

**Six Monthly Report
1 July - 31 December 2018
Strengthened Indonesian Resilience:
Reducing Risk from Disasters
(StIRRRD)**

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GNS Science International Consultancy Report 2019#1



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



Universitas Gadjah Mada,
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BIBLIOGRAPHIC REFERENCE

Daly M, Glassey PG, Fathani TF, Riches S, Ediningtyas F, Wilopo W. 2019. Six Monthly Report 1 July – 31 December 2018 Lower Hutt (New Zealand): GNS Science. p. 124. (GNS Science International Consultancy Report 2019/01).

Six Monthly Progress Report: 1 July 2018–31 December 2018

Strengthened Indonesian Resilience: Reducing Risk from Disasters (StIRRRD)

Summary

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">• Effective DRR¹ activities – improved practice• DRR strengthening model applied to other districts• Strengthened DRR planning and implementation by Local Government• Improved community DRR practice
Short-term	<ul style="list-style-type: none">• Increased stakeholder awareness and buy-in of DRR approach• Local government staff have skills and knowledge to support DRR• DRR Action Plans finalised• Expert knowledge and skills applied to support DRR• Improved community awareness of hazards and risks

Contract or grant information

Start and end dates	19 September 2014–30 September 2019
Total cost	\$7.266M
Reporting period	1 July 2018 – 31 December 2018

¹ DRR = Disaster Risk Reduction

Progress report preparation

Prepared by	Michele Daly, Phil Glassey, Teuku Faisal Fathani, Sylvia Riches, Fransisca Ediningtyas, Wahyu Wilopo.
Reviewed by	Geoff Kilgour and Kelvin Berryman
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Executive Summary

The StIRRRD Activity continues to make progress despite the earthquake in Lombok, and earthquake and tsunami in Palu. The total actual spend to date is \$6.559 M against a planned budget of \$6.705 M (pre-LOV2). Overall the budget is 2% underspent to the end of December 2018. This compares to an underspend of 3% at the end of July 2018.

In response to the mid-term review, an Indonesian gender specialist from Auckland University of Technology, has been engaged to facilitate training and analysis of women's Focus Group Discussions. Recommendations on the changes to the Results Framework are not yet fully implemented.

Activity has increased significantly in Output 1, (Toolkit Review), Risk reduction network, Output 2 (DRR Week in Medan) and Output 10 (Community Projects). Regular Coaching and Mentoring (Output 3.1) has been ongoing. Additional unbudgeted tasks include developing a proposal to respond to the Palu earthquake and tsunami, response to the Lombok earthquake and additional project management, (including a special AGG meeting to discuss needs in Palu). These have contributed to the extra expenditure in this quarter.

The extra costs associated with other tasks are the subject of a Variation currently under discussion with MFAT. The Variation is also intended to address a 6- month extension to the completion date of the Activity to accommodate revised delivery dates for tasks during the last 12 months. These include additional coaching and mentoring visits, rescheduling the Final Workshop, Community Project 1, and deployment of the Local-Government Self-Assessment Tool (LG-SAT) which will provide a measure of the changed DRR capacity of local government in the districts. The Variation also includes an Integrated Spatial Decision Support System (ISDSS) for DRR scoping mission requested by Bappenas, which is to help develop a method to determine where investment is best directed across the government sector to reduce Indonesia's risk index. This mission was conducted in September 2018.

Highlights during this reporting period include the significant progress made with the Rawa Indah Community "Tsunami Awareness and Preparedness" project, response to the Lombok and Palu earthquakes, and involvement of UGM StIRRRD members in technical and social panels related to these events. The Integrated Spatial Decision Support System (ISDSS) scoping mission was also successful. The team attended DRR Week in Medan and ran a session, including presenting the Activity Toolkit, which is also included in the variation.

The focus for the next six months will be on delivering the community projects, completing the Activity Toolkit, and organising the Final workshop to strengthen the StIRRRD district network. Ensuring support from Government of Indonesia (GoI) partners to ensure sustainability remains a top priority.

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, and timeline. Impacts in each of the StIRRRD districts are summarised in Appendix C. Key learnings, highlights and issues are also discussed.

Summary of Services for the Reporting Period 1 July – 31 December 2018

Note: Output and sub-output numbers below correspond to those in the costed workplan (Version 10.2). More information on the services can be found in the monthly reports. District and StIRRRD impacts are listed in Appendix C. Abbreviations and acronyms used throughout the report can be found in Appendix F.

Output 0: Project Management

(0.1) Team leadership and management is an important component of an Activity of 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 GNS Science and UGM Project Team Meetings (approximately fortnightly).
- A joint UGM-GNS Workshop was held in Yogyakarta on 17 September 2018. The meeting followed a workshop on the Toolbox and included discussion on:
 - Expansion of, and ongoing engagement with the StIRRRD network.
 - Updating the StIRRRD DRR Profiles.
 - Seismometers in Schools competition ideas and prizes.
 - Action Plan updates for the annual report.
 - Format for StIRRRD's workshop session at Medan during DRR week. GNS confirmed that they would not attend the session for budget reasons.
- A full UGM-GNS Project Team meeting was held by Skype on 12 December 2018.
- Director's Meetings (involving Daly, Glassey, Fathani, Wilopo, Ediningtyas and Riches) are held approximately monthly, and were held this reporting period on 12 July, 6 August, 17 September, 26 October, 22 November. There was no Directors meeting held in December, however Michele Daly met with the UGM Directors during her visit to Jakarta mid-December, the main items for discussion were the arrangements and agenda for the Special AGG meeting held on 17 December 2018. Notes from the meetings above are available on request.
- StIRRRD Province Coordinator skype meetings were held as follows:
Eastern Province Coordinator meetings were held on 18 September and 29 November 2018 respectively.

A Western Province Coordinator meeting was held on 23 November 2018

(0.1) 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.

