Estimated Progress: <b>75 %</b> Map completed	1. BNPB 2. BPBD (Geodatabase file) 3. Bappeda (Infrastructure


NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
	disaster risk	earthquake, tsunami, and coastal erosion along with relevant stakeholders and the local communities							data) 4. Badan Informasi Geospasial	
			There is a map on landslide-prone areas					Estimated Progress: <b>75%</b> Map completed 	1. BNPB 2. BPBD (Geodatabase file) 3. Bappeda (Infrastructure data) 4. Badan Informasi Geospasial	
			There is a map on earthquake-prone areas					Estimated Progress: <b>75%</b> Map completed 	1. BNPB 2. BPBD (Geodatabase file) 3. Bappeda (Infrastructure data)	


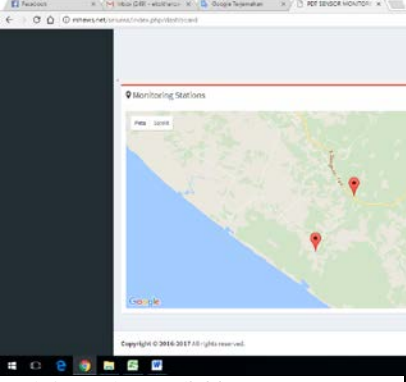
NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
									4. Badan Informasi Geospasial	
			There is a map on tsunami-prone areas					<p>Estimated Progress: <b>100%</b> Map completed</p> 	<ol style="list-style-type: none"> <li>1. BNPB</li> <li>2. BPBD (Geodatabase file)</li> <li>3. Bappeda (Infrastructure data)</li> <li>4. Badan Informasi Geospasial</li> </ol>	
		b. Disaster vulnerability data	Updating hazard maps periodically through satellite		x		350 M	Estimated Progress: <b>5%</b>		


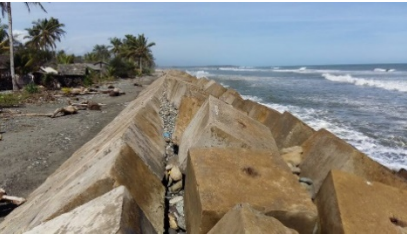

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
		are always updated following the recent changes in social and physical environments	maps						Purchasing data and imagery. Report/ mapping of disaster events. In 2017, BPBD obtained base maps for Seluma. These will be used to create maps showing hazard, vulnerability and capacity. See <a href="https://www.openstreetmap.org/#map=12/-4.0247/102.4252">https://www.openstreetmap.org/#map=12/-4.0247/102.4252</a> 	
		c. Socializing hazards through the media	Socializing hazards through the media	x	x	x	x	75M	Estimated Progress: <b>5%</b>  Concentrating on floods and landslides. Hazards information socialized through the BPBD website, and voluntary groups.	
3.2	Improving the community's capacity in DRR	a. Disseminate the concept of earthquake-resistant housing to people of Seluma	Socializing the concept of earthquake-resilient structures in 14 sub-districts		x	x	x	150M	Estimated Progress: <b>5%</b>  Coordination started by UNIB.	
		b. Inventory and identifying damages and losses due to disasters	There is a list of damages and losses due to disasters  Proposal for rehabilitation of damaged structures		x	x	x	x	155 M	Estimated Progress: <b>100 %</b> Complete for 2017





NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
		c. Improving coordination among higher education related to DRR	MoU between Seluma government and UNIB in DRR is implemented	x	x	x	x	50M	<p>Estimated Progress: <b>10%</b></p> <p>Discussions have started with UNIB regarding an MoU in 2017.</p> <p>There is a DRR activity presenter from UNIB.</p> <p>2017 - engagement with UNIB on Student Practical activities</p> 	

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
										
		d. Facilitating the establishment of Disaster-Prepared Schools	14 schools have implemented Disaster-Prepared Schools		x			5 M	Not programmed to start until 2017. Note : PMI has completed about 79 school (junior and high)	Mr. Diel Andika (PMI Seluma )
3.3	Improving the involvement of vulnerable groups in decision-making process	a. Coordination of the establishment of disaster mitigation team of Seluma District	There is a disaster mitigation program socialization team in the district and 14 sub-districts	x				100M	Estimated Progress: 0%	
		b. Socializing DRR programs in Seluma District	DRR programs are socialized in 14 sub-districts	x	x	x	x	20 M	Estimated Progress: 0%  Included in the program of Tangguh Disaster Village, Volunteer Training and counselling of college students. Difficult to determine level of progress	
3.4	Structural disaster mitigation	Providing EWS equipment for flooding, landslide,	Budget for EWS equipment in several flooding-prone areas Locations: 4		x			50 M	Progress : 100 % Note : Kemendesa has completed about 4 sensors (Rain dan water level)	1. BPBD 2. Kemendesa

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
		and tsunami	Installation of EWS equipment in several landslide-prone areas Locations: 4		x	x	x	250 M	<p>Estimated Progress: <b>33%</b></p> <p>Landslide EWS systems Installed in one location with 4 sensors- in conjunction with BNPB and UGM BPBD would like to install more EWS with their budget in the future.</p>  	1. Kemendesa has installed flood EWS (2017). 1 unit Water level and 1 unit rain gauge system at Desa Napal Jungur (Upstream), 1 Unit water level dan 1 unit rain gauge at Desa Air Periukan and 1 unit Warning Station at Desa Pasar Ngalam
3.5	Mitigation of flooding and landslide	Planting trees for forest protection against flooding and landslide	Planting trees in critical/deforested lands		x	x	x	150 M	No information available.	

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
3.6		Developing guidebook for earthquake and tornado resistant houses	Distribution of Guidebook/leaflet for earthquake and tornado resistant design and construction	x	x	x	x	75 M	Estimated Progress: 0%	
3.7		Planning and constructing embankment for coastal protection	There is a planning document for embankment construction.		x			65M	Estimated Progress: 100 % for 2017 Construction started in some locations.   	



NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
3.8		Repairing or constructing road or bridge for evacuation route	The evacuation routes are in good condition.	x	x	x	x	65 M	Estimated Progress: 100%  1. 2 Evacuation Route has completed 2. 2 SuspensionBridges has completed.	1. PU ( Public Work Dept) Kab Seluma = Evacuation Road at Desa Jenggalu to Desa Riak Siabun 2. Unpredictable Budget – BPBD about 500 M (2 unit suspension bridge) at Desa Cahaya Negeri

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
3.9		Developing coastal safety measures against abrasion	The coast is safe from abrasion.		x	x	x	5,00M	<p>Estimated Progress: <b>100 %</b> for 2017</p> <p>Physical works have started and are on-going supported by BNPB (Rp.9 B)</p>  	



NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
3.10		Rehabilitation/maintenance of protection dikes/gabion	The coast is safe from abrasion.	x	x	x	x	500 M	Estimated Progress: 20 %  Note: there is some overlap here with 3.9.	
3.11	Finding out the target success and constraints of DRR activities	Monitoring and evaluation of DRR activities	There is a Monitoring and Evaluation document of DRR activities	x	x	x	x	125 M	Estimated Progress: 25 % Every year, BPBD conducts coordination meetings to evaluate activities including DRR.	

## E. HUMAN RESOURCES

NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
4.1	Capacity building of DRM HR in DRR effort	f. Fire management staff training	Fire management staff is capable of handling fires	x	x	x	x	100M	Estimated Progress: 0%	
		b. Volunteer capacity building (Tagana/ Disaster-Prepared Youth, Rapid Response Team, Disaster-Prepared Village)	Training for volunteers (Tagana, Rapid Response Team, Disaster-Prepared Village)	x	x	x	x	75 M	Estimated Progress: 50% Training starting on December, 2017.	BPBD, BPBD Propinsi, Basarnas, PMI

NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
								 		



NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
										
		c. Training volunteers	Volunteers are capable of DRR efforts	x	x	x	x	75M	<p>Estimated Progress: 25% Training complete for 2017.</p> 	

NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Time Plan				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
4.2	Improving the community's capacity in mitigating disaster	Improving the community's participation in disaster mitigation	Village community is aware of the measures to take during tsunami	x	x	x	x	120M	Estimated Progress: 25 % 1. Has completed build 1 Village (Ds Pasar Talo) 2. Has completed development (Desa Rawa Indah and Desa Sumber Makmur) 3. By 2018 we are planning 2 villages (1 villages for tsunami and 1 village for flood)	1. BPBD 2. BNPB
4.3	Improving the education world's involvement in DRR	Establishing 5 Disaster-Free Public Elementary Schools	A school can function as a shelter  Students and teachers can participate in DRR efforts		x	x	x	120 M	Estimated Progress: 0%  By 2018 we plan 3 schools as disaster-safe schools	

Progress is estimated as a percentage, with green indicating "on track", blue indicating "some progress", yellow indicating "limited or no progress"

**DISASTER RISK REDUCTION ACTION PLAN**  
**SUMBAWA DISTRICT**  
**Implementation Progress to 19 October 2017**  
**and Activity Plan for 2018**

Name of City/District	Sumbawa
Province	Nusa Tenggara Barat
Output Target	Disaster Resilient Community and Organization of Sumbawa District
Focal Point	Drs. Zainal Abidin (New Head of BPBD Sumbawa) start from October 2016 till now. Ir. Mukmin (Head of BPBD Sumbawa till September 2016)  Dr. Eko Pradjoko (Center for Disaster Risk Management (CDRM), Mataram University/ Lecturer of Civil Engineering Dept. Mataram University) Dr. Yusron Saadi (Faculty of Engineering, Mataram University) Dr. Ni Nyoman Kencanawati (Faculty of Engineering Mataram University)

Note :

Progress is estimated as a percentage, with green indicating "on track", blue indicating "some progress", yellow indicating "limited or no progress"  
 Updated information, with red font


• **INSTITUTIONAL**

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
1.1	Finding legal basis for DRR activities	Creating a regional regulation on disaster mitigation.  Creating a derivative such as a regent regulation	A regional regulation on disaster mitigation is in place.	X				10.000.000 (2016)	Estimated Progress: 100% (2016)  Progress until March 2017: The Regional Regulation No 5 Year 2016 on Disaster Management was approved in October. The	BPBD

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
								<p>regulation strengthens the policies related to the DRR efforts as the legal umbrella. The establishment of disaster resilient villages, hazard prone villages mapping is expected to bring positive investment climate in Sumbawa.</p> <p>DPRD Pak Budi :</p> <ul style="list-style-type: none"> <li>• Budget support for DRR activities</li> <li>• Not only depend on regulation (Perda), but also encouraging the establishment of regulation that strengthening other regulations.</li> </ul> <p>DPRD Pak Ahmadul Kusasih:</p> <ul style="list-style-type: none"> <li>• Perda does not followed up afterwards. Usually it will stop after the establishment of Perda.</li> <li>• Need strong commitment in law and related institution to plan for derivative of existing Perda.</li> </ul> <p>BPBD :</p> <ul style="list-style-type: none"> <li>• Sumbawa is flooded as a result of activities in other area.</li> <li>• According to Pak Usman (BPBD), BPBD has allocated budget for establishment of Perbup in 2017.</li> <li>• There is a plan to generate 4 Perbup from DRR District regulation (Perda).</li> <li>• A lot of regulations is not implemented.</li> <li>• Head of BPBD need to make the flood potential identification.</li> <li>• There is area that never flooded, but recently it got flooded.</li> </ul> <p>DPRD :</p> <ul style="list-style-type: none"> <li>• BPBD is still considered weak in terms of it capacity.</li> <li>• BPBD and Fire fighters office were flooded. It</li> </ul>		

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
								<p>necessary to consider constructing a building that avoid the risk of flooding.</p> <p>DPRD Sumbawa Pak Ahmadul Kusasih (2)</p> <ul style="list-style-type: none"> <li>• There are not only natural related disaster but also social related disaster. Social related disaster is considered to be more severe than natural disaster.</li> <li>• There are 24 sub-district that most often exposed by disaster: 18 sub-district located at coastal area and 6 in mountain area.</li> </ul> <p>DPRD Pak Kamal :</p> <ul style="list-style-type: none"> <li>• Has engineering background.</li> <li>• Interested in earthquake resilience building design.</li> <li>• Sumbawa have cultural houses design that earthquake resilience.</li> <li>• Feel that information regarding DRR in between parliament members is lacking.</li> <li>• STIRRRD is asked to invite parliament members when hosted a seminar.</li> <li>• There is buku putih (White book) about DRR as a guidebook that can be delivered to communities when reses period</li> <li>• Concerned when Perda has not been implemented. Encourage the establishment of PerBup as legal basis.</li> <li>• Follow up will be made in internal parliament.</li> </ul> <p>DPRD Bu Ida commission 4 :</p> <ul style="list-style-type: none"> <li>• BPBD is work partner of 4<sup>th</sup> commission.</li> <li>• Ready to support the budget of BPBD.</li> <li>• Ask Head of BPBD to draft Perbup as derivative of Perda.</li> <li>• There are 30 builders that already understand</li> </ul>		

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
								<p>earthquake resilient building → The number of builders are need to be increase.</p> <ul style="list-style-type: none"> <li>• Need to be involving women staff/worker like PKK, Iwapi. Women is tend to be more focus.</li> </ul> <p>DPRD Pak ..... :</p> <ul style="list-style-type: none"> <li>• We need Action Program to deal with dry and wet season.</li> <li>• Invite parliament members to participate.</li> <li>• Forestry Agency is under Province jurisdiction therefore we need to encourage participation of central government.</li> </ul> <p>Housing and Settlement Agency</p> <ul style="list-style-type: none"> <li>• Sumbawa have flood risk every 6 years.</li> <li>• BPBD need to search the record of flood.</li> <li>• Draft proposal is not complete yet. Help from TAGANA to record disaster event.</li> </ul>		
		Creating a derivative such as a regent regulation	As a finding legal that strengthens the Policy related to DRR Efforts			X		20.000.000	Estimated Progress: 0% (2018)	
1.2	The community and the local government task forces understand and implement relevant regional regulations	Socializing regional regulations on disaster management to the community and the task forces	The community and the local government task forces are aware of the regional regulations on disaster management.	X	X	X	X	55.000.000 (2016)	<p>Estimated Progress: 100% (2016)</p> <p>Progres until March 2017:</p> <p>BPBD :</p> <p>Seminar on Sustainable Building and Cooperation of Disaster Resilient Villages. The seminar was attended by the representatives of Resilient Villages from Kalimango and Baru Village, Alas sub district (November 2016).</p>	BPBD