(0.1) Mid-Term Review. The final review report was received from MFAT in late September 2018. The Report is available from MFAT's website: (<https://www.mfat.govt.nz/assets/Aid-Prog-docs/Evaluations/2018/STIRRRD-REPORT-FOR-PRESENTATION.pdf>). MFAT's management response to the report was available to the team in September. Agreed recommendations for implementation were:

- Gender socialisation for GNS and UGM team members,
- Better use of the gender data collected from the Focus Group Discussions (FGD) to inform the district coaching strategies,
- A review of the Results Framework to update and refresh the indicators and targets.

A gender specialist has been engaged to deliver the training and review the FGD data. Dr. Sharyn Graham Davies is a Senior Lecturer at the Auckland University of Technology and she will undertake gender socialisation training for the GNS team in February 2019 and work with Esti Anantasari to review the FGD data and preliminary analysis. Gender socialisation for the UGM team was to be given by the reviewer Donna Leigh-Holden when she was next in Yogyakarta and working with the CARED² team but it is our understanding that this will not happen and some other vehicle for training the UGM staff will need to be formulated.

(0.1) Letter of Variation (LoV) to the contract. The second LOV has been agreed to in principle by both MFAT and GNS Science, however signing had still not taken place by the end of the reporting period due to a need to reconcile payments made on an annual basis with changes made to the costed workplan. This has taken a considerable amount of time to resolve.

(0.2) AGG Meetings: Two AGG meetings were held over the reporting period:

- The 12th AGG Meeting was held in Jakarta on 19 September 2018. The StIRRRD team provided an update on its response to the Lombok earthquake, identified design and/or construction issues with vertical tsunami evacuation shelters (Rawa Indah and Lombok), and provided an overview of the Activity Toolkit. A summary of the Mid-Term Review was provided by MFAT along with a commentary on the changing investment strategy for Indonesia. Meeting minutes were circulated to members on 10 October 2018 (including MFAT) and are available again on request.

² CARED = MFAT funded contestable research fund at UGM.



Figure 1: AGG Meeting in Jakarta on 19 September 2018. Wahyu Wilopo and Faisal Fathani (left) and AGG members (right). (source: M Daly and W Wilopo)

- A Special AGG meeting was held on 17 December 2018 to present the three proposals concerning technical assistance for Palu as well as give an update on the ISDSS (Integrated Spatial Decision Support System) report and recommended next steps. StIRRRD was represented by Faisal Fathani (UGM), Wahyu Wilopo (UGM), Michele Daly (GNS) and Marc-André Brideau (GNS). The main purpose of the meeting was to gain support (or otherwise) for the three proposals among the Government representatives present so that MFAT would be in a position to recommend they be funded by the NZ Government. The main outcome of the meeting was approval in principle for “Earthquake damage assessment” and “Build back better” proposals. The landslide risk assessment proposal was considered too similar to work that had already been undertaken. However, the suggested approach by the StIRRRD team had much merit, and the team were invited to consider a revised proposal which was aligned to StIRRRD’s local government capacity building approach. There was a lot of support for continuation of the ISDSS project which was endorsed by Bappenas. Minutes of the meeting have been circulated to all participants and are available again on request.



Figure 2: Attendees at the Special AGG Meeting in Jakarta on 17 December 2018. BNPB, Bappenas, BMKG, MoHA, Kemendesa, MFAT, UGM and GNS were all represented. (Source: UGM)

(0.3) Jakarta Liaison. During the week of 17 September, a number of stakeholder meetings were held:

- Hannah Brackley met with Fajar Anugerah of NZTE and others to explore transitioning StIRRDR from support from the aid programme to G2G (Government to Government). Fajar attended the final workshop for the ISDSS task (see under Output 9 below) and is assisting with locating funding support for continuation of this particular project.
- Michele Daly met with the Head of BMKG (Dwikorita Karnawati) to discuss the Seismometers in Schools community project and BMKG's ongoing commitment to it; the MoU with GNS Science; and follow-up after the March 2018 visit to NZ.
- Hannah Brackley and Michele Daly met with a representative from the Indonesian Institute of Sciences (LIPI) to discuss progressing the MoU with GNS Science.

Further meetings were held in December, during the visit by Michele Daly to attend the AGG. Meetings were held with Bappenas in relation to the ISDSS project (reported on under Output 9 below), and with BMKG (reported on under Output 10 below).

(0.3) MFAT meeting with the Post in Jakarta. A meeting was held with Firliana Purwanti (Contract Manager), Fajar Anugerah (NZTE) and Mehaka Rountree (Development Counsellor) on 18 December. The meeting was to de-brief the AGG meeting held the day before and to discuss the next steps. Key points, outcomes and actions of the meeting can be found in the December 2018 Monthly report.

(0.4) Communications Plan. There was a lot of media activity during this reporting period, due to the two community projects currently underway and the Lombok and Palu earthquakes. An overview of social media metrics can be found in Table 1.

A number of blogs were written and added to the StIRRRD website between July and December 2018, they covered a variety of topics:

- The Lombok Earthquake,
 - <https://stirrrd.org/2018/08/20/earthquake-hits-lombok-some-reflections-from-the-stirrrd-team/>
- The third and final visit to Rawa Indah village as part of the Tsunami Safe Project,
 - <https://stirrrd.org/2018/08/31/concluding-the-tsunami-safe-community-project-in-rawa-indah-seluma/>
 - <https://stirrrd.org/2018/10/24/from-balclutha-with-love-rotary-and-stirrrd-help-rawa-indah-school/>
- The Palu earthquake and tsunami and Seismometers in Schools project,
 - <https://stirrrd.org/2018/10/02/palu-and-donggala-working-towards-resiliency/>
 - <https://stirrrd.org/2018/11/02/raspberry-shakes-at-palu-schools-keep-on-keeping-on-providing-us-a-picture-of-the-recent-earthquake/>
- The Tsunami Field Team collecting tsunami damage data. While not a StIRRRD activity as such, StIRRRD was able to provide support and connections to people in Palu (UGM, BPBD, UNTAD) who helped the team with logistics and advice.
 - <https://stirrrd.org/2018/11/18/new-zealand-indonesia-palu-tsunami-survey-team/>
 - <https://stirrrd.org/2018/11/18/new-zealand-indonesia-palu-tsunami-survey-team-2/>
 - <https://stirrrd.org/2018/11/18/new-zealand-indonesia-palu-tsunami-survey-team-3/>
 - <https://stirrrd.org/2018/11/19/new-zealand-indonesia-palu-tsunami-survey-team-4/>

An article was written for the Raspberry Shake company newsletter. A link to the StIRRRD website and the Seismometers in Schools project is already provided on their website. <https://raspberrysshake.org/news/press/>

Table 1 StIRRRD Social Media Metrics June – December 2018

Facebook impressions from page posts	June – Dec 2018: 8,412 Jan – June 2018: 4,298 This equates to a 96% <u>increase</u> in total Facebook reach over the last period.
Facebook Page likes:	June – Dec 2018: 202 Jan – June 2018: 198 This equates to an 1.5% <u>increase</u> in total Facebook likes over the last period.
Total number of Twitter impressions from tweets:	June – Dec 2018: 30,931 Jan – June 2018: 49,321 This equates to a 37% <u>decrease</u> in total Twitter reach over the last period.
Total number of Website visits:	June – Dec 2018: 2,889 Jan – June 2018: 1,231 This equates to a 135% <u>increase</u> in total Website visits over the last period.

Note: The decrease in Facebook reach continues due to the way Facebook are implementing reach algorithms in the hope people will pay to boost pages.

A Meeting with the Indonesian Ambassador and staff to follow-up discussions held after presentations by Michele Daly and Andrew Charleson (Victoria University) regarding work undertaken in Lombok and the importance of well designed and constructed earthquake resistant buildings. The meeting explored ways the Embassy could assist in supporting a proposal to MFAT by StIRRRD for technical support post the Palu earthquake in the area of building damage assessments and ‘building back better’. The Embassy are committed to contacting Central Sulawesi provincial government to alert them to the assistance NZ could provide in this area.



Figure 3: StIRRRD and Natural Hazards Business Cluster members meeting with the Indonesian Ambassador and staff. (source: Michele Daly)

Output 1: Activity Toolkit

- A workshop was held in Yogyakarta on 17 September between GNS Science and UGM to discuss the progress of the Toolkit. It was suggested that BNPB, UGM and GNS Science endorse the toolkit and BNPB write a foreword. A number of actions were agreed to including presenting a draft at the Medan DRR week event. Since the earthquake and tsunami in Palu it was decided that there would not be a representative from GNS Science at the Medan DRR week event and the soft launch of the Activity Toolkit was the responsibility of UGM (see under Output 2 below). Currently the Activity Toolkit is being developed as a web tool by UGM. The toolkit will be formally presented at the final workshop in June 2019.

Output 2: Risk Reduction Network

- The StIRRRD UGM Team ran a Knowledge Sharing session at the National DRR Awareness week at Santika Dyandra Hotel and Convention, Medan, North Sumatra on 23 October 2018. The session was attended by approximately 80 participants and central government representatives (Ir. Hasman Ma'ani Galuru, Director for Hazard Prone Area Management (Kemendes), Mohd. Robi Amri, S.T., Head of Mitigation Sub Directorate (BNPB), and I.R. Koeswiyanto, M. Si., Uswiyanto (BAPPENAS)). I.R. Hasman and Mohd. Robi spoke about Policy on Planning and Implementation of DRR while I.R. Koeswiyanto focused on the technocratic draft for National Medium-Term Development Plans (RPJMN) 2020-2024 in Disaster Management (DM). A key feature of the session was the head of BPBD from Padang speaking about their DRR experience. Dr. Edi Hasymi talked about DRR and international collaboration. Faisal Fathani and Wahyu Wilopo presented the Toolkit at the end of the session. The audience was very enthusiastic about the information presented at the session, particularly about the Toolkit. Many BPBDs expressed their interest in adopting the Toolkit for their districts.





Figure 4: Photos from the StIRRRD session at Medan DRR Week in October 2018 (source: UGM).

Output 3: Coaching and Mentoring Support

Additional uncontracted Outputs

StIRRRD sent a team of 4 people from UGM to Lombok following the earthquake of 19 August. The team comprised Iman Satyarno as an earthquake engineering expert, Esti Anantasari as a social expert and 2 technical assistants, Farma, a geologist from GAMA-InaTEK providing GIS support and Dhega from the Geodetic Dept as a Drone/Mapping Specialist. The team arrived in Lombok on 26 August and returned to Yogyakarta on 29 August.

The team conducted two Training of Trainers (ToT) sessions on Building Assessment and Data Inventory for Damaged Buildings on Monday, 27 August led by Prof. Iman. The participants were lecturers and students from UNRAM and other universities in Mataram. After the ToT, Esti Anantasari led a Sharing Knowledge Social Assessment to learn the roles of stakeholders in the disaster management in Mataram. On Tuesday, the team (Prof. Iman and Dhega) conducted building assessments in Lombok Utara. Esti Anantasari and Farma carried out a social assessment in Mataram. A report on the visit was compiled and submitted to GNS and MFAT during September.

Palu Earthquake and Tsunami Response. The large earthquake, tsunami and landslides that devastated Palu on 28 September 2018 required a fast and coordinated effort from StIRRRD and NZ. Developing these proposals required significant effort from the StIRRRD team including liaising with NZ and Indonesian collaborators as well as the GoI and MFAT. The preference of MFAT to wait until priorities and requests come from the GoI caused significant delays during this time sensitive response. Therefore, we recommend that a proactive approach be considered in the future.

StIRRRD team member, Faisal Fathani was invited to participate in the Recovery Plan Expert Advisory Group, making StIRRRD well placed to learn and contribute to the recovery planning process.

Tsunami Damage Data. GNS and NIWA had a team on the ground in Palu collecting tsunami damage data as part of NIWA and GNS' Riskscape research programme. The data collected will inform fragility function research (i.e. how do different types of structures perform in a tsunami). Several short blogs and photos from this visit can be found on the StIRRRD website (refer Output 0.4 above). The visit was organised through UNESCO and the international tsunami research community. StIRRRD team members from UGM and Tadulako University helped support the group on the ground.