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
								 <p>DPRD Pak Andi Rusni</p> <ul style="list-style-type: none"> <li>• Critic for point 1.2 → Socialization. Not only socialization of regulation but also socialization regarding DRR in communities.</li> <li>• Increasing human resources is needed → Socialization on Disaster Risk Anticipation</li> <li>• Communities is still lack in awareness regarding disaster risk.</li> <li>• Communities should aware to refuse disaster-causing activities (Fire, flood, etc. --→ Fiscal limitation</li> <li>• Correction for TRC, This team should be able to empowering its communities in facing disaster.</li> <li>• Numerous activities has been conducted.</li> <li>• TRC should not be a burden instead it should be a tool to help.</li> <li>• Disaster aid coordination is still not well coordinated.</li> </ul>		
			The community and the local government task forces are aware of the regional regulations on disaster management.			X		55.000.000	Estimated Progress: 0% (2018)	BPBD
1.3	Building cooperation among	Establishing DRR Forums in sub-districts and districts	There is DRR Forum in the district There is DRR Forum in the	X	X	X	X	35.000.000 (BNPB)	Estimated Progress: 75% (2016) Progress until March 2017:	

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
	stakeholders related to disaster		sub-districts Target: 24 sub-districts, 5 sub-districts/year. There are coordination meetings 3 times per month					15.000.000 (APBD Sumbawa)	BPBD : <ul style="list-style-type: none"> <li>• DRR forum has been established in 4 sub-district (Kecamatan). Still less than 20. Members of the forum is taken from village (desa/kelurahan).</li> <li>• Declaration of DRR forum conducted in 2014 but then it is on hiatus.</li> <li>• Does not have SK Bupati</li> <li>• There are 12 Destana in Sumbawa.</li> <li>• 120 TRC that scattered in village and has only basic training.</li> <li>• Para anggota TRC does not get salary. tidak mendapat honor. Try to make it like TAGANA who get salary.</li> <li>• BPBD want to increase the capacity by doing advanced training.</li> <li>• Pak Usman (BPBD) stated that Perda, initiative of Parliament, should be thinking the consequences like budget to produce derivative regulation.</li> </ul> Pak Mukmin : This program has not been implemented yet because of changes in OPD and budget priority.	
			There is DRR Forum in the district			X		190.000.000	Estimated Progress: 0% (2018)	BPBD
		Inter-DRR organizations joint action plan	There is an action plan among DRR organizations with the local government task forces and the community.  There is a meeting once a month.	X	X	X	X	35.000.000 (2016)	Estimated Progress: 0%  Progress until Maret 2017: BPBD : Do not have SK Bupati, concerned with financial implication with this activity.	BPBD



NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
		Meetings between task forces for joint DRR activities At least twice a year	A coordination team is established. Coordination meetings are held to improve preparedness and togetherness in disaster mitigation	X	X	X	X	30.000.000 (2016)	Estimated Progress: 100% (2016)  Progress until March 2017: BPBD: Coordination and dissemination regarding resilient village in Kalimnago and Beru village was opened by Assistant I of Sumbawa District, Dr. H. Muhammad Ikhsa, M.Pd. and attended by related stakeholder.	BPBD
			A coordination team is established. Coordination meetings are held to improve preparedness and togetherness in disaster mitigation			X		30.000.000	Estimated Progress: 0% (2018)	BPBD
		Preparing MoU between UNRAM and Sumbawa BPBD for DRR-related collaborations	There is an MoU between UNRAM and Sumbawa BPBD	X	X			15.000.000 (2016)	Estimated Progress: 20%  Progress March 2017: BPBD : <ul style="list-style-type: none"> <li>Planned to be held in 2017.</li> <li>Ongoing discussion with UNRAM.</li> <li>Pak Usman (BPBD) stated that in local universities in Sumbawa, there is no figure or institutions that prominent pursuing the field of science.</li> <li>For now, foloow-up the cooperation with Pak Eko from UNRAM.</li> </ul> DPRD Pak Andi Rusni : Should the cooperation held with UNRAM, why not involving other universities.  Pak Mukmin : <ul style="list-style-type: none"> <li>This program is not implemented yet because of changes in OPD and budget priority.</li> <li>Pak Eko and UNRAM is ready.</li> </ul>	BPBD

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
								<ul style="list-style-type: none"> <li>Pak Abidin is expected to follow up.</li> <li>Pak Eko- Coastal abrasion expert.</li> <li>Fieldtrip Aibari –Kemendesa make port for communities implemented in 2018 → 9,5 M (National Strategic Plan).</li> </ul>		
			There is an MoU between UNRAM and Sumbawa BPBD			X		30.000.000	Estimated Progress: 0% (2018)	BPBD
4	Institutional capacity building Resilient Village	Institutional Strengthening Training for Community Based Disaster Risk Reduction activities	Increasing the capacity of the member / manager of Resilient Village in the activities of community-based disaster risk reduction		X			Budget ?	Estimated Progress: 100% (2017)  Progress October 2017 :. BPBD: It Was held on 10-18 July 2017 Involving 3 resilient village in Moyo River watershed (Baru Tahan, Songkar and Kugin Village)	BPBD

• BUDGET

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
2.1	Mapping funding alternatives for DRR activities	a. Starting up collaborations among local government task forces for joint funding of DRR activities	<p>There are DRR joint activities.</p> <p>There is a coordination forum involving all task forces.</p>	X	X			20.000.000 (2016)	<p>Estimated Progress: 0% 2016</p> <p>Progress until March 2017: Pak Mukmin :</p> <ul style="list-style-type: none"> <li>Planned to be followed up with PerBup to regulate all OPD to allocate budget for DRR activities.</li> <li>And also support from Parliament DPRD.</li> <li>This matter has been presented to Parliament in 2016.</li> </ul> <p>DPRD Pak Rusli:</p> <ul style="list-style-type: none"> <li>Already have budget inclusion and detail of the activity.</li> </ul>	BPBD

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
								<ul style="list-style-type: none"> <li>• DRR activities are good and helpful.</li> <li>• Support the DRR program.</li> <li>• Regarding budget, it can be accommodate</li> </ul> <p>BPBD :</p> <ul style="list-style-type: none"> <li>• There is letter from StRRRD for implementation of DRR activity.</li> </ul> <p>Social Agency</p> <ul style="list-style-type: none"> <li>• In Flood disaster, many private sector contributing</li> <li>• Suggestion to have a forum for Identification of corporate potential.</li> <li>• High interest from corporate.</li> </ul>		
			There are DRR joint activities			X		20.000.000	Estimated Progress: 0% (2018)	BPBD
		b. Identifying funding sources outside of the government -> CSR programs of hotels/companies, NGOs	There is a list of potential actors willing to participate in disaster-related CSR activities There is commitment by entrepreneurs to contribute	X	X			20.000.000 (2016)	<p>Estimated Progress: 10%</p> <p>Progress for March 2017: BPBD : not planned for 2017. Belum diagendakan di tahun 2017</p> <p>Pak Mukmin :</p> <ul style="list-style-type: none"> <li>• We have done by giving the name and address of the victims to the corporation and corporation directly giving the aid to the victim.</li> <li>• CSR aid emphasize more on community capacity.</li> <li>• Flood is more sever in Sumbawa, but communities in Sumbawa is more resilient.</li> <li>• There is no Perda that regulating participation of corporate through CSR and its use.</li> </ul>	BPBD



NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
2.2	Facilitating DRR budget to mitigate flooding, landslide, earthquake, tsunami, and tornado	a. Identifying budget needs for DRR activities related to coastal erosion and tsunami	<ul style="list-style-type: none"> <li>There are budget proposals both from local or central (BNPB)</li> <li>Budgeting for Disaster Simulation Event</li> <li>Budgeting training for rapid response teams</li> </ul>	X	X	X		100.000.000 (2016)	Estimated Progress: 50% (2016)  Progress until March 2017: BPBD <ul style="list-style-type: none"> <li>Budgeting preparation has been done. However, the budget got cut.</li> <li>Will draft proposal; Structural mitigation Non-structural proposal Destana proposal → Developed for Alas sub-district.</li> </ul>	BPBD
			There are budget proposals both from local or central (BNPB)			X		100.000.000	Estimated Progress: 0% (2018)	BPBD
			Budgeting for Disaster Simulation Event			X			Estimated Progress: 0% (2018)	BPBD
			Budgeting training for rapid response teams			X			Estimated Progress: 0% (2018)	BPBD
		b. Identifying budget needs for DRR activities related to the establishment of disaster-prepared villages and village disaster-prepared teams	There is a proposal document on the establishment of Disaster Preparedness Group (BCC) and village disaster preparedness team (TSBD)		X			50.000.000 (2016)	Estimated Progress: 50% (2016)  Progress March 2017: BPBD : <ul style="list-style-type: none"> <li>Planned to be held in 2017.</li> <li>Development of resilient village in 4 location using national budget, which is;               <ul style="list-style-type: none"> <li>Desa Berora Kec. Lopok,</li> <li>Desa Lopok Beru Kec Lopok</li> <li>Desa Kalimango Kec. Alas,</li> <li>Desa Baru Kec. Alas Baru</li> </ul> </li> <li>Pak Mukmin : already made and sent the proposal to BNPB</li> </ul>	BPBD

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
			There is a proposal document on the establishment of Disaster Preparedness Group (BCC) and village disaster preparedness team (TSBD)			X		50.000.000	Estimated Progress: 0% (2018)	BPBD
		c. Preparing budget for safety coastal dikes, cliffs/drainages, EWS equipment, equipment and infrastructure of disaster mitigation and DRR activities.	There is a proposal for building coastal safety dikes, cliff/ drainages. There is a proposal for EWS equipment provision There is a proposal for equipment and infrastructure of disaster mitigation and DRR activities					150.000.000 (2016)	Estimated Progress: 50% (2016) Progress until March 2017: Pak Mukmin : Already made a proposal and have already submitted to UNRAM and PU. Division 3, BPBD Regarding Sea wall construction, 900 meter of sea wall have been constructed. Still 1.3 km to go. Already made proposal for damaged structure.	BPBD
			There is a proposal for building coastal safety dikes, cliff/ drainages.			X		150.000.000	Estimated Progress: 0% (2018)	BPBD
			There is a proposal for EWS equipment provision						Estimated Progress: 0% (2018)	BPBD
			There is a proposal for equipment and infrastructure of disaster mitigation and DRR activities						Estimated Progress: 0% (2018)	BPBD

• PROGRAM

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
3.1	Improving disaster information	a. Identifying areas prone to flooding, landslide, earthquake, tsunami, coastal erosion, and	There is a document on flood, landslide, earthquake, tsunami, coastal erosion-	X					Estimated progress: 100 % (2016) Progress until March 2017:	BPBD

	services to reduce disaster risk	tornado along with relevant stakeholders and the local communities	prone areas.						BPBD : <ul style="list-style-type: none"> <li>Mapping has done in 2015.</li> <li>Bid 3 BPBD: The document is available and ready to be reviewed.</li> </ul> Investment Service Agency (Pak Adi) : <ul style="list-style-type: none"> <li>There is map of coastal areas impacted by climate change. For further info, contact Fishery agency.</li> </ul>	
	b. Disaster vulnerability data are always updated following the recent changes in social and physical environments	Updating hazard maps periodically through satellite maps	X	X	X	X	15.000.000 (2016)	Estimated progress: 100 % (2016) Progress until March 2017: BPBD : <ul style="list-style-type: none"> <li>The program is planned to be held in 2017.</li> <li>Bid 3 BPBD: The document is available and ready to be reviewed.</li> </ul> Social Agency <ul style="list-style-type: none"> <li>Need updated information on disaster to be able to synchronize with activities from Social Agency.</li> </ul>	BPBD	
	c. Socializing hazard maps to members of the parliament, local government task forces, and the community At least 3 times a year	The targets are aware of information on disasters in Sumbawa	X	X	X	X	40.000.000 (2016)	Estimated progress: 100 % (2016) Progress until March 2017: Pak Mukmin <ul style="list-style-type: none"> <li>We have 19 hazard map.</li> <li>Dissemination has been done in several areas.</li> <li>Positive appreciation from communities. Need to continue the dissemination.</li> </ul> BPBD : Already have plan for flood EWS. However it is have not implemented yet. OXFAM → 2 location ; 1) Mama Dam, 2)... Need to resume the program by installing EWS in other location.	BPBD	

3.2	Improving the community's capacity in DRR	a. Socializing the concept of earthquake-resilient housing to Sumbawa people At least 3 times a year	Socialization of the concept of earthquake-resilient housing is carried out in 24 sub-districts	X	X	X	X	45.000.000 (2016)  Anggaran Desa Tangguh Bencana: 35M (Central) 25M (district)	<p>Estimated progress: <b>100%</b> (2016)</p> <p>Progress until March 2017: BPBD :</p> <ul style="list-style-type: none"> <li>• The Seminar on the Finalization of the Result in Building Community Resilient in the Disaster Resilient Village; Kalimango Village and Baru Village was conducted.</li> <li>• The seminar was attended by all of the related stakeholders including the Army and the Police (December 2016).</li> </ul> 	BPBD
		b. Disaster simulations (evacuation drills) for high-impact hazards	There is at least one simulation every year	X	X	X	X	50.000.000 (2016)	<p>Estimated Progress: <b>100%</b> (2016)</p> <p>Progress until March 2017: BPBD:</p> <ul style="list-style-type: none"> <li>• Evacuation Drill for flooding was conducted in Berora Village, Lopok subdistrict in November. The drill simulated the information flow for flooding cycle</li> <li>• And evacuee management including shelter management, post management. This kind of drill is important to anticipate the rainy season to maintain the awareness of the community.</li> </ul> 	BPBD


			There is at least one simulation every year			X		100.000.000	Estimated Progress: 0% (2018)	BPBD
	c. Installation of evacuation sign for building fire evacuation		Evacuation signs are made and installed with the participation of the community	X	X	X	X	20.000.000 (2016)	Estimated Progress: 100% (2016) Progress until March 2017: BPBD : The evacuation sign has been already installed at several government buildings.	BPBD
			Evacuation signs are made and installed with the participation of the community			X		29.105.800	Estimated Progress: 0% (2018)	BPBD
	d. Installation of evacuation signs for flood evacuation Target: 4 villages		Evacuation signs are made and installed with the participation of the community	X	X	X	X	20.000.000 (2016)	Estimated Progress: 100% (2016) Progress until March 2017: BPBD : The evacuation sign has been already installed at several government buildings.	BPBD
	e. Installation of evacuation signs: Tsunami evacuation. Target: Lunyuk Sub-district		Evacuation signs are made and installed with the participation of the community	X	X	X	X	20.000.000 (2016)	Estimated Progress: 100% (2016) Progress until March 2017: BPBD : The evacuation sign has been already installed at several government buildings.	BPBD
	f. Involving the community in reforestation		Seedling activity for reforestation in some villages which is considered frequent forest fires.	X	X	X		Budget?	Estimated Progress: 0% (2016) Progress until March 2017: Environment and forestry Agency: <ul style="list-style-type: none"> <li>Forestry agency visited Newmount 2016</li> <li>Only making seed not preservation.</li> </ul> DPRD Pak Haji Samsul Nurdin." <ul style="list-style-type: none"> <li>Point 3. There is indicator as a guidance for conducting reforestation.</li> <li>Suggestion → policy from government to encourage community to make movement of loving the nature.</li> <li>For example, there is obligation for people that will marry to plant a tree.</li> <li>In Sumbawa, there is regulation that people must pay their taxes in order to be able to take care of</li> </ul>	Environment and forestry Agency



									administrational problems.	
		g. Establishment of Safe Schools	Establishing 1 Safe Schools. Target: 2 schools each year	X	X	X	X	30.000.000 (2016)	Estimated Progress: <b>100%</b> (2016)  Progress until March 2017: BPBD <ul style="list-style-type: none"> <li>Disaster-save School in Brangkolong 2016.</li> <li>There are 8 school that implemented the program.</li> <li>Province budget.</li> </ul>	BPBD
		h. Providing EWS equipment for flooding, landslide and tsunami	EWS equipment is installed in several flood-prone areas Number of location: 24 sub-districts	X	X	X		50.000.000 (2016)	Estimated Prgress: <b>0%</b> (2016)  Progress until March 2017: BPBD <ul style="list-style-type: none"> <li>Flood EWS in DAS Moyo, 2 location (Mamak village and Tahan-Baru Tahan).</li> <li>Baru Tahan Moyo Utara village.</li> </ul>	BPBD
	EWS equipment is installed in several landslide-prone areas Number of locations: 16 sub-districts (South Sumbawa)			X	X					
	EWS equipment is installed in several tsunami-prone areas Locations: Sumbawa Besar, Lunyuk			X	X					
		i. Training of laborers to build housing resilient against earthquake and tornado	30 laborers are aware of the concept of earthquake-resilient housing	X	X	X	X	<del>60.000.000</del> (2016)	Estimated Progress: <b>0%</b> (2016)  Progress until March 2017: BPBD <ul style="list-style-type: none"> <li>Not implemented yet in 2017.</li> <li>The program conducted for 2 days.</li> </ul> Note : <ul style="list-style-type: none"> <li>This can be addressed to Public Works agency and House and settlement agency.</li> <li>Send a letter to StiRRRD if want to invite UGM as Speakers.</li> </ul>	BPBD
			30 laborers are aware of the concept of tornado-resilient housing	X	X	X	X			

	j. Studying the plans and installing coastal protection	There is a document on the analysis and planning of development of coastal protection	X	X	X		<del>90.000.000</del> (2016)	Estimated Progress: 0% (2016)  Progress until March 2017: Public Works agency that will implement this program.	Public Works Agency
	k. Establishing a Disaster Manager Center Operating Team	Disaster Manager Center Operating Team is established	X	X	X		<del>50.000.000</del> (2016)	Estimated Progress: 50% (2016)  Progress until March 2017: BPBD : <ul style="list-style-type: none"> <li>Equipment and human resources are available since 2016.</li> <li>It is not yet been implemented because the condition of the office (flooded).</li> </ul>	BPBD
	Monitoring and dissemination of information on potential natural disasters	There are 30 participants who understand the potential of natural disasters in their region		X			<del>59.921.700</del>	Estimated Progress: 100% (2017)  Progress in October 2017: BPBD: - Has been implemented in District Maronge	BPBD
	Socialization on Disaster Risk Reduction in Schools	There are 30 participants who understood the DRR materials	X				<del>33.937.800</del>	Estimated Progress: 100% (2016)  Have formed one disaster resilient village	BPBD
	Formation of Disaster Resilient Village	The establishment of the Disaster Resilient Village in disaster-prone areas		X			<del>26.990.0000</del> (APBD)	Estimated Progress: 100% (2017)  Progress in October 2017: <ul style="list-style-type: none"> <li>Development of resilient village in 4 location using national budget, which is; <ul style="list-style-type: none"> <li>Berora Village Lopok Sub district</li> <li>Lopok Village Beru Lopok Sub district</li> <li>Kalimango Village Alas Sub district</li> <li>Baru Village Alas Baru Sub district</li> </ul> </li> </ul>	BPBD
	Production and placement of danger signs	Guidance on disaster risk reduction.			X		<del>150.000.000</del>	Estimated Progress: 0% (2018)	BPBD
	Improve public knowledge through education / socialization / training	A society that is sensitive and resilient to disasters			X		<del>100.000.000</del>	Estimated Progress: 0% (2018)	BPBD

• HUMAN RESOURCES

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
4.1	Capacity building of HR in DRR effort	a. Improving volunteers' capacity (Tagana, rapid response team, Disaster-Prepared Village)	Training for 30 volunteers	X	X	X	X	60.000.000 (2016)	<p>Estimated Progress: <b>100%</b> (2016)</p> <p>Progress until March 2017: BPBD Training for Rapid Response Team of Disaster Management. To anticipate and manage the natural disaster, BPBD of Sumbawa carried out training for Rapid Response Team. The participants were the villages and sub Districts which areas are prone to disaster. (November 2016)</p>  <p>BPBD of Sumbawa carried out Training of Volunteers of Disaster Resilient Village (Baru and Kalimango Village –Alas sub district) in December 2016.</p> <p>Health Agency:</p> <ul style="list-style-type: none"> <li>• There is one section that handle it.</li> <li>• To involve Health Agency in disaster management training.</li> <li>• Health Agency have made TGC.</li> </ul> <p>Social Agency:</p>	BPBD

NO.	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	TIME FRAME				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
								<ul style="list-style-type: none"> <li>Total of 50 Tagana, also need disaster management training/drill.</li> </ul> <p>Bappeda For Human resources activity, It need additional activity that consider; Untuk kegiatan SDM, Perlu ada tambahan kegiatan yang mempertimbangkan;</p> <ol style="list-style-type: none"> <li>Improvement of community resilient in 14 days period</li> <li>Utilization of Fiscal fund</li> <li>Activity that improve preparedness.</li> </ol>		
		b. Improving capacity of BPBD staff and the local government task forces on disaster risk analysis	There are self-drafted DRR documents, contingency documents, etc.		X	X	X	60.000.000 (2016)	<p>Estimated Progress: 0% (2016)</p> <p>Progress until March 2017: BPBD :</p> <ul style="list-style-type: none"> <li>Planned to be held in 2017.</li> <li>Proposal of contingency document is being proposed to BNPB.</li> </ul> <p>Contractual document – there is no simulation/no proof. SOP disaster management → SOP penanganan bencana. Community Triangle.</p>	BPBD
		c. Increased capacity and competence of Fire Brigade	The existence of Fire Fighter staff is more capacity in facing fire hazard		X			Budget ?	<p>Estimated Progress: 100% (2017)</p> <p>Progres in Oktober 2017: BPBD : Have been implemented</p>	

## DISASTER RISK REDUCTION ACTION PLAN KOTA MATARAM

Implementation Progress to end October 2017

and Activity Plan for 2018

Name of City /District	Mataram
Province	Nusa Tenggara Barat
Output Target	Mataram Disaster Resilient Community and Organization
Focal Point	<p>Ir. H. Supardi ST. (Head of BPBD Mataram) till September 2016                      Ir. Dedy Supriyadi, SH. (New Head of BPBD Mataram) start from October 2016 till now.</p> <p>Dr. Eko Pradjoko (Center for Disaster Risk Management (CDRM), Mataram University/                      Lecturer of Civil Engineering Dept. Mataram University)                      Dr. Yusron Saadi (Faculty of Engineering, Mataram University)                      Dr. Ni Nyoman Kencanawati (Faculty of Engineering Mataram University)</p>

*Note :*



*Progress is estimated as a percentage, with green indicating "on track", blue indicating "some progress", yellow indicating "limited or no progress"*


*Updated information, with red font*

### • INSTITUTIONAL

NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Timeframe				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
1.1	Strengthening the legal basis of DRR activities	a. Formation of DRR Regulation of Mayor (Perwal) as a follow-up on Regional Regulation No. 4/2015 on PK (Prevention and Preparedness)	<ul style="list-style-type: none"> <li>Establishment of DRR Perwal Team with the related stakeholders.</li> <li>Issuance of DRR Regulation of Mayor (Perwal) of Mataram.</li> </ul>	X	X	X		50.000.000 (2016)	Estimated progress: 30% (2016)  Progress until March 2017: <ul style="list-style-type: none"> <li>Plans to set up a mayor regulation (Perwal) delayed due to the Head of BPBDs (H. Supardi) death. BPBDs new chairman is committed to</li> </ul>	BPBD Mataram


									<p>continue the preparation of Perwal in 2017</p> <ul style="list-style-type: none"> <li>• Perda Penanggulangan Bencana (District DRR Regulation) is already established and will be implemented into 2 Perwal (mayor regulation) and 1 mayor decree</li> <li>• This perwal is expected to be a legal basis that can strengthening the collaboration between executive and other stakeholders.</li> <li>• Perwal will strengthen coordination system in DRR. Perwal plan,</li> <li>• DPRD Mataram has shown its support regarding Perwal as derivative from Perda of disaster management.</li> <li>• In March 2017, the material of perwal regarding emergency response and post disaster (approved on March 2017) is ready and still waiting to be given the number by District Secretary.</li> <li>• BPBD will try to use 1 perwal for preparedness related activities and 1 mayor decree for establishing DRR Forum</li> <li>• Perwal DRR formulation and preparation team and decree of establishing DRR Forum team is established.</li> </ul> <p>Regulation that support DRR activities has been implemented by Public Works Agency:</p> <ul style="list-style-type: none"> <li>• Draft of Perda Building Structure like earthquake resilient building regulation, is available.</li> <li>• Also there was a Mayor decree regarding Building structure regulation (Product of Public Works)</li> </ul>	
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									 <p>Photo: Meeting with BPBD of Mataram (January 2017)</p>  <p>Photo: Meeting with Mataram Parliament (January 2017)</p> <p>October 2017 Progress: There has been no progress for the finalization of the Perwal of the follow up of the Mataram City Disaster Management Regulation. Due to budget constraints.</p>	
		b. Incorporating DRR concept in the RJPMD (Regional Medium-Term Development Plan) and RT/RW (neighborhood association/community association)	DRR concept is incorporated in the RJPMD (Regional Medium-Term Development Plan) and RT/RW (neighborhood association/community association)	X	X	X			<p>Estimated progress: 100% (2016)</p> <p>Progress until March 2017: In meeting with DPRD:</p> <ul style="list-style-type: none"> <li>• Special committee of Perda RTRW (Spasial Regional Planning) ensure that DRR concept has been accommodated in draft of Perda amendment, which is discussion regarding the zoning of abrasion prone area.</li> <li>• RJPMD (Regional Medium-Term Development Plan) has already mentioning the perspective of disaster.</li> </ul>	BPBD Mataram

1.2	Developing cooperation among stakeholders in relation to disaster	a. Drafting a MOU between UNRAM and BPBD	MOU between UNRAM and BPBD is developed and signed.	✕	X	X		<p>Estimated Progress: 90% (2016)</p> <p>Progress until March 2017:</p> <ul style="list-style-type: none"> <li>• During a visit in January, 2017, an agreement was made with Mataram's Parliament to develop MoU between UGM, Mataram District, and the University of Mataram. It is expected to be ready for signing during the visit in March 2017.</li> <li>• MoU draft is ready. Those MoU is expected to elaborating previous MoU.</li> <li>• Communication has been made with Balitbang Mataram Team that will support the implementation of the MoU.</li> <li>• Vulnerable groups become the target for DRR programs.</li> </ul>  <p>Photo: Meeting with Mataram Parliament (January 2017)</p> <p>October 2017 Progress: There has been no progress for this activity due to budget constraints</p>	BPBD Mataram
		b. Establishment of a Center for Disaster Management Studies at UNRAM	Center for Disaster Management Studies at UNRAM is established.	X	X			<p>Estimated Progress: 100% (2016)</p> <p>Center for Disaster Management Studies is established on January 8, 2016</p> <p>Progress until March 2017: Notes from UNRAM :</p> <ul style="list-style-type: none"> <li>• Diseminasi regarding river mitigation to prevent</li> </ul>	BPBD Mataram



									<p>and reduce the risk of flooding. Invite related OPD.</p> <ul style="list-style-type: none"> <li>• During those meeting, it can be seen that the paradigm in government is still focused on post disaster activities, meanwhile the academician are emphasize more on pre disaster activities.</li> <li>• Unram and BWS → Development of coastal building technical standard.</li> <li>• 3 research regarding flood mitigation in Sumbawa, Bima, and Mataram will be conducted.</li> <li>• Similar studies will be conducted in Mataram.</li> <li>• Every BPBD in fact have a chance to held RPB, Renstra, with funding support from BNPB.</li> <li>• UNRAM experience in Bima → trauma healing for children, post disaster.</li> </ul>	
		c. Identifying the number and classification of DRR activities of organizations within the government and in the community	There is information on the classification and number of DRR organization activities with relevant stakeholders	X	X				<p>Estimated Progress: <b>30%</b> (2016)</p> <p>Progress until March 2017:</p> <ul style="list-style-type: none"> <li>• BPBD has already involved many stakeholder related with disaster and invite them to coordination meeting.</li> <li>• Documentation profile of OPD has not been done yet by BPBD.</li> </ul> <p>October 2017 Progress: There has been no progress for this activity due to budget constraints</p>	BPBD Mataram
		d. Establishment of DRR Forum at sub-district level	<p>DRR Forums at sub-district level are formed.</p> <p>In 2017, establishment of DRR Forum will be initiated in Bintaro Sub-district. In 2018, the forum is planned to be initiated in Ampenan Selatan Sub-district.</p>	X	X				<p>Estimated Progress: <b>10%</b> (2016)</p> <p>Progress until March 2017:</p> <ul style="list-style-type: none"> <li>• BPBD is forming draft of DRR Forum establishment and trying to establish the forum this year.</li> <li>• Establishment of DRR Forum will start in 2017. Operational of the forum will be in 2018.</li> <li>• Establishment of DRR forum need mayor decree, derivative from Perda.</li> </ul> <p>October 2017 Progress:</p>	BPBD Mataram