The International Conference on Urban Disaster Resilience (ICUDR) organised by Tadulako University was scheduled to take place 22-24 November 2018. Due to the earthquake and tsunami, it has now been rescheduled to 25-27 April 2019. There will be a new session on the earthquakes, landslides and tsunami, <http://icudr.fatek.untad.ac.id/>. StIRRRD will have a reasonably large presence at the conference (in conjunction with Seismometer in Schools Community project) and the NZ Ambassador will attend the opening.

Social Science research support for Palu. A Social Science platform has been convened in Indonesia (December 3, 2018) to focus social science research in support of Palu. StIRRRD team member Esti Anantasari has been invited to participate in the platform, which is being organised by Irina Rafflesia at LIPI. The social panel is important as there is still a lack of involvement of social science in handling natural disasters in Indonesia. The situation is different to the role of the natural sciences and engineering, or often referred to as the hard sciences. In addition, a workshop on Palu, Central Sulawesi Post-Disaster Research was held on December 19, 2018.



Figure 5: StIRRRD team member Esti Anantasari at the Social Impacts Post Disaster research workshop, Palu (source: UGM).

(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)³ on the dates given below regarding the activities described.

District	Month					
	July 18	August 18	September 18	October 18	November 18	December 18
Agam	3, 4, 5,	27, 28	5	10, 18, 23	14, 15, 22, 26	11, 15, 16, 24, 26
Bengkulu	5, 19, 25, 26	2, 8	12, 25	10, 11	4	1, 14
Donggala	3, 5, 7	14, 21	5, 15, 28	4, 6, 8, 10, 17, 18, 19, 20	19	5, 10, 11, 12, 14, 24
Mataram	16, 29, 31	5, 6, 19, 20, 25	14	10	11, 14	12, 18
Morowali	3, 7	14, 21	5, 15, 28	nil	12, 23	3, 12
Pesisir Selatan	5	3, 29	5	2, 16, 19	2, 14, 22, 23	14
Seluma	5, 6, 7, 9, 10, 13, 18, 20 21	10, 12	7, 8	10, 15, 19	4, 16, 21	11, 16
Sumbawa	16, 29	5, 6, 16, 29, 26, 28	14	10	14	12
Palu				6, 8, 10, 17, 18, 19, 20	13, 15, 28	
	Seismometers in Schools (SIS) Workshop in Palu	SIS competition	Donggala Network trouble with the seismograph in SMA 1 Banawa & update of SIS Program	Update on post-earthquake & tsunami building and land conditions. SIS project update, condition of seismometer.	Action plan and work programs.	Action plan and work programs. Work plan for 2019. Tent for SMA Banawa and preparations for 17-21 Dec visit.
	Technical issues with Seismometer installed at UNTAD	Mataram update on conditions post-earthquake	SIS competition	Rehabilitation & reconstruction post-earthquake (Mataram)	SIS network trouble	Visited schools re SIS programme.
	Action Plan Progress	Mataram – building assessment after the earthquake	Action Plan progress.	Flood contingency plan.	Preparation for international seminar at UNTAD	DRR Activities
	DRR activities	Sumbawa update on conditions post-earthquake	Donggala post - earthquake and tsunami updates	BPBD Sumbawa activities – Sumbawa	DRR Activities	Work Plan 2019

³ UNAND (Andalas University), UNIB (Bengkulu University), UNRAM (Mataram University), UNTAD (Tadulako University)

District	Month					
	July 18	August 18	September 18	October 18	November 18	December 18
				is currently experiencing drought.		
	Conditions in Mataram after the 29 July earthquake	Information that TRC Team Sumbawa went to Lombok Utara to assist with emergency response	Morowali Network trouble in the seismograph in SMAN 1 Bahodopi & update of SIS Program	Update on DRR activities establishment of sekolah laut 'sea school' in Bengkulu.	Tsunami Community project – installation of posters.	Roles & responsibilities of BPBD and BMKG on roles and responsibilities during, and after the EQ.
	Contact with UNTAD Social Science Faculty involvement in the Sumbawa Community Project	DRR Activities	Morowli post-earthquake and tsunami updates	NZ Rotary funding for school court yard.	NZ Rotary funding for school court yard.	Update of activities
	Bengkulu request for StIRRRD to build an earthquake resistant building to be used as an example and a museum, the city government has provided the land.	ICUDR in November	BPBD of Mataram and UNRAM on the updates of Mataram City after the emergency response and their plans (to build temporary housing in 3 locations in Sandubaya sub District, to identify damaged buildings, and to give psychological support for the disaster victims);	DRR activities, disaster occurrence, weather conditions, mass movements, landslides, flooding.	Program updates post-earthquake	Simulation on disaster preparedness
	Tsunami Project – 3 rd Visit to Rawa Indah village.	Bengkulu plans to build an earthquake resistant building as an example by applying for Ambassador Funds.	BPBD of Sumbawa on the updates of BPBD Sumbawa Activities (assisting the victims of Lombok Earthquake in Bungin Island and Alas).		Mapping building assessment for schools and government buildings	

District	Month					
	July 18	August 18	September 18	October 18	November 18	December 18
	Shelter assessment at Rawa Indah village.	Tsunami Project (community project 2) follow up with Head of Rawa Indah Village	BPBD of Bengkulu on the updates of DRR activities in Bengkulu (establishment of sekolah laut 'sea school' and BPBD's plan to apply for the Ambassador Fund for Earthquake Resilient Building).			
	Pesisir Selatan – staff retirement.	Pesisir Selatan discussions on several earthquakes related to Mentawai fault	BPBD of Seluma and the Head of Rawa Indah Village on the updates of DRR Activities in Rawa Indah and Seluma (there will be a coordination meeting for all villages located along the coast in October).			
		Pesisir Selatan advice from BPBD Pessel that they would not be able to participate in DRR Jamboree in Padang due to budget cuts.	BPBD of Pesisir Selatan on the information of Tangguh Resilient Award.			
		BPBD in Agam preparation for West Sumatra DRR Jamboree in Kota Padang 3-7/9.	BPBD of Agam on the information of Tangguh Resilient Award.			
		BPBD Agam advised that Jamari Sakato no longer worked in Agam				

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

No activity for the reporting period.

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: New Zealand Comparative Study Visits

(8.1) & (8.2) The Study Visits held in 2015 and 2016 have been completed.

Output 9: Expert Training – Hazard and Risk Training

(9.4) Integrated Spatial Decision Support System (ISDSS).

In the last week of September, a team comprising GNS Science, UGM and Market Economics staff were in Jakarta to work with Bappenas on scoping the Indonesian Government's capability in economic and spatial modelling with the intention of designing an integrated spatial decision support system (ISDSS). The team met with several government agencies during the week and ran two workshops; a start-up workshop on Monday 24 September and final summary workshop on Friday 28 September. Not all the required technical one-on-one meetings were able to be held during the week in Jakarta. Follow-up Zoom meetings were held with BIG (Spatial Information) on 24 October and Bappenas (re CGE modelling capability) on 9 November.

A draft report summarising the visit and workshops was completed in October and submitted to Bappenas for their comment. A presentation on the report was made to Bappenas on 16 December 2019. No revisions were needed, and the report will be finalised in the New Year.



Figure 6: Towards an Integrated Decision Support System for Indonesia. (top left) StIRRRD and Bappenas teams at Bappenas; Michele Daly (GNS), Nicky Smith (ME), Garry McDonald (ME), Aruminingsih Sudjatma (Bappenas), Nicky (Bappenas), Rimawan Pradiptyo (UGM), (top right) Start-up workshop at Bappenas, (bottom left) Technical meeting at BMKG, (bottom right) Final summary workshop with stakeholders at Hotel Aone in Jakarta.

Output 10: Community Projects

(10.1) Seismometers in Schools Community Project

As a result of the 28 September earthquake and subsequent tsunami in Palu and Donggala, the completion of the SIS as planned is now compromised. The evaluation component of the SIS programme will be re-designed to coincide with the ICUDR conference originally scheduled for November, now to be held 25-27 April 2019.

The UGM SIS team (Esti Anantasari and Agung Setianto) headed to Palu in December to conduct school visits to see what support the schools required and to ascertain the state of the seismometers after the earthquake and tsunami. All the seismometers remained operational and were in good condition, except the seismometer at UNTAD which had sustained damage to one of the adjustable legs but has subsequently been repaired. However, since then the seismometer and associated equipment in the Donggala school has been stolen.

UGM proposed to the NZ Embassy fund to provide tents as replacement classrooms in schools involved in the *Seismometer in Schools* project. The proposal was unsuccessful and UGM subsequently provided tents from the wider university budget. Tents were supplied by UGM and delivered to all 3 schools in Palu and Donggala (Figure 7). The tents were branded with StIRRRD, UGM, GNS Science and MFAT logos. BMKG staff delivered the tents on behalf of StIRRRD.



Figure 7: Delivery of tents to the SIS schools by BMKG staff.



StIRRRD Director Faisal Fathani had been invited to give a keynote at a BMKG training seminar. As the GNS team were also in Jakarta, special provision was made for Michele Daly to give a short presentation on the *Seismometer in Schools* project. This provided an opportunity to showcase the project to a wider BMKG audience, particularly as BMKG is starting to move more into preparedness, community risk communication and education. The presentation was well received.

A meeting with Dwikorita Karnawati (Head of BMKG) and her staff followed the presentations. There was measured support for BMKG to support the SIS project once the pilot programme had finished.



Figure 8: BMKG staff at the seminar (left) and Michele Daly with Ibu Dwikorita, Head of BMKG (right).

(10.2) Rawa Indah Tsunami awareness and preparedness

Between 23-27 July, the StIRRRD team made the third and final visit to Rawa Indah to install signage and run a village tsunami simulation. A2-sized framed tsunami posters were presented to each class, assembly area signs, evacuation signs and an A0 information poster. The large information poster attracted the attention of the students.

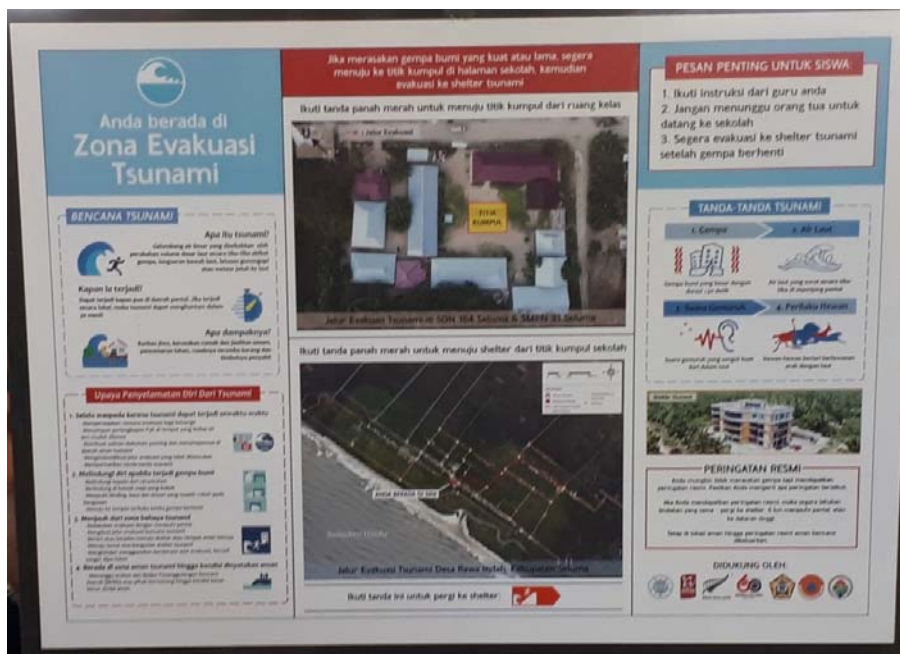


Figure 9: Framed tsunami awareness and information poster for each classroom at Rawa Indah School



Figure 10: School children interested in the map on the information poster at Rawa Indah school.

In the afternoon local volunteers were briefed on the evacuation simulation and around 10 locals were enlisted to be observers/counters. Esti Anantasari summarised the first community survey results (from an earlier visit) to the larger group and led the training for the survey with 10 volunteers.