									<ul style="list-style-type: none"> <li>• There has been no progress for this activity due to budget constraints</li> <li>• This activity has been proposed to be implemented in 2018.</li> </ul>	
		e. Meeting among SKPDs to explore the possibility of conducting other DRR collaborative activities	Coordination Team is established.	X	X	X	X		<p>Estimated Progress: 100% (2016)</p> <p>Progress until March 2017:</p> <ul style="list-style-type: none"> <li>• Coordination meeting in order to increase preparedness and togetherness in disaster mitigation.</li> <li>• DRR agenda is included in Musrenbang talks agenda.</li> </ul>	BPBD Mataram
			Collaborative Action Plan between DRR Organization, SKPDs, and related community is developed.	X	X	X	X		<p>Estimated Progress: 15% (2016)</p> <p>Progress until March 2017: Discussion regarding this matter has been conducted during coordination meeting with OPD. Still limited to collaboration with OPD, coordination with NGO and private sector has not been made yet.</p> <p>This activity is done routinely every year.</p>  <p>October 2017 Progress: There has been no progress for this activity due to budget constraints</p>	BPBD Mataram
		f. Involving	Dissemination on roles and	X	X	X	X		Estimated Progress: 50% (2016)	BPBD


		religious/prominent figures in disaster management of coastal erosion and social conflict	Toga/Toma in disaster management of coastal erosion and Social Conflict with related stakeholders is conducted.						Progress until March 2017: Toga/Toma involved in DRR activity although the role of Toga/Toma has not been disseminated.  October 2017 Progress: There has been no progress for this activity due to budget constraints	Mataram
1.3.	Institutional Strengthening of Disaster Preparedness Group	a. Establishment of a Beach School in Mataram City (Ampenen Beach)	Increased regional capacity in disaster preparedness and disaster risk reduction			X		BNPB	October 2017 Progress: The proposed activities are submitted to BNPB for implementation in 2018.	BPBD Mataram
		b. Establishment of River School in Mataram City (the area through which 4 rivers: Jangkok River, Ancar River, Unus River, Sungai Midang)	Increased regional capacity in disaster preparedness and disaster risk reduction			X		BNPB	October 2017 Progress: The proposed activities are submitted to BNPB for implementation in 2018.	BPBD Mataram

• BUDGET

NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Timeframe				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
2.1	Mapping alternative funding sources for DRR activities	a. Initiating the possibility of collaboration cross-SKPD for DRR activities funding.	Collaboration in DRR Activities is implemented.  Coordination forum for all SKPDs is established.			X			<p>Estimated Progress : 5 % (2016)</p> <p>Progress until March 2017:</p> <ul style="list-style-type: none"> <li>BPBD need Mayor Regulation for managing disaster fund. For example, Now it is Possible to collaborate with private sector with possibility of doing collective budgeting for activity.</li> <li>Realization in 2018.</li> </ul> <p>DPRD :</p> <ul style="list-style-type: none"> <li>Ready to support the facilitation of fund for DRR. It depend on the executive whether they are ready to implement it or not.</li> <li>Support the possibility of reciprocal visit to New Zealand.</li> </ul> <p>October 2017 Progress: There has been no progress for this activity due to budget constraints</p>	BPBD Mataram
		b. Identifying the alternative funding sources outside the regional budget, like CSR from hotels or companies, donation from civilians, and other sources.	A list of potential funding sources that eager to involve in disaster related activities is available.			X			<p>There is no information available</p> <p>Progress until March 2017: Cannot be implemented, waiting for Perwal that regulate this.</p> <p>October 2017 Progress: There has been no progress for this activity due to budget constraints</p>	BPBD Mataram

● PROGRAM

NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Timeframe				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
3.1	Improving information services on disaster in order to reduce disaster risk	a. Identifying the areas prone to coastal erosion with the related stakeholders and the local community	Document on coastal erosion hazard area of Mataram is developed Disaster risk map data are updated periodically.	X					Estimated Progress: <b>20%</b> (2016)  Progress until March 2017: <ul style="list-style-type: none"> <li>Hazard risk map is already exist. (JICA). Vulnerability map will be provided by UNRAM.</li> <li>UNRAM will identified the existing disaster map to ensure there are no misinformation and mistake in the map.</li> <li>PKS with UNRAM is not available yet.</li> </ul> <b>October 2017 Progress:</b> There has been no progress for this activity due to budget constraints	BPBD Mataram
		b. Disseminating hazard map to the parliament, other SKPDs, and the community	Targets are aware of the information on disaster risks in Mataram.	X					There is no information available.  Progress until March 2017: Cannot be implemented in 2017. Planned to be held in 2018.	BPBD Mataram
		c. Dissemination regarding the benefit of DRR in communities, government, and legislative.	Dissemination in 2 Sub-districts, 5 Kelurahan.  2 Sub-districts: Bintaro and Ampenan Selatan		X	X			Estimated Progress: <b>0%</b> (2016)  Progress until March 2017: The budget cut by government in 2016 cause the program to be postponed.  <b>October 2017 Progress:</b> There has been no progress for this activity due to budget constraints	BPBD Mataram
		d. Monitoring and dissemination of information related to disaster risk.	Information of disaster risk is monitored and disseminated in 10 schools.  <b>By 2017, it has been</b>						Estimated progress : <b>5%</b> (2016)  Progress until March 2017: BPBD have allocated the budget in 2017 budgets. Material for socialization is being prepared.	BPBD Mataram
							<b>73.800.000</b>			

NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Timeframe				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
			implemented in 5 schools. By 2018, it was planned to be implemented in 10 schools			X		(2017) 438.055.500 (2018)	October 2017 Progress: <ul style="list-style-type: none"> <li>Initialisation activities have been conducted in 5 schools, namely: <ul style="list-style-type: none"> <li>SDN 19 Mataram</li> <li>SMP N 11 Mataram</li> <li>Madrasah Aliyah Al Barokah Mataram</li> <li>Madrasah Tsanawiah Negeri 03 Mataram</li> <li>SMPN 21 Mataram</li> </ul> </li> <li>This activity has also been proposed to be implemented in 2018.</li> </ul>	
3.2	Preventing social conflict from happening	Identifying the potential of social conflict	Monitoring national holiday celebration in the areas with potential of social conflict	X				24.000.000	Estimated Progress: <b>100%</b> (2016)  Progress until March 2017 : This program is routinely held every year. In 2016, it was held in Kampung Monjok. The place/area to conduct the program in 2017 has not been decided yet    October 2017 Progress: There has been no progress for this activity due to budget constraints	BPBD Mataram
3.3	Improving the involvement of vulnerable groups in decision making	a. Identification of disaster-vulnerable groups	information on the number, location, and conditions of vulnerable groups	X					Estimated Progress: <b>0%</b> (2016)  Progress until March 2017: Could not be implemented in 2017. Belum bisa dilaksanakan pada tahun 2017.	BPBD Mataram

NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Timeframe				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
	processes								Planned to be held in 2018.	
		b. Planning of Mataram DRR involving vulnerable groups especially women, the elderly, people with disabilities, and children	There are vulnerable group representatives which involved in disaster mitigation planning.	X					<p>Estimated Progress: 0% (2016)</p> <p>Progres until March 2017 : Could not be implemented in 2017. Planned to be held in 2018.</p> <p>Notes from Women Empowerment Agency: Mataram Government want to make Mataram child-friendly city. Child Council is already exist in Mataram. Children need to get socialization and education to improve their capacity – Training/drill, EWS, and treatment for children during disaster.</p> <p>Notes from DPRD Mataram : DPRD : Suggest the need of DRR activity for disability group.</p>	BPBD Mataram
3.4	Improving DRR capacity	<p>a. Establishment of Disaster Resilient Village (Destana) that pay attention to gender.</p> <p>Destana will be implemented in Kelurahan, not in Desa because Mataram does not have Desa (Village).</p>	Establishment of Kelurahan Tangguh Bencana (Disaster Resilient Village) in Bintaro Sub-District.			X		1.067.748.900 (2018)	<p>Estimated Progress: 0% (2016)</p> <p>Progres until March 2017 :</p> <ul style="list-style-type: none"> <li>Planned for 2018, 1 Village</li> <li>There is no budget allocated for this program in 2017.</li> <li>Establishment of Kelurahan Tangguh Bencana (Disaster resilient Village) in other area will be initiated. (From 7 village, 2 village are already established). Planned to be held in 2018 along with the establishment of DRR Forum.</li> <li>Coordination is already made with Head of Bintaro sub-district and Head of Ampenan Selatan sub-district.</li> <li>From May 2017, Pilot project of Disaster Resilient Village Forum and Disaster Safe School Forum in Bintaro will be held. Forum operational target will</li> </ul>	BPBD Mataram

NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Timeframe				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
								<p>be funded in 2018.</p> <p>Notes from DPRD Mataram: Suggested that there are 5 more villages in coastal area. Abrasion risk.</p> <p>Notes from Social Agency: Disaster Preparedness Group (Kelompok Siaga Bencana, KSB) has been formed.</p> <ul style="list-style-type: none"> <li>- KSB Ko Hua Kong</li> <li>- KSB Gereja Imakulata</li> <li>- KSB Mesjid Taman Ayu</li> <li>- KSB Unram</li> </ul> <p>October 2017 Progress:</p> <ul style="list-style-type: none"> <li>• There has been no progress for this activity due to budget constraints</li> <li>• This activity has been proposed to be implemented in 2018.</li> </ul>		
		b. Establishment of Disaster Safe Schools.	<p>There are several schools that already implementing Disaster Safe Schools Program.</p> <p>In 2018, Safer School has been established in 6 schools</p>		X	X		<p>167.187.800 (2018)</p>	<p>Estimated Progress: 0% (2016)</p> <p>Progress until March 2017:</p> <ul style="list-style-type: none"> <li>• Could not be held in 2016.</li> <li>• Disaster Safe School is planned to be held in 50 kelurahan in Mataram that planned to be initiated and formed in 2017.</li> <li>• In Coordination Meeting has been discussed about; 1) Development of Disaster Safe Schools, and 2) Encourage communities to have Disaster resilient Communities in each village.</li> <li>• BPBD for emergency response and post disaster are not yet done.</li> <li>• From May 2017, Pilot project of Disaster Resilient Village Forum and Disaster Safe School Forum in Bintaro will be held. Forum operational target will</li> </ul>	BPBD Mataram



NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Timeframe				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
								<p>be funded in 2018.</p> <ul style="list-style-type: none"> <li>Location of pilot project is SDN 21.</li> </ul> <p>Notes from DPRD Mataram : Received suggestion from DPRD to plan several DRR Program that can be held and implemented in 2017.</p> <p>October 2017 Progress:</p> <ul style="list-style-type: none"> <li>There has been no progress for this activity due to budget constraints</li> <li>This activity has been proposed to be implemented in 2018, at 6 schools in Mataram City.</li> </ul>		
3.5	Structural disaster mitigation	a. Providing Flood EWS equipment	There are EWS equipment installed in several flood-prone areas		X	X		<p>Estimated Progress: 0% (2016)</p> <p>Progress until March 2017 : Flood EWS equipment aid/support can be proposed to BNPB. BPBD interested in making River School. BPBD could send proposal to BNPB.</p> <p>October 2017 Progress: There has been no progress for this activity due to budget constraints</p>	BPBD Mataram	
		b. Initiate the construction of vertical shelter.	There is commitment from DPRD to allocate budget for the construction of good vertical shelter.					<p>Note: Planned to be held in 2018.</p>	BPBD Mataram	
3.6.	Nonstructural earthquakes disaster mitigation	Monitor the geomagnetic to predict earthquake.	There are geomagnetic information available that periodically reported to BMKG Geophysics Station.		X	X	X	<p>Estimated Progress: 0% (2016)</p> <p>Progress until March 2017: This program is conducted by Geomagnetic Observatory Laboratory, UNRAM.</p> <p>October 2017 Progress:</p>	BPBD Mataram	

NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Timeframe				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
									There has been no progress for this activity due to budget constraints	

## • HUMAN RESOURCES

NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Timeframe				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
4.1	Improving the capacity of DM HR in relation to DRR	a. Standardisation of DM HR capacity, particularly in DRR	The standardization document of HR capacity in DRR is compiled.			X			Estimated Progress: <b>0%</b> (2016) Progress until March 2017 : <ul style="list-style-type: none"> <li>• Could not be done in 2017.</li> <li>• Planned to be held in 2018.</li> </ul> <p>October 2017 Progress: There has been no progress for this activity due to budget constraints</p>	BPBD Mataram
		b. Conducting dissemination to improve the capacity of DRR HR - volunteer	Human resources for disaster prevention/reduction are available.			X			Estimated Progress: <b>0%</b> (2016) Progress until March 2017: Planned to be held in 2017.  October 2017 Progress: There has been no progress for this activity due to budget constraints	BPBD Mataram
		c. Giving DRR materials to the students participating in the student community services (KKN) in the Engineering Faculty of UNRAM	students are aware of DRR concept and activities in each class/KKN group in the Engineering Faculty of UNRAM	X					Estimated Progress: <b>0%</b> (2016) Progress until March 2017: UNRAM: Learn from UNTAD regarding the establishment of Disaster Preparedness Group for Universities student.	BPBD Mataram

NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Timeframe				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
								October 2017 Progress: There has been no progress for this activity due to budget constraints		
		d. Establishment of Disaster Preparedness Team and Emergency Response Training	The existence of human resources that have the ability in the prevention and disaster management			X		237.502.000 (2018)	October 2017 Progress: This activity has been proposed to be implemented in 2018.	
4.2	Identifying the number of Human Resources involved in DRR	Identifying the number of DRR HR and classifying the quality of DRR HR in the government and the community	A document recording the number of the DRR HR and the quality of DRR HR is compiled.	X					Estimated Progress: 0% (2016)  Progress until March 2017 : Social Agency: <ul style="list-style-type: none"> <li>• Kelurahan Siaga bencana (Disaster Resilient Village) has been established in Ampenan Selatan Sub-district and Bintaro Sub-district.</li> <li>• TAGANA Kota Mataram: 40 people</li> <li>• Satgas</li> </ul> October 2017 Progress: There has been no progress for this activity due to budget constraints	BPBD Mataram
4.3.	Structural disaster mitigation	Training for workers/builders to build earthquake resilient building.	Workers/builders understand the concept of earthquake resilient building.		X	X			Estimated Progress: 0% (2016)  Progress until March 2017: <ul style="list-style-type: none"> <li>• There is no plan yet for 2017.</li> <li>• STIRRRD open the possibility to provide training involving UNRAM.</li> <li>• Suggested to involve Public Works Agency.</li> </ul> October 2017 Progress: There has been no progress for this activity due to budget constraints	BPBD Mataram
		Training and dissemination of base isolation.	Construction practitioners, private sectors, and government have	X	X	X			Estimated Progress : 30% (2016)  Progres Maret 2017 :	BPBD Mataram