Figure 11: Esti Anantasari training volunteers to undertake the repeat tsunami survey



Figure 12: Simulation training, Monday afternoon



Figure 13: Socialising tsunami hazard preparedness at the tsunami evacuation shelter as part of the simulation. Go Bags from Clutha District Civil Defence in NZ were presented as prizes.

The report on the Rawa Indah Tsunami Awareness and Preparedness Project is still waiting to be finalised. The Lombok and Palu events have diverted StIRRRD staff on to other tasks.

The Balclutha Rotary Club in New Zealand provided a grant of NZ\$500 to the local school to pave the evacuation meeting point in the school yard (refer to the blog about this on the website).



Figure 14: Paving at Rawa Indah school funded by Balclutha Rotary Club.

(10.3) *Community project 3 – Flood Risk Management in Sumbawa.*

Community Project 3 has now been dropped in favour of the Integrated Spatial Decision Support System (ISDSS) project for Bappenas.

An application to the HEF fund by UGM (Esti Anantasari) to fund a portion of the costs of the third community project was successful. StIRRRD budget (principally UGM's) will still be required to provide mentoring and training to UNRAM staff to enable them to expand their approach beyond the more conventional engineering approach to flood and catchment management. UGM are working on a timeline, budget and work programme. It is planned to dovetail visits to Mataram and Sumbawa with other scheduled visits made as part of Coaching and Mentoring (Output 3) and LG-SAT (Output 4).

Review of Progress to Date

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 budget (version 9.7) as agreed in the *Letter of Variation* signed 11 April 2016. The total contracted value remains unchanged (New Zealand \$7.266M), however costs have been redistributed across different outputs.

The total actual spend to date is \$6.559 M against a planned budget of \$6.705 M. Overall the budget is 2% underspent to the end of December 2018. This compares to an underspend of 3% at the end of July 2018.

Responses to the Lombok earthquake and coordinating potential response to the Palu earthquake have distracted the team from planned StIRRRD activities. Therefore, there is a need to review the remainder of the StIRRRD programme in light of these recent events and this will be done at the start of 2019 with a revised timeline developed. Completion of the Seismometers in Schools community project has been reviewed and rescheduled to coincide with the postponed ICUDR conference in Palu. The final StIRRRD seminar will now take place in June 2019.

A web version of the Activity Toolkit is to be developed by UGM. Mid-term review activities such as gender training and analysis, and result framework review will take place early 2019.

Progress Against Delivery of Outputs

The six months to the end of December 2018 has been dominated by the earthquake events in Lombok and Palu which has deferred or delayed a few activities. Appendix B shows the estimated percentage completed for each high-level output.

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

- AGG meeting #8, September 2018
- Liaison-Jakarta
- Review of toolkit and presentation to AGG
- Coaching as scheduled
- Community Project #1 Preparation & start of Implementation
- Community project #2 Final visit Tsunami Awareness, Rawa Indah.

Some tasks are behind schedule, namely Community projects and the Toolbox. In addition, the Final Workshop (Output 2.6) has had to be deferred from November 2018 to June 2019 as a result of the Lombok and Palu earthquakes.

Progress with Action Plan Implementation

No specific assessment of DRR Action Plan implementation has been undertaken this reporting period. Where information on activities in the districts has been gathered through UGM contact with the districts, it has been captured in Appendix C.

Progress against the Results Framework

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. The collection and analysis of information and data this reporting period is incomplete in some areas due to the Palu and Lombok earthquakes, which has diverted resources away from Monitoring and Evaluation.

To help assess progress in meeting some of the mid- and long- term indicators relating to RPJMD and DRR policy in plans and regulations, planning specialist Ms Prillia Astuti was engaged. She assessed the available Mid-Term Development Plans (RPJMDs) for each of the districts to determine whether the StIRRRD DRR Action Plans or other activity looked to be influencing content. She has also undertaken a preliminary analysis of available legislation and regulations for DRR specific content. It was very difficult accessing this information; plans and regulations were not readily available or accessible despite anecdotal evidence of their existence. From what information was available, there was evidence that the DRR Action Plans were having a positive influence on policy and plans.

One of the indicators looks at tracking the risk index for each of the StIRRRD districts. The risk index is a tool developed by BNPB and has been a key cornerstone measure for BNPB of district DRR capacity and capability. Unfortunately, BNPB and Bappenas have suspended reporting on the risk index pending a review. They have found that there are too many indicators comprising the index making information difficult to collect and analyse. BNPB is currently working with Bappenas and JICA to review and simplify the index.

As reported on in the last 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.

This situation was picked up in the Mid-Term Review undertaken in early 2018. The recommendations suggested a review of the current Results Framework to simplify it, including in the way counts were undertaken. A review was scheduled before the end of 2018, however the Palu and Lombok earthquakes meant that this did not take place. A review has been rescheduled to the first half of 2019.

In the meantime, an additional count has been included. This relates to the numbers of people attending workshops, meetings, trainings and outreach activities associated with the Community Projects. It was felt important to capture people involved in DRR activities beyond just those involved with the earlier preparation of the DRR Action Plans.

Learning and Action Points Arising from the Services

1. Mid-Term Review

As a result of the mid-term review

- we will be revising the results Framework to provide more relevant indicators.
- We have engaged a gender specialist who will conduct gender socialisation training and help complete analysis of the Women's Focus Group Discussions.

2. Additional Coaching Visits

We have identified that the West Sumatran districts of Pesisir Selatan and Agam, and the Central Sulawesi district of Morowali have not received as much face-to-face coaching in the past year and provision is being made to visit these districts.

Coaching and mentoring of other Districts has coincided with Community Projects (Palu, Donggala, Seluma, Bengkulu) or response to earthquakes (Mataram, Palu, Donggala). The HEF funding in Sumbawa will provide a coaching and mentoring opportunity in this district.