NO	OBJECTIVE	ACTION/ACTIVITY	INDICATOR	Timeframe				BUDGET (Rp)	PROGRESS (brief description and photos)	SOURCE
				2016	2017	2018	2019			
			knowledge about the importance of base isolation in building.					<ul style="list-style-type: none"> <li>UNRAM has conducted an introductory seminar in February, 2016.</li> <li>BPBD not planned until 2017.</li> <li>Suggested to involve Public Works Agency.</li> </ul> <p>October 2017 Progress: There has been no progress for this activity due to budget constraint</p>		

Appendix H: Activity Risk Matrix – as at 31 December 2017

Risk ID	Risk categories	Author	Date Registered	Description	Impact severity	Probability of occurring	Overall Risk Rating	Risk Treatment	Risk Status	Risk Owner	Risk Actionee
1	Contract Performance	Michele Daly	13/05/2015	If actions are not completed after meetings then project maybe delayed in part.	Minor	Likely	Medium	Allowing realistic time for actions to be completed. Actions Log for meetings.	Open	Michele	Sylvia
4	Contract Performance	Michele Daly	13/05/2015	If communication becomes an issue with UGM due to distance then project could become fragmented.	Moderate	Low	Medium	Regular joint project team meetings. Regular province coordinator meetings being held.	Open	Michele	Sylvia
6	Financial/Resourcing	Michele Daly	24/06/2015	If review of other MFAT work (Response Framework) being undertaken in Indonesia results in the Activity being impacted then unplanned costs or delays could be incurred	Minor	Unlikely	Low	Seek regular updates from MFAT; Keep in touch with National Response Framework project manager (=Jane Rovins). Seems to be limited connectivity between the two and unlikely we'll get asked to contribute.	Closed	Michele	Michele
9	Financial/Resourcing	Michele Daly	24/06/2015	If UGM are asked to contribute to other similar projects or replicates of the project (e.g. Java districts) they may not have the capacity to finish the original project.	Major	Unlikely	Medium	UGM asked to prioritise StIRRDRD. UGM have assigned non-StIRRDRD personnel to other spin-off projects and recognise this as a risk. Appropriate action is being taken.	Open	Michele	Michele
11	Financial/Resourcing	Phil Glassey	8/07/2015	If GNS needs to spend additional money to use specialist non-GNS staff to cover capacity issues, we may be overspent.	Minor	Possible	Medium	Build capacity within the team; identify preferred suppliers (e.g. NIWA)	Open	Michele	Michele/Phil
13	H&S	Sylvia Riches	8/07/2015	<i>Driving Conditions in Indonesia.</i> If GNS staff, secondees or contractors are involved in a car accident this could have immediate and long term impacts on staff in the project.	Major	Unlikely	Medium	H&S guidelines provided to GNS & UGM staff listing expectations and appropriate behaviours. Use fit for purpose vehicles (e.g. 4WD to Morowali). Require experienced drivers. Require appropriate speed. Require adequate rest periods for drivers.	Open	Sylvia	Sylvia
14	Contract Performance	Michele Daly	8/07/2015	If people change jobs or get overloaded, we may lose key project staff.	Moderate	Almost Certain	High	Keep project staff engaged. Have back-ups in place. Introduce more staff into the project. More staff have been introduced (Richard; Emily; Maureen; Michael) Discuss stress management techniques. Keep discussing at PTMs.	Open	Michele	Michele
15	Contract Performance	Michele Daly	8/07/2015	If the Project Director (GNS or UGM) moves on this could compromise the completion of the project (delays and reduced quality)	Moderate	Unlikely	Medium	Have back-ups in place (done). Phil as Deputy Director on extended leave in 2017. Consider appointing this role temporarily. Current plan is to spread duties across the team.	Open	Michele	Michele/ Faisal
16	Financial/Resourcing	Michele Daly	9/09/2015	If we are asked to undertake additional work (by e.g. Indonesian Government), we may not have the resources to do so affecting delivery of the main Activity.	Moderate	Possible	Medium	Ensure work is kept within project scope. Regular communication via AGG. Ensure enough capacity to be responsive to a degree. The Government currently have no budget for additional work due to budget cuts.	Open	Michele	Michele/ Faisal
17	Contract Performance	Michele Daly	9/09/2015	The pace of the Activity may lead to milestones and tasks not able to be completed in the timeframe required (slippage)	Moderate	Likely	High	If required provide additional GNS and UGM resource (done but ongoing and requiring regular review). Regular communication with client. Maintain focus on timelines.	Open	Michele	Michele/ Faisal
18	Reputation/Brand	Michele Daly	9/09/2015	A lack of communication with UGM Rektor could adversely affect the high level UGM/GNS Relationship	Major	Unlikely	Medium	UGM programme director to keep regular communication lines open with UGM Rektor. GNS to keep CEO and DD regularly updated. UGM and GNS	Open	Michele	Michele/ Faisal

Risk ID	Risk categories	Author	Date Registered	Description	Impact severity	Probability of occurring	Overall Risk Rating	Risk Treatment	Risk Status	Risk Owner	Risk Actionee
								behaviour is as trusted partners (open and full communication).			
19	Contract Performance	Michele Daly	9/09/2015	If UGM's capacity is not increased, some specific tasks may not get completed.	Moderate	Possible	Medium	Open and direct conversations with UGM programme directors. Buid more capacity into the project.	Open	Michele	Michele/ Faisal
20	Contract Performance	Michele Daly	9/09/2015	If there is a lack of focus on the DRR Network, it may not get started.	Moderate	Possible	Medium	Regular communication with UGM programme directors.	Closed	Michele	Michele
21	Contract Performance	Michele Daly	9/09/2015	If there is a lack of focus on Action Plan coaching & support (UGM milestone), then there could be limited AP implementation	Moderate	Likely	High	Regular communication with UGM programme directors. Fortnightly Province Coordinator meetings established.	Open	Michele	Michele
22	Financial/Resourcing	Michele Daly	10/12/2015	If we are asked to contribute to Indonesia's Sendai Framework Reporting (expectations of UNDP), we may not be able to meet timeframes or standards required. This needs to be carefully managed.	Minor	Possible	Medium	Don't over-promise; regular communication. Risk has not eventuated.	Closed	Michele	Michele
23	H&S	Michele Daly	10/12/2015	If travelling to West Sumatra, there is the potential for rabies (also NTB)	Major	Unlikely	Medium	Regular review; Consider immunisation.	Open	Phil	Sylvia
24	Reputation/Brand	Michele Daly	10/12/2015	If the Blue Line Project in Pesisir Selatan/Bengkulu is managed poorly, GNS & UGM reputations could be at risk and the community not well served by the resulting outcome.	Moderate	Unlikely	Medium	Communication with BNPB; Have letter to BNPB drafted and ready to send if needed (re concerns); maintain oversight and provide regular advice to BNPB and BPBD. Consider including socialisation aspects in Community project. <b>Recent visits have indicated projects in pasdang and Bengkulu are being managed reasonably well -lessons to be learned for NZ in the Padang experience.</b>	Open	Phil	Phil
25	Contract Performance	Michele Daly	10/12/2015	If AGG meetings are not better run & organised, Gol could lose interest in the Activity <b>and the project will not be sustainable.</b>	Major	Likely	High	Adequate AGG meeting preparation; better communication with AGG between meetings; hold mtg/email with MFAT prior to AGG meeting; provide translation at mtg; provide more regular email updates. <b>MFAT taking on more duties. Special session AGGs to be held to focus on single issues (e.g. sustainability)</b>	Open	Michele	Michele/ Faisal
26	H&S	Michele Daly	21/01/2016	Bombings /unrest in Jakarta while team on the ground	Major	Possible	High	Mitigation - avoid obvious hot spot; keep up to date with advisory notes from MFAT; Where possible avoid meetings in public places, hotel foyers and the like. Choose Business class hotels with good security. Continue to have risk assessments completed each time a team or individual travels to Indonesia.	Open	Michele	Sylvia
27	Contract Performance	Michele Daly	4/02/2016	West Sumatra province feel like they are not included in the activity and are not keen on signing the MOU.	Moderate	Possible	Medium	Follow up with UGM. Ensure issue is resolved as soon as possible. Resolved.	Closed	Phil	Phil
28	Contract Performance	Michele Daly	2/03/2016	Under-delivering on project tasks (i.e. quality of some outputs - lack of time and effort in places)	Major	Likely	High	Bring in additional resources. Focus on catching up. Additional resources brought in (Richard; Emily; Maureen; Michael; others?)	Open	Michele	Michele/ Faisal
29	Contract Performance	Michele Daly	18/03/2016	Reports getting behind schedule Refer also #17	Moderate	Almost Certain	High	Bring in additional resources. Focus on catching up. Good communication with MFAT.	Open	Michele	Michele/ Phil

Risk ID	Risk categories	Author	Date Registered	Description	Impact severity	Probability of occurring	Overall Risk Rating	Risk Treatment	Risk Status	Risk Owner	Risk Actionee
30	Contract Performance	Michele Daly	18/03/2016	Action Plan Implementation - loss of momentum and district interest. Delays in AP revision and translation.	Moderate	Likely	High	Pro-active district contact between visits by UGM; topic for UGM-GNS Project team meetings; Pro-active implementation plan and response log created; More structure around final AP workshops. Involve Firli at MFAT to assist in resolving this issue. Physical visits required. May resolve itself once Community projects get underway.	Open	Michele	Michele/ Faisal
31	Financial/Resourcing	Michele Daly	12/05/2016	Other workload affecting time on StIRRRD by Province Coordinators/ Directors Refer also #14 & #15.	Moderate	Almost Certain	High	Have back-ups in place. Introduce more staff into the project. Delegate other project tasks where possible. Prioritise time to StIRRRD. Trial Province Coord. Mtgs (e.g. 4 people covering two provinces). Use mtgs for info gathering as well. Copy Sisca into all emails. Proactive monitoring of due dates. Early heads-up if timelines not able to be met.	Open	Michele	Michele/ Faisal
32	H&S	Michele Daly	26/05/2016	Zika virus - may be more of a problem in Indonesia than previously thought.	Major	Unlikely	Medium	Check SOS and other sources (MFAT; WHO) for most up-to-date info before each visit.	Open	Nico	Sylvia
33	Contract Performance	Michele Daly	5/11/2015	Volcanic eruptions and bush fires could disrupt air travel in and out of Indonesia as well as within, impacting on being able to undertake scheduled visits.	Minor	Possible	Medium	Keep on top of information relating to eruptions and bush fire events. Note: one such event has occurred already.	Open	Nico	Sylvia
34	Contract Performance	Kelvin Berryman	9/06/2016	If a major natural event such as the 2004 EQ/tsunami occurs, it could cause a major national distraction causing StIRRRD to lose momentum.	Moderate	Unlikely	Medium	Contract re-negotiation. Respond to the event by way of communication with affected districts. Leverage off StIRRRD to get resources for affected districts.	Open	Michele	Michele/Faisal
35	Business Continuity	Michele Daly	27/10/2016	Leadership changes in Sumbawa & Mataram - risk to the project if not carefully managed. Sumbawa seems to be in hand? Staff rotation in general across all districts. Refer also #35.	Moderate	Likely	High	Communication with BNPB, by province co-ordinators and UGM representatives. Esti will visit District in person to maintain relationship. Mataram will need following up in person. Additional training to be provided. Coaching Strategy for each district to be established (Province Coordinators). List of strategies created for Toolbox (as will be an ongoing problem). <b>Note: Likely to have to accept Mataram could fall by the wayside.</b>	Open	Michele	Province co-ordinators
36	Business Continuity	Michele Daly	27/10/2016	Donggala disconnection (lack of contact) affecting AP implementation. Refer also #30	Major	Unlikely	Medium	Additional visits and communication by UGM province co-ordinators. Draft up specific questions for Donggala representatives. Agung to visit in person. GNS to follow-up. Resolved - Donggala ok.	Closed	Michele	Agun & Esti
37	Business Continuity	Michele Daly	9/11/2016	Internal Resources - Phil Glassey unavailable April 17-November 17. Refer also #10.	Major	Almost Certain	High	Share the workload across the other team members. Appoint a temp Deputy over this period. Current plan is to spread duties across the team.	Open	Michele	project team
38	Reputation/Brand	Michele Daly	19/04/2017	Change in Rektor from August 2017 means new Rektor unfamiliar with StIRRRD and we won't necessarily have the same support. Refer also #18.	Moderate	Almost Certain	High	UGM to manage communications during transition to new Rektor. Enlist Bu Rita's help with transition. Risk has not materialised - good support from the new Rektor.	Closed	Michele	Michele/Faisal
39	Contract Performance	Michele Daly	4/05/2017	When Pak Yoga leaves Kemendesa we lose a key person in Kemendesa which may affect the sustainability of the project going forward.	Moderate	Almost Certain	High	Make contact with Kemendesa -ensure continuity of contact by UGM.	Open	Michele	Michele/Faisal



Risk ID	Risk categories	Author	Date Registered	Description	Impact severity	Probability of occurring	Overall Risk Rating	Risk Treatment	Risk Status	Risk Owner	Risk Actionee
40	Reputation/Brand	Michele Daly	15/06/2017	If other MFAT contracts are under-performing it could affect our relationship with MFAT.	Moderate	Possible	Medium	Focus on good performance of this contract. MFAT-GNS reln. likely to be affected only for future contracts.	Open	Kelvin	Kelvin
42	Contract Performance	Michele Daly	26/07/2017	If Gol (particularly BNPB) don't take responsibility for the roll-out of StIRRRD the sustainability of the project will be affected affecting evaluation of the Activity overall and negatively impacting future projects.	Major	Possible	High	See #25 above. Develop Engagement Strategy with MFAT; more regular meetings with individual agencies; work at next level down in agencies (than AGG reps). <b>Next AGG meeting to focus on sustainability issues.</b>	Open	Michele	Michele
43	Financial/Resourcing	Michele Daly	21/09/2017	Dropping the 4th community project due to pressure on the budget as a result of unscheduled visits and additional tasks (e.g. National DRR Awareness Week)	Moderate	Likely	High	Early communication with MFAT (monthly and 6-monthly reports). A decision to be made early 2018 as likely LOV will be required as 4 community projects are contracted.	Open	Michele	Sylvia
44	Financial/Resourcing	Michele Daly	19/10/2017	Support by MFAT of the Massey (Johnston/Rovens/ADPC) project could put future revenue at risk and eventually itself become StIRRRD3 (reducing \$ available to support other StIRRRD3 projects).	Catastrophic	Possible	High	Meet with Massey team and seek input to ADD (for alignment); meet with MFAT and understand drivers; ensure StIRRRD review is well managed; maintain good relationships with Gol stakeholders (so they continue to support StIRRRD) e.g. at AGG meetings.	Open	Michele	Michele/Faisal
45	Financial/Resourcing	Michele Daly	19/10/2017	<u>60 year anniversary celebrations</u> . A lack of effort here will result in a missed opportunity for StIRRRD and reduced visibility. This is important for next steps and sustainability.	Moderate	Possible	Medium	Arrange meetings with the Embassy. Focus on a few agreed tasks, e.g. MoU with UGM, LIPI? And possibly a visit of key stakeholders (will need additional budget support). Pull in additional resources (Suzy Paisley)	Open	Michele	Sylvia/ Susie
46	Financial/Resourcing	Michele Daly	10/11/2017	MFAT initiated review of StIRRRD. A bad review will put StIRRRD3 at risk and impact on future contracting opportunities.	Catastrophic	Possible	High	Cooperate and resource effort in preparing for the review. GNS workshop to provide input to the review. Complete outstanding reports and other deliverables.	Open	Michele	Michele



APPENDIX I – Activity Governance Group Issue & Policy Recommendations



**StIRRRD Issues and Policy Recommendations**

**As at 31 December 2017** (blue text is new information since the last report)

No	Issue	Date raised at AGG	Districts affected	Policy Options/ Recommendations	Responsibility	Comments	StIRRRD Response/Actions	Government Progress
<b>Managerial/ Political</b>								
1	Rotation of BPBD staff hinders long term capacity building and implementation of plans.	20 April 2015	Most, in particular:  Sumbawa Mataram Palu	Before someone is promoted or rotated, the replacement candidate must have adequate training and/or experience.	MoHA (consistent approach; guidelines; regulations)  Local Government	A professional development programme could be established as a mix of vocational training (certificate) through to diploma and eventually degree programmes (NZ has some good examples of this).  Movement of StIRRRD trained staff across departments does have advantages for integration (mainstreaming).  <u>December 2016:</u> In some StIRRRD districts, staff have been completely rotated affecting continuity. Districts affected in particular are Sumbawa, Mataram and Palu. In Districts where there has been no rotation (e.g. Donggala), Action Plan implementation is progressing well.	<u>June 2016:</u> Information: In NTB Province, when someone is assigned to a position. He/she will not be replaced to other position for at least two years (regulation established) (From: Mataram DRR Workshop 2015).  <u>Dec 2016:</u> StIRRRD UGM team have increased physical visits to districts in an effort to maintain continuity.  <u>Feb 2017:</u> ALGG discuss this issue (refer minutes) – some districts have established workarounds, e.g. in Mataram.  <u>Nov 2015:</u> StIRRRD is supporting Kemendesa (Ibu Dewi) to develop a concept note for a professional development programme for Kemendesa staff.  <u>June 2016:</u> UGM and JCDR Massey in NZ discussed training opportunities during the NZ Comparative Study Visit in April 2016.  <u>Dec 2016:</u> no further development.  <u>Dec 2017:</u> Rotation of BPBD staff to other OPD also good for mainstreaming DRR to all stakeholders and OPD. It is important to keep in touch with them for DRR activity even they already move from BPBD.	<u>Feb 2017:</u> Pak Wisnu agreed to raise the issue of staff rotation within BPBD (and other OPD) with MoHA at an upcoming meeting, with a recommendation to limit staff rotations to not less than a two year period.  <u>Dec 2017:</u> MOHA indicate that a review is now likely as this issue keeps coming up and other functions are similarly affected.  <u>Nov 2015:</u> Kemendesa is developing a professional development training programme for its staff in 2016 (which will also be suitable for BNPB staff).  <u>Dec 2016:</u> no further development.  <u>Dec 2017:</u> BNPB, Bappenas, Basarnas and LIPI gave a presentation at UGM on professional development for 70 master and Ph.D. students and faculty members for one week on October 2017

No	Issue	Date raised at AGG	Districts affected	Policy Options/ Recommendations	Responsibility	Comments	StIRRDR Response/Actions	Government Progress
2	BPBD positions do not always attract the best candidates due to the lower seniority of the position relative to other departments. This results in a reduced ability to influence DRR planning, coordination and budgeting process.	20 April 2015		Elevate the role of BPBD within local government structure to attract better staff and achieve more influence.	MoHA (consistent approach; guidelines; regulations)  Local Government		<p><u>June 2016</u>: Issue of HR capacity building has been included as a priority action in the StIRRDR DRR Action Plans (all StIRRDR target areas). <i>Example</i>: Head of BPBD Pessel rejected newly appointed person to BPBD as the person concerned was presumed not competent (From: Head of BPBD Pessel 2016).</p> <p><u>Feb 2017</u>: ALGG discuss this issue (refer minutes) – some districts have changed the position of BPBD and made it the same as Bappeda.</p>	
				Establish a professional development (accreditation) programme for BPBD staff.	BNPB		<p><u>Nov 2015</u>: StIRRDR is supporting Kemendesa (Ibu Dewi) to develop a concept note for a professional development programme for Kemendesa staff.</p> <p><u>June 2016</u>: As above for 1.</p> <p><u>Dec 2016</u>: no known further development.</p> <p><u>Dec 2017</u>:</p> <ul style="list-style-type: none"> <li>• StIRRDR suggest to all BPBD especially for Head of BPBD to have good relation and communication to parliament, OPD, private sector and NGO. The informal communication probably more successful than formal meeting.</li> <li>• UGM gave a workshop on professional development for BPBDs during the All District Visit to 10 StIRRDR targeted districts.</li> <li>• In addition, UGM also took a similar approach at: <ul style="list-style-type: none"> <li>– Trenggalek District,</li> <li>– Temanggung District,</li> <li>– Kulonprogo Districts,</li> <li>– Gunung Kidul District,</li> <li>– Central Java Province,</li> <li>– STPDN in North Sulawesi,</li> <li>– Aceh Province.</li> </ul> </li> </ul>	<p><u>19 Nov 2015</u>: Kemendesa is developing a professional development training programme for its staff in 2016 (which will also be suitable for BNPB staff).</p> <p><u>Dec 2016</u>: no known further development.</p> <p><u>Dec 2017</u>: not known.</p>

No	Issue	Date raised at AGG	Districts affected	Policy Options/ Recommendations	Responsibility	Comments	StIRRDR Response/Actions	Government Progress
3	There is a lack of coordination in DRR planning and setting budgets across local government units/agencies (OPD).	20 April 2015  (also in Pilot)	All	Consider a more formal requirement to coordinate across plans and establish roles and responsibilities as part of the budgeting process.	MoHA  (consistent approach; guidelines; regulations)	This could be done through a statutory requirement to establish coordination.  Currently coordination seems to be <i>ad hoc</i> , although the StIRRDR programme has been successful in starting this coordination in some areas.  <a href="#">There is a regular meeting among OPD that includes BPBD, however discussions relating to DRM are not the main agenda. They will coordinate however when the disaster occurs.</a>	<p><u>Nov 2015:</u> StIRRDR has been successful in starting this coordination in some areas. Not sure it's sustainable.</p> <p><u>June 2016:</u></p> <ul style="list-style-type: none"> <li>In Agam (Feb16), BPBD Agam committed to have coordination meeting with related stakeholders and agencies once a year.</li> <li>In Sumbawa (Apr16), the Head of BPBD Sumbawa said key for bridging the communication gap with BPBD stakeholders is to have meetings with each head of agencies.</li> <li>Mataram final AP workshop suggested having DRR as a separate topic as part of the budget committee to improve integration across SKPD units.</li> </ul> <p><u>Dec 2016:</u> 5 Parliament Chairs who attended the NZ Study Visits, were invited as speakers on budgetary coordination, to Manado in October 2016. A session on budgets is being held as part of the Mid-Term DRR Seminar in Feb. 2017.</p> <p><u>Dec 2017:</u> <a href="#">Coordination and budgeting featured in discussions and sessions at the Mid-Term Seminar. There is an increasing awareness of the importance of coordination across OPD emerging in most districts as evidenced during the All-Districts Visit. StIRRDR continues to emphasise this important aspect.</a></p>	<p><u>Dec 2016:</u> not known</p> <p><a href="#">Dec 2017: not known</a></p>
				Review requirements and membership for DRR Forums. Consider greater compliance with the regulations.	BNPB (consistent approach; guidelines; regulations)	Local government	<p><u>June 2016:</u> StIRRDR is looking at developing a sample ToR for a DRR Forum as part of the StIRRDR toolkit. This provides guidance but is not mandatory.</p> <p><u>Dec 2016:</u> A session on Forums and coordination is being held as part of the Mid-Term DRR Seminar in Feb. 2017.</p> <p><u>Dec 2017:</u> <a href="#">A session on Forums and coordination was held as part of the Mid-Term DRR Seminar in Feb. 2017. The number of Forums becoming established in the Districts is increasing. Links have been made to the National DRR Forum.</a></p>	<p><u>Dec 2016:</u> not known</p> <p><a href="#">Dec 2017: not known</a></p>

No	Issue	Date raised at AGG	Districts affected	Policy Options/ Recommendations	Responsibility	Comments	StIRRDR Response/Actions	Government Progress
4	<p>DRR Forums are mostly inactive limiting coordination across departments and sectors (<i>see also issue 3</i>).</p> <p>Local government seems unsure of how to set Forums up, membership and what they should do.</p>	20 April 2015	All districts	<p>Review requirements and membership for DRR Forums. Consider greater compliance with the regulations.</p> <p>Establish more guidelines for local government on the Terms of Reference for Forums</p>	<p>BNPB</p> <p>(consistent approach; guidelines; regulations)</p> <p>Local government</p>	<p><i>See also #3 above.</i></p> <p>Note: The establishment of DRR Forum is a mandatory in the Law 24/2007.</p>	<p><u>June 2016:</u> StIRRDR is looking at developing a sample ToR for a DRR Forum as part of the StIRRDR toolkit. This provides guidance but is not mandatory.</p> <p><u>Dec 2016:</u> A session on Forums and coordination is being held as part of the Mid-Term DRR Seminar in Feb. 2017.</p> <p><u>Feb 2017:</u> A session on Forums and coordination was held as part of the Mid-Term DRR Seminar in Feb. 2017.</p> <p><u>Jun 2017:</u> Sec Gen of National DRR Forum to be engaged for advice.</p> <p><u>Dec 2017:</u> Sec Gen of National DRR Forum has provided some advice on ToR and Forum functions.</p>	<p><u>Dec 2016:</u> not known</p> <p><a href="#">Dec 2017:</a> not known</p>
5	<p>Local government has very limited relationships with the private sector in the DRR space. This is resulting in missed opportunities to increase funding and buy-in for DRR initiatives.</p>	20 April 2015 (also in pilot)	All districts	<p>Review requirements and membership for DRR Forums. Consider making membership of Forums mandatory.</p>	<p>BNPB</p> <p>(consistent approach; guidelines; regulations)</p> <p>Local government</p>	<p>Central Java has a private sector forum/collaboration focussed on recovery, but also mitigation in the context of Mt. Merapi. This could be a model worth investigating.</p> <p><a href="#">Dec 2017:</a> Slow but steady progress is being made with private sector engagement by districts. Some have one or two agencies (e.g. telecommunications companies/ banks) that they are working with.</p>	<p><u>Nov 2015:</u> StIRRDR to date has had limited success in increasing private sector involvement in the programme. We could look at trialling a specific initiative as part of the “community” projects in years 3-5.</p> <p><u>June 2016:</u> The issue of increasing the involvement of the private sector in DRR initiatives is included in the priority of DRR action plan formulated with StIRRDR (all StIRRDR target areas).</p> <p><u>Dec 2016:</u></p> <ul style="list-style-type: none"> <li>StIRRDR have met and engaged with a mining company in Morowali. Relationship has improved with BPBD. Need better understanding of both impacts and benefits of mining.</li> <li>Private sector presentations will be included at the Mid-term DRR Seminar.</li> <li>A cooperation has been established between local government in Bengkulu, Bengkulu University and Bank Indonesia in the field of disaster risk reduction, which sees the establishment of a fund for DRR for Bengkulu.</li> </ul> <p><u>Dec 2017:</u></p> <ul style="list-style-type: none"> <li>Some private sector attendance at the Mid-Term Seminar.</li> </ul>	<p><u>Dec 2016:</u> not known</p> <p><a href="#">Dec 2017:</a> not known</p>

No	Issue	Date raised at AGG	Districts affected	Policy Options/ Recommendations	Responsibility	Comments	StIRRRD Response/Actions	Government Progress
							<ul style="list-style-type: none"> <li>Contact has been made with a specialist in public:private partnerships and this is being followed up.</li> <li>Despite initial positive contact with the Morowali Mining Company, there has been very little ongoing communication.</li> </ul>	
6	The capacity and capability of BNPB and Kemendesa staff needs increasing so as to be able to better support BPBD and to be able to work directly in villages (Kemendesa).	19 Nov 2015	N/A	Establish a professional development (accreditation) programme for BNPB and Kemendesa staff.	BNPB/ Kemendesa		<p><u>Nov 2015:</u> StIRRRD is supporting Kemendesa (Ibu Dewi) to develop a concept note for a professional development programme for Kemendesa staff.</p> <p><u>June 2016:</u> No follow-up yet.</p> <p><u>Dec 2016:</u> There has been no follow-up.</p> <p><u>Dec 2017:</u> StIRRRD team repeat offer to host Kemendesa and BNPB on visits to the districts.</p>	<p><u>Nov 2015:</u> Kemendesa is developing a professional development training programme for its staff in 2016 (which will also be suitable for BNPB staff).</p> <p><u>Dec 2016:</u> not known</p> <p><u>Dec 2017:</u> not known</p>
7	Good leadership in local government is critical to the successful implementation of DRR plans. Successful outcomes in the districts are more dependent on good local leadership than good planning and information etc.	19 Nov 2015	<p>Good leadership: Agam, Sumbawa, Donggala, Bengkulu,</p> <p>Improvements required: Pesisir Selatan, Seluma, Morowali,</p>	<p>Target decision makers and politicians for leadership training and DRR training as part of professional development for people in governance roles.</p> <p>Develop leadership skills in BPBD staff. Include a leadership unit as part of professional development (accreditation) for BPBD staff (see also issues 1 &amp;2).</p>	<p>MoHA  (consistent approach; guidelines; regulations)</p> <p>Local government</p> <p>BNPB/ Kemendesa</p> <p>Local government</p>	<p><u>Dec 2016:</u> Districts where Heads of Parliament have participated in the StIRRRD programme are generally showing good momentum in Action Plan implementation (e.g. Donggala; Sumbawa; Agam)</p>	<p><u>Nov 2015:</u> Note that StIRRRD is targeting politicians in its training and also targets BPBD/PU and Bappenas staff that show leadership potential.</p> <p><u>June 2016:</u> No further information at this stage.</p> <p><u>Dec 2016:</u> StIRRRD focuses on leadership at the National DRR/DRM event in Manado in Nov 2016. Parliamentarians and Head of Districts speak about their experiences.</p> <p><u>Feb 2017:</u> Leadership continues to be a focus for STIRRRD coaching activities.</p> <p><u>Dec 2017:</u> as above.</p>	<p><u>Dec 2016:</u> not known</p> <p><u>Dec 2017:</u> not known</p>
8	Districts no longer seem to have a say in whether mining operations are approved in their respective	21 Jul 2016	Morowali Donggala Palu	Review how mining operations are approved (pros and cons of existing arrangements) and impact on local government.	MoHA?	This issue has been raised in Donggala and Morowali.	<p><u>June 2016:</u> StIRRRD are trying to engage with a mining company active in the Morowali area to increase awareness of DRR and see how they could be involved more.</p>	<p><u>Dec 2016:</u> not known</p> <p><u>Dec 2017:</u> not known</p>