3. Vertical Evacuation Shelters

During the community project in Rawa Indah, concerns were raised about the construction of the tsunami vertical evacuation shelter. A limited retrospective structural analysis determined that the stairs and ramp to the upper levels were vulnerable to earthquake shaking and tsunami loadings. Subsequently, in Lombok, as a result of shaking from the 5 August earthquake, the stairs and access ramps of two similar purpose-built tsunami shelters collapsed. This issue was bought to

the attention of the AGG, with the suggestion that the structures be reassessed using detailed construction drawings and if found to have earthquake shaking weaknesses that these be remedied. Medi Herlianto (BNPB) of the AGG contacted PU immediately, but action regarding this was postponed due to the subsequent Palu earthquake.

4. Proactive Advice

A special AGG meeting was held in December 2018 to seek GoI support for three proposals developed to support Palu's recovery. These proposals were requested from StIRRRD by MFAT and covered training in earthquake damaged building assessments, training in retrofitting damaged buildings and how to 'build back better', and landslide risk assessment. While the GoI was supportive, the landslide work had been substantially completed by others. It highlighted the need for the StIRRRD team and the New Zealand Government to be proactive in providing advice to GoI rather than waiting to be asked. MFAT preferred to wait until GoI released its Recovery Plan to establish needs, however, a preferred strategy might have been to contribute to discussions establishing need as part of the development of the Recovery Plan rather than wait.

Significant Highlights

Significant highlights this reporting period include the following:

- The visit to Rawa Indah village for the Tsunami Awareness and Preparedness project was a highlight. There was excellent engagement by all parties involved.
- The rapid response by the StIRRRD UGM team to the Lombok earthquake and the practical approach tailored to local needs was positively commented on by AGG chair Yoga Wiratama at the AGG meeting.
- The September AGG meeting itself was a success, with the team able to successfully draw to the attention of AGG members the issues with vertical tsunami evacuation shelters (refer the issue above). AGG members resolved to act swiftly to address the issues raised.
- The ISDSS project proceeded well with good support from Bappenas and stakeholders. The report was accepted and there was a strong signal from Bappenas that they wished to proceed with the full project subject to funding.
- Michael Goldsmith of the StIRRRD team spoke to the Balclutha Rotary Club about the StIRRRD community project in Rawa Indah, Seluma and they became interested in supporting the local school. The Balclutha Rotary have donated \$500 to the school to pave the school yard, which is the evacuation meeting point for the entire school in the event of an emergency.
- Faisal Fathani has been invited to be part of the Recovery Expert Advisory Group for the Palu recovery planning process. This is a great honour and is in part due to StIRRRD's involvement in Palu over the preceding 7 years.
- Faisal Fathani has also been invited as a keynote speaker to the 11th Pacific Conference on Earthquake Engineering to be held in Auckland 4- 6 April 2019.
- Esti Anantasari has been invited to be part of the social science platform being set up to investigate social science related issues post the disaster event. This is also in part due to StIRRRD's involvement in Palu.
- Development and approval in principle by the Indonesian government of the earthquake damage assessment and build back better proposals and the ISDSS proposal.

Other Related Activities

1. The September visit to Jakarta included delivery of a small training component for the AHA Centre ACE Leadership programme by Michele Daly. This enabled good connections to be made with Disaster Management Officers from ASEAN countries including Indonesia.
2. KEMENDESA will conduct Training for Trainers (TOT) for EQ resistant houses in Lombok, in cooperation with UGM, UNAND and UNRAM. 60 participants at the venue of Lombok Garden Hotel, 2-days for theory and 3-days for practical work in the field. KEMENDESA will construct about 6000 new houses in Lombok. UGM was invited to KEMENDESA's office in Jakarta on 9 October 2018 to discuss the detailed agenda.
3. GNS and NIWA sent a field team in early November to Palu to collect tsunami damage information, funded from research funds. The data collected will be used to inform fragility function in risk models. The field visit was arranged under the auspices of UNESCO and the international tsunami expert community.
4. The UGM response to the Lombok earthquake, along with the development of proposals to respond to the Palu earthquake. Ensuring that the needs of the GOI and local government were being addressed, appropriate Indonesian and NZ expertise were included, along with additional associated project management, took considerable effort.
5. The ACE Leadership Training Programme for ASEAN disaster management professionals visited NZ in October. StIRRRD member Michele Daly spent a morning with the group in Auckland on their last day. The morning provided a refresher on hazard mitigation across different hazards. StIRRRD MFAT contract manager Firliana Purwanti was part of the group.
6. StIRRRD team members Sylvia Riches and Hannah Brackley attended a "Symphony of Friendship" at the Town Hall in Wellington at the invitation of the Indonesian Embassy. This was a musical event to mark the 60th anniversary of Indonesia-NZ diplomatic relations and was hosted by Indonesian Ambassador H.E. Tantowi Yahya.
7. Esti Anantasari, of the UGM StIRRRD team completed and passed UNITAR training on Resilience Action Planning – Implementing the Sendai Framework at The Local Level.

Significant Issues or Risks

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

1. The construction, condition and maintenance of Vertical Tsunami Evacuation shelters remain an ongoing concern. Preliminary assessment of the shelter at Rawa Indah shows some earthquake strengthening is needed and the failure of key components of the VES in Lombok, verified the Structural assessment. This issue was brought to the attention of the AGG, with the suggestion that the structures be reassessed using detailed construction drawings and if found to have earthquake shaking weaknesses that these be remedied.
2. The team are finalising a report on the Rawa Indah shelter to discuss with BNPB and PU. Team members also visited the Teluk Sepang tsunami shelter in Bengkulu City as part of the visit and discovered that no one was taking responsibility for it. Ownership and maintenance has become a political and budget issue.
3. The length of time taken to agree and prioritise additional tasks and process these through a contract variation is a concern. Work on variation tasks has started based on a verbal agreement (e.g. preparations for Medan, ISDSS scoping mission). The turnover of MFAT staff in Wellington is also contributing to delays. The delays to the completion of the LOV are holding up invoicing and we would like to see this resolved as soon as possible.
4. Dropping Community Project 3 at the expense of the ISDSS scoping mission for Bappenas was initially disappointing. However, the GoI response to the ISDSS project was positive. The team have secured HEF funding for a revised community project in Sumbawa.
5. The Lombok earthquakes presented both a risk and an opportunity for the Activity. UGM sent a team to Mataram to undertake damage assessments (both buildings and community).
6. The Palu earthquake in Central Sulawesi on Friday 28 September, resulted in GNS coordinating New Zealand's and StIRRRD's expertise in providing technical support. MFAT has advised that there is funding available for technical support and 3 proposals have been developed for MFAT's consideration.
7. Responses to the Lombok earthquake and coordinating potential response to the Palu earthquake, have distracted the team from planned StIRRRD activities. The remainder of the StIRRRD programme will be reviewed considering these recent events, and a revised timeline will be completed at the start of the new year. Completion of the Seismometers in Schools community project will be reviewed and rescheduled. The final seminar will now take place in June 2019.