No	Issue	Date raised at AGG	Districts affected	Policy Options/ Recommendations	Responsibility	Comments	StIRRDR Response/Actions	Government Progress
	districts. This responsibility seems to have passed to the Province. This is making it difficult for districts to exercise any control of activities which are having a major impact in their districts.  Process is strongly open to political interference.					<u>Dec 2016:</u> Head of Bappeda loses his job in Morowali after trying to mitigate impacts of mining on environment and risk through planning regulations.	<u>Dec 2016:</u> The StIRRDR team have built a relationship with a mining company in Morowali and have helped improve relationships between them and BPBD. The mining company wants to contribute to mitigating effects. <u>Feb 2017:</u> <ul style="list-style-type: none"> <li>Central Sulawesi districts have asked for support to develop training for mining operators on environmental impacts.</li> <li>Mining company in Morowali declines further meetings.</li> </ul> <u>Dec 2017:</u> no update	
9	National government budget cuts in the 2016 fiscal year resulted in cut-backs to local budgets, including in the DRR area. Many local governments still do not recognise the importance of DRR versus disaster response versus other local government spending priorities.	14 Feb 2017		Undertake a Roadshow (for local parliamentarians) explaining Gol's commitment to the Sendai Framework.  Utilise the annual BPBD meeting to promote the importance of DRR.  <a href="#">Guidelines for local government (BPBD) on how to leverage budgets for DRR, including village funds.</a>	BNPB/ Kemendesa  MOHA (consistent approach; guidelines; regulations)		<u>Dec 2016:</u> Many StIRRDR districts had budget cuts affecting Action Plan implementation. Some however, (e.g. Donggala) managed budget increases, going against the trend.  <u>Dec 2017:</u> Budgeting featured in discussions and sessions at the Mid-Term Seminar. StIRRDR continues to emphasise this important aspect and show-case examples from districts who seem to be better at leveraging sources of funding than others.	<u>Dec 2016:</u> not known  <u>Dec 2017:</u> not known
<b>Technical</b>								
10	There seems to be confusion and a lack of understanding and standardisation in the way tsunami assessments, evacuation planning, warnings, signage, vertical evacuation shelters and community involvement is undertaken.	20 April 2015	All, but particularly Pesisir Selatan Seluma Padang Bengkulu Agam	Establish some guidelines: how to develop tsunami evacuation maps, signage standards, vertical evacuation building guidelines and specifications end-to-end warning system (incl. public engagement)	BNPB  (consistent approach; guidelines; regulations)  Local government	NZ has some good standards which could be used as a guide.  <u>Dec 2016:</u> Padang and Bengkulu have established "Tsunami Blue Line" projects.	<u>Nov 2016:</u> StIRRDR has tsunami hazards management as part of its training. <u>June 2016:</u> One of StIRRDR's community projects will look at developing a case study around some of these issues. <u>Dec 2017:</u> <ul style="list-style-type: none"> <li>Project scoping starts; Seluma selected with Pesisir Selatan staff involved as observers.</li> <li>MoU underway between Wellington City and Padang City.</li> </ul>	<u>June 2016:</u> BNPB are looking to establish a pilot Tsunami Blue Line project in Pesisir Selatan.  <u>Dec 2016:</u> not known, although it's suspected that budget cuts have delayed or cancelled this pilot initiative.  <u>Dec 2017:</u> not known



No	Issue	Date raised at AGG	Districts affected	Policy Options/ Recommendations	Responsibility	Comments	StIRRDR Response/Actions	Government Progress
11	Local government need help with coastal hazard management – there is limited understanding of 'when' and 'when not' to build seawalls, seawall design criteria etc., and an over-emphasis on physical mitigation work.	20 April 2015	All	Establish some guidelines: coastal hazard management options (the full range including community relocation; mangroves and other planting; beach nourishment; set-backs etc.) seawalls (the ins and outs)	BNPB  (consistent approach; guidelines; regulations)  Local government	NZ has some good standards which could be used as a guide.	<p><u>Nov 2015:</u> StIRRDR has coastal hazards management as part of its training.</p> <p><u>Jun 2016:</u></p> <ul style="list-style-type: none"> <li>Head of BPBD Donggala joined the 2015 NZ comparative study and was motivated (Nov15) to mitigate coastal erosion by building breakwater (the effectiveness of its effect is still unknown).</li> <li>In Morowali (2015) BPBD built breakwater with National Budget but the community still doubt its effectiveness (DRR Workshop Feb 2016)</li> </ul> <p><u>Dec 2016:</u></p> <ul style="list-style-type: none"> <li>Coastal management appears in most district Action Plans.</li> <li>Agam and Seluma districts have built retaining structures for coastal erosion.</li> </ul> <p><u>Dec 2017:</u> Coastal hazard management features at the Mid-Term Seminar.</p>	<p><u>Dec 2016:</u> not known</p> <p><u>Dec 2017:</u> BPBD Seluma got support from BNPB to build seawater breaker</p>
12	Environmental management and its link to DRR needs strengthening; key issues are waste management, comprehensive catchment management and better natural resource management (mangroves; forests etc.)	20 April 2015 19 Nov 2015	All	Education programme for local government (roadshows; booklets; etc.)  Establish guidelines on options for linking DRR with environmental management and resource management policy and public education.	Bappenas  (consistent approach; guidelines; regulations)  Bappenas  (consistent approach; guidelines; regulations)	<u>Dec 2016:</u> StIRRDR team have noticed an increasing awareness of the links between waste management and flood management.	<p><u>Nov 2015:</u> StIRRDR has environmental management as part of its training.</p> <p><u>June 2016:</u> Some districts have catchment management and mangrove re-establishment within Action Plans.</p> <p><u>Dec 2016:</u> Waste management and mangroves will be highlighted in DRR Mid-Term Seminar in Feb 2017.</p> <p><u>Dec 2017:</u></p> <ul style="list-style-type: none"> <li>Waste and river management and mangroves were highlighted in DRR Mid-Term Seminar in Feb 2017.</li> <li>BPBD Seluma has a program for mangrove plantation along coastal area of Bengkulu</li> <li>BPBD Seluma got a support from Kemendesa for water supply sanitation</li> </ul>	<p><u>Dec 2016:</u> not known</p> <p><u>Dec 2017:</u> not known</p>
13	There are limited or no controls on the effects and/or limited ability to require mining/ quarrying/	20 April 2015 19 Nov 2015	Donggala Morowali	Review Environmental Impact Assessment (EIA) requirements.	Bappenas?  (consistent approach;	Will require an assessment of trade-offs by the local parliament (revenue vs. increased risk and	<u>June 2016:</u> The StIRRDR team are meeting with a mining company active in Morowali area to explore ways they can contribute to mitigating risk.	<u>Dec 2016:</u> not known

No	Issue	Date raised at AGG	Districts affected	Policy Options/ Recommendations	Responsibility	Comments	StIRRDR Response/Actions	Government Progress
	plantation industries to mitigate effects. This is resulting in increased flooding, sedimentation and landslides.  Process is strongly open to political interference.		Palu		guidelines; regulations)	environmental degradation vs. jobs, etc.).	<u>Dec 2016:</u> The StIRRDR team have built a relationship with a mining company in Morowali and have helped improve relationships between them and BPBD. The mining company wants to contribute to mitigating effects. <u>Feb 2017:</u> Central Sulawesi districts have asked for support to develop training for mining operators on environmental impacts. Mining company in Morowali declines further meetings. <u>Dec 2017:</u> no further update	<a href="#">Dec 2017: not known</a>
				Add a requirement to address risk in all EIAs for activities. Activities exacerbating or increasing risk must show how they will mitigate the risk before permission can be given. For risks that are unacceptable, permission could be declined.	Bappenas?  (consistent approach; guidelines; regulations)  Local government	Will require compliance monitoring (which can be difficult to resource).  <u>Dec 2016:</u> Head of Bappeda loses his job in Morowali after trying to mitigate impacts of mining on environment and risk through planning regulations.		
14	Women aren't very involved in DRR and have limited knowledge of DRR. They have a very family oriented role after an emergency but would like to be able to expand this to help BPBD with preparedness, rescue and relief.	20 April 2015	All	Involve women's groups in preparedness planning.	BNPB (consistent approach; guidelines; regulations)	This information is coming out of StIRRDR's Focus Group Discussions (FGD).	<u>Nov 2015:</u> StIRRDR FGD's have been helpful in raising awareness of women's roles. Some women's groups are including DRR in their meeting agendas as a result. <u>June 2016:</u> Pesisir Selatan have organised a Women's DRR Action Plan meeting (May16) which was attended by StIRRDR members and over 100 participants. <u>Dec 2017:</u> <ul style="list-style-type: none"> <li>Women and disabilities feature in Mid-Term Seminar in Feb 2017.</li> <li>A paper is being prepared on the results of the FGD with a view to an eventual journal publication.</li> <li>Agam has a program to empower women for DRR, the link <a href="https://kaba12.co.id/2017/02/23/peran-perempuan-penting-prb/">https://kaba12.co.id/2017/02/23/peran-perempuan-penting-prb/</a></li> </ul>	<u>Dec 2016:</u> not known  <a href="#">Dec 2017: not known</a>
				Develop DRM educational material specifically for women.	BNPB (consistent approach; guidelines; regulations)			
15	Districts lack the capability to create hazard and risk maps or to use existing ones for formulation of policy.	19 Nov 2015	All	Include a basic hazard and hazard mapping unit as part of professional development (accreditation) for BPBD staff (see also issues 1 &2).  <a href="#">Develop specific training modules.</a>	BNPB  (consistent approach; guidelines; regulations)		<u>Nov 2015:</u> Note that StIRRDR is running a one-off Hazards and Hazards Mapping training course in January 2015 to partly address this. Course material could be used for an ongoing professional development programme. <u>Jun 2016:</u> Course completed and report finalised.  <u>Dec 2017:</u> Donggala runs Hazards 101 training for sub-districts in Feb 2017. Morowali has also held a similar training.	<u>Dec 2016:</u> not known  <a href="#">Dec 2017: BNPB Pusedalops inquires whether StIRRDR can help with a Risk Assessment training module.</a>  BNPB has a program training annually for BPBD staff.



No	Issue	Date raised at AGG	Districts affected	Policy Options/ Recommendations	Responsibility	Comments	StIRRDR Response/Actions	Government Progress
								Local government has a program to increase the staff capability by training such as Seluma.
16	Districts lack a basic overview of their district hazards and vulnerabilities to help inform priorities for DRR planning.	19 Nov 2015	All	<p>Use the StIRRDR District Profile as a template for other districts.</p> <p><a href="#">Develop specific training modules.</a></p> <p><a href="#">Roadshow by BNPB on the Risk Index and how it's compiled – many districts don't understand or agree with the rankings and want them changed.</a></p>	BNPB/ Kemendesa  (consistent approach; guidelines; regulations)	<p>There are both long and short profile versions.</p> <p>The short profiles are good for a high level summary and are more visual. They provide a good indication of the type of information the districts should be collecting.</p> <p><a href="#">Jun 2017</a>: Districts are just starting to socialise the profiles now – still revising content.</p>	<p><a href="#">Nov 2015</a>: The StIRRDR profiles use and expand the BNPB risk index. The information is mostly qualitative and is drawn from available information. It's easily able to be pulled together by the districts themselves.</p> <p><a href="#">June 2016</a>: Profiles have been completed for all 8 StIRRDR districts.</p> <p><a href="#">Dec 2016</a>: Usefulness of the profiles will be reviewed during the All District Visits in March 2017.</p> <p><a href="#">Dec 2017</a>:</p> <ul style="list-style-type: none"> <li>Profiles are still being socialised. Some districts do not agree with the BNPB risk ratings for their districts and don't want this information featuring on the Profiles.</li> <li>BPBD Bengkulu Province has a program for knowledge sharing of DRR, the link is <a href="http://esa.or.id/bincang-bencana-dengan-dunia-usaha/">http://esa.or.id/bincang-bencana-dengan-dunia-usaha/</a></li> </ul>	<p><a href="#">Dec 2016</a>: not known</p> <p><a href="#">Dec 2017</a>: BNPB Pusedalops inquires whether StIRRDR can help with a Risk Assessment training module.</p>

## **StIRRRD Community Project 2**

### **Raising community tsunami awareness and preparedness – Coastal West Sumatra**

#### **1. Project Summary**

This community engagement project will provide education about tsunami hazard, and facilitate sustainable, community-led resilience and response plans to reduce the impacts of future tsunami events.

It will include mapping of community resources, infrastructure and evacuation routes, in the village of Rawa Indah, which is located on flat, low-lying land near the coast, and immediately adjacent to an existing vertical tsunami shelter. Other StIRRRD districts along the west Sumatran coast have comparable levels of tsunami risk. It is intended that this project will enable similar initiatives for other coastal communities in surrounding villages and in other districts. The project is modelled on a similar successful community project instigated by GNS Science in Samoa.

#### **2. Project Rationale**

There are a number of small communities (23 villages) along the broad, low-lying coastal plain of the Seluma District, in Sumatra. During the process of developing Seluma's DRR Action Plan, it was recognised that many of these communities are vulnerable to significant impacts from tsunamis. In many cases, nearby high ground does not exist, or tsunamis triggered by local events would not allow sufficient warning time for communities to evacuate to high ground.

Experience of recent catastrophic tsunami events in Seluma is limited, and local people may therefore not have a full understanding of their exposure to this hazard. In addition, people tend to rely on, and expect local or national authorities to issue formal tsunami evacuation warnings. The reality is that for near-source tsunami there may be insufficient time to issue a warning, and the protocols for receiving and disseminating warnings are not yet mature. Hence the community needs to understand that there may be no official warning, that they need to self-evacuate, and that they need to have a plan in place to ensure their safety.

In addition, Palm Oil industry workers and their families often live in separate settlements on the coastal plain. These people are often not locals and may

therefore have even less knowledge of tsunami hazard, or the need for a response plan. These settlements are often several kilometres from the main villages or from safe evacuation points.

A potential solution which has been established in the village of Rawa Indah is a vertical evacuation shelter, designed to resist the effects of a tsunami. Vertical evacuation structures are most useful when there is not enough time between the tsunami warning and tsunami inundation to allow a community to evacuate out of the inundation zone or to existing areas of high ground (FEMA, 2009).<sup>20</sup> However, the shelter in Rawa Indah is not currently being utilised for its intended purpose, due to limited disaster risk reduction knowledge and capacity within the local community.

This project fits in well with the target output of the Seluma District Disaster Risk Reduction Plan, which is to create resilient communities and organisations. The project also fits within the scope of the District Strategy identified for Seluma by the StIRRRD program to help the district improve its overall progress on DRR initiatives. In particular, the District Strategy recommends providing BPBD staff with relatively simple tools to characterise natural hazards at the village level, and to develop community response plans.

### 3. Project Outcomes and Objectives

The main outcomes of this project are to:

1. Enable the vertical tsunami shelter at Rawa Indah to become an integral, and well-maintained part of the local community.
2. Improve the local community's DRR capacity, so as to reduce impacts of future tsunami events. This includes an ongoing commitment from local government agencies and the community to engage in regular training and annual simulations, to maintain a high level of hazard awareness and preparedness. The simulations will be combined with other activity in the village, such as a cultural ceremony.
3. Improve the capacity of local agencies to engage with and train communities in disaster risk reduction techniques ('train the trainers').
4. Build cooperation amongst disaster-related stakeholders.
5. Inform decisions about locating and managing other tsunami shelters.

Specific outputs:

1. Pre- and post-workshop surveys to ascertain the level of awareness and preparedness of the community.
2. Education material to inform the community about sources and characteristics of tsunami.
3. Workshops with various sectors of the community to:

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<sup>20</sup> *Vertical Evacuation from Tsunamis: A Guide for Community Officials*

- a. capture existing knowledge and understanding of tsunami hazard,
  - b. map key infrastructure and potential evacuation routes,
  - c. identify and map vulnerable households or groups,
  - d. identify the warnings upon which to evacuate (natural, human).
4. Development of a community response plan, including:
    - e. roles and responsibilities prior to, during, and after a tsunami event,
    - f. methods to keep tsunami awareness and preparedness part of daily life (e.g. traditional culture - myths, songs, art),
    - g. actions required to maintain the shelter so it is fit for purpose, and remains an important community asset, and
    - h. recommendations on the design and location of evacuation route signage and tsunami information boards.<sup>21</sup>
  5. An evacuation simulation, with observers assessing the effectiveness of the response.
  6. The Rawa Indah School qualifies as a Disaster Resilient School.<sup>22</sup>
  7. Report on the project, evaluation and recommendations.

## 4. Project Requirements and Resources

To be successful the project needs:

- Local commitment from Seluma BPBD and local government officials, leaders from Rawa Indah village and the sub-district, and support from UNIB:
- The project should also fit with BPBD's existing public awareness programme.
- Motivated facilitators and BPBD staff who have received technical training from UGM, UNIB or GNS). Includes existing village disaster mitigation team (KSB).
- Support from BNPB to provide information about the existing hazard maps for Seluma, to determine the severity of the tsunami hazard (i.e. how were the maps created, what scenario do they represent, what are the likely characteristics of tsunami along this coast (wave height and speed, arrival time).
- Information about the operating procedures for the existing tsunami shelter (if any).

## 5. Background

Tsunami inundation hazard areas have been mapped along the west coast of Sumatra, and in Seluma these areas extend as far as 6 km inland. These hazard maps were provided by the National Disaster Management Agency (BNPB) in 2013. The five districts on the island of Sumatra where StIRRRD has been engaged have already implemented some initiatives such as evacuation route signage, early warning systems, and 'Blue Line' projects. In Seluma, a vertical evacuation shelter

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<sup>21</sup> Note that the actual installation of signs and boards does not form part of the project.

<sup>22</sup> This would be the first school in the Seluma District to gain this certification.

has been constructed near the coast at Rawa Indah, but several more would be needed to accommodate the population potentially at risk from tsunami along Seluma's 78km stretch of coastline.

As any warning before the arrival of a near-source tsunami is likely to be minimal, people would need to be aware of the quickest and safest way to evacuate to an identified safe area, or to a vertical evacuation shelter. However, the operating procedures for the existing tsunami shelter are unclear, as are the protocols for self-evacuation. Many will want to evacuate in cars but the limited roading network is in poor condition and roads generally run parallel to the coast rather than inland. It may be quicker for people to move towards a safe area on foot or by motorbike, provided suitable tracks are available. Evacuation simulations have yet to be undertaken and hence the current initiatives have yet to be evaluated for effectiveness.

## 6. Budget

The budget for this project is estimated at approximately NZ\$150,000. This amount has already been budgeted for within the StIRRRD Activity.

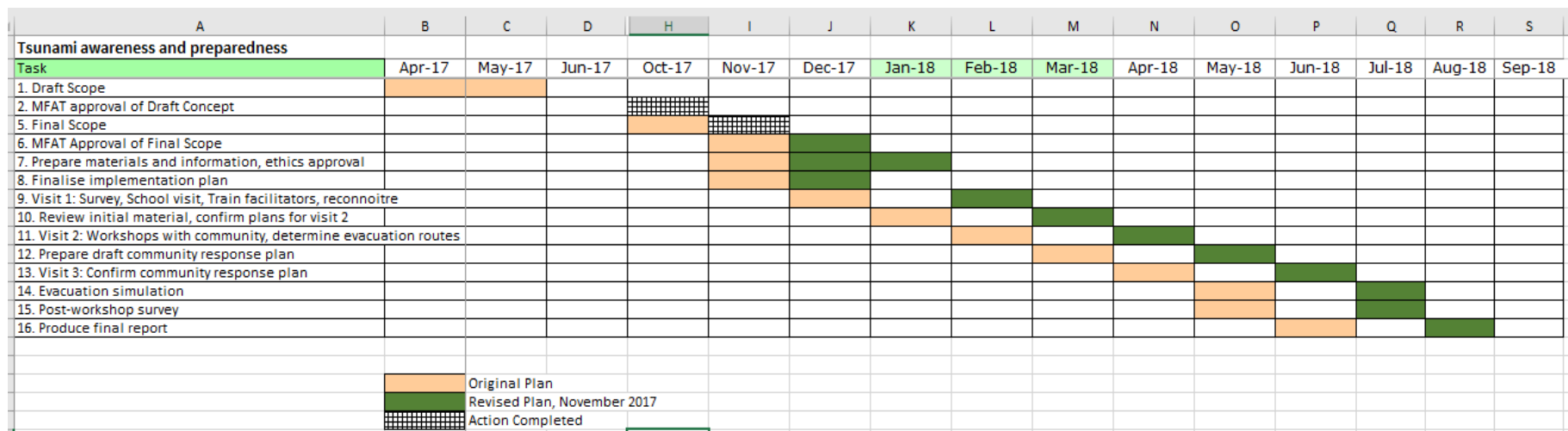
## 7. Program (colour-coded for main components)

Action	Responsible	Timing
1. Confirm location.	UGM / GNS	July 2017
2. Preliminary meeting in Seluma a. Discuss project with local agencies (head of village, KSB, Tagana, Red Cross (PMI) and BPBD). b. Determine appropriate timing.	UGM, GNS, UNIB	14 Aug 2017
3. Finalise scoping document, send to MFAT for approval.	UGM, GNS	Nov 2017
4. Finalise implementation plan and logistics.	UGM / GNS	Dec 2018
5. Prepare materials and information required for the project.	UGM / GNS / UNIB	Jan 2018
6. Design and test community survey	UGM / GNS / UNIB	Jan 2018
7. <i>Visit 1: Initial groundwork.</i> a. Undertake preliminary community survey. b. Workshops with facilitators and school teachers to ensure consistency of messages. c. Initial school sessions: (i) contingency plan, (ii) evacuation plan, (iii) tsunami art project - shelter decoration. d. Reconnoitre of village; location of key infrastructure / assets / layout of village, collect drone footage.	UNIB (students) UGM / GNS UGM / PMI  All	4 days, in Feb 2018. To coincide with retirement of current BPBD head, and as new head starts.
8. Facilitate a workshop on DRR-related land-use issues (replanting native forest along coast).	UGM / UNIB	End of Visit 1, Feb 2018
9. Review material (collate survey results) and information gained during visit 1, final preparations for Visit 2.	UGM / GNS	Mar 2018

Action	Responsible	Timing
<p>10. <i>Visit 2: Community workshops.</i></p> <ul style="list-style-type: none"> <li>a. Capture existing knowledge / direct experience / cultural understanding of tsunami hazard.</li> <li>b. Explain potential tsunami hazard and key concepts.</li> <li>c. Identify the warnings upon which to evacuate (natural, human).</li> <li>d. Map key assets and evacuation routes (tracks, roads, houses, shelter, school etc.)</li> <li>e. Identify and map vulnerable households or groups.</li> <li>f. Discuss other uses for the shelter and ways to incorporate it into daily life.</li> <li>g. Walk evacuation routes with community members.</li> <li>h. Follow-up visit to school to progress / finalise items listed in 7c above.</li> </ul>	<p>Facilitation: PMI, UNIB, UGM, KSB,</p> <p>Oversight: BPBD, UGM, GNS</p>	<p>4 days, Apr 2018.</p>
<p>11. Analyse information collected during the workshops / walkabout, and prepare a draft community response plan. Confirm roles, responsibilities, and budgets from district to sub-village and household level. This includes keeping the shelter fit for purpose, installing / maintaining signs, maintaining evacuation routes (tracks / roads) and other infrastructure, evacuating vulnerable groups, ongoing education &amp; simulations.</p>	<p>UGM / GNS</p>	<p>May 2018</p>
<p>12. <i>Visit 3: Present and confirm the key elements of the community response plan, including:</i></p> <ul style="list-style-type: none"> <li>a. Roles and responsibilities.</li> <li>b. Maps depicting evacuation routes and travel times to the shelter.</li> <li>c. Importance of using traditional culture to keep tsunami awareness and preparedness part of daily life.</li> <li>d. How the shelter will operate after a warning; supplies to be stocked; what happens when threat is over.</li> <li>e. Guidance on maximum occupancy, accommodation for pets and vehicles etc.</li> <li>f. School presentation – award Disaster Resilient School certificate, hand-over evacuation map.</li> <li>g. Conduct an evacuation simulation and observe effectiveness of the response.</li> <li>h. Commitment agreement among stakeholders to guarantee the sustainability of awareness</li> </ul>	<p>Facilitators, led by UGM (no GNS staff in budget at this stage), BPBD, PMI</p>	<p>2 days, June 2018</p>
<p>13. Post-project community survey of tsunami hazard awareness and planning.</p>	<p>UNIB</p>	<p>July 2018</p>
<p>14. Prepare a report describing the work undertaken and evaluating its effectiveness.</p>	<p>UGM / GNS</p>	<p>August 2018</p>
<p>15. Follow-up project: assess the level of awareness in local schools (AP activity).</p>	<p>BPBD</p>	<p>Ongoing</p>

Action	Responsible	Timing
16. Follow-up project: each household could receive a sticker with information about the hazard characteristics, and actions to take (i.e. similar to program in Padang).	UGM / BPBD	2018
17. Parallel project: assess the design of the shelter, and its ability to withstand earthquake and / or tsunami.	UNIB / UGM	2017-2018
18. Parallel project: importance of re-planting coastal margin with native vegetation – prevent erosion.	District	2017
19. Parallel program: Observations by village representatives from Bengkulu and/or Pesisir Selatan	UGM / GNS	Visit 2

### Proposed timeline for *Tsunami awareness and preparedness* community project





## APPENDIX K – Abbreviations

AADMER	ASEAN Agreement for Disaster Management and Emergency Response
AGG	Activity Governance Group
AHA	Asean Humanitarian Agency
AIFDR	Australia-Indonesia Facility for Disaster Reduction
ASEAN	Association of Southeast Asian Nations
AusAID	Australian Agency for International Development
BAPPEDA	Badan Perencanaan Pembangunan Daerah (Indonesian Regional body for planning and development)
BAPPENAS	Badan Perencanaan Pembangunan Nasional (State Ministry for National Planning and Development Agency)
BMKG	National Meteorological and Geophysical Monitoring Agency
BNPB	Badan Nasional Penanggulangan Bencana (National Disaster Management Agency)
BPBD	Badan Penanggulangan Bencana Daerah (Local Disaster Management Agency)
BPPT	Badan Pengkajian dan Penerapan Teknologi (Agency for the Assessment and Application of Technology)
DRM	Disaster Risk Management. Includes reduction (DRR), as well as preparedness, response and recovery (DM)
DRR	Disaster Risk Reduction
GAMA-Inatek	
GFDRR	Global Fund for Disaster Risk Reduction (administered by the World Bank)
IMDFF-DR	The Indonesian Multi-Donor Fund Facility for Disaster Recovery (administered by the World Bank)
ISO	International Standards Organisation
ITB	Bandung Institute of Technology
JICA	Japan International Cooperation Agency
Kemendagri	Ministry of Home Affairs (MOHA)
Kemendesa	Ministry of Village Development, Disadvantaged Regions and Transmigration (formerly KPDT then KDPDTT)
KPDT	Kementerian Pembangunan Daerah Tertinggal (Ministry of Disadvantaged Areas Development)
MoHA	Ministry of Home Affairs
NGO	Non-Governmental Organisation
PMT	Project Management Team
PU	Public Works Department

SCDRR	Safer Communities Through Disaster Risk Reduction (SCDRR) in Development (UNDP funded programme, BAPPENAS & BNPB implementing agencies)
UGM	Universitas Gadjah Mada
UNAND	Andalas University
UN-OCHA	United Nations office for the Coordination of Humanitarian Affairs
UNDP	United Nations Development Programme
UNRAM	Mataram University
UNTAD	Tadulako University
USAID	United States Agency for International Development