8. The potential work in the pipeline (3 Palu proposals; HEF funded Sumbawa Community project) plus deferment of some of the scheduled tasks such as the finalisation of the Toolkit, ICUDR conference and the *Seismometers in Schools* project will put strain on the team resources. In addition to that, specific recovery roles for Faisal Fathani and Esti Anantasari in the recovery process will also mean team resources will be stretched over the next reporting period.
9. The sustainability of the project would be considerably enhanced by developing an ongoing programme (StIRRRD3) which primarily involved UGM running specific projects. A decision from MFAT as whether a successor programme will be supported or not would aid planning.

Authorisation



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

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: Activity Risk Matrix
- Appendix H: Abbreviations

Appendix A: Progress Against the Agreed Workplan and Budget

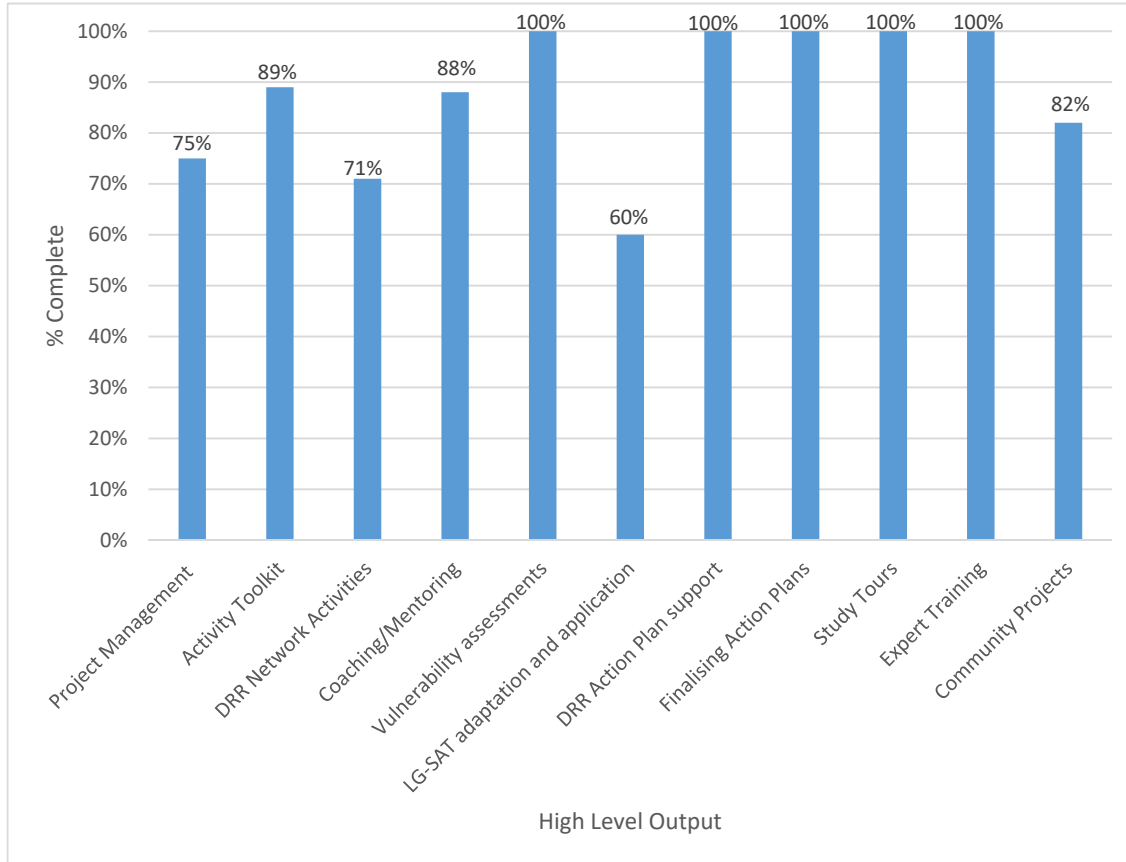
Output	Description	Actual Expenditure		Planned Expenditure		Total Actual Expenditure	Total Planned Expenditure	Total Variance	Reason for Variance
		Time	Disbursement	Time	Disbursement				
Output 0	Project Management	1,208,801	162,104	975,585	155,550	1,370,905	1,131,135	21%	Time related to Mid-term review, LoV, Palu response proposals, additional comms and reporting
	0.1 Project Management	601,193	37,683	399,360		638,876	399,360	60%	Expected due to additional project management tasks including scoping LOV, additional project team meetings, scoping Palu proposals and managing an additional visit to New Zealand. Disbursements are for GNS staff attending project team meetings in NZ.
	0.2 AGG Meeting	94,108	50,652	76,800	105,750	144,760	182,550	-21%	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	114,695	29,832	243,100	41,230	144,527	284,330	-49%	Not as many mtgs have been held as planned due to people not being available when we are in Jakarta. Mtngs will be programmed in for future visits. MFAT has not held a joint donor meeting for some time. Also offset by meeting with Indonesians in NZ in March 2018
	0.4 Activity Communications Plan	63,435	13,268	28,500	6,050	76,703	34,550	122%	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	176,879	4,848	162,925	735	181,728	163,660	11%	Reporting requirements are taking more time than budgeted.
	0.6 -0.14 Major milestone reporting	68,150	3,077	64,900	1,785	71,227	66,685	7%	Most reports have been completed under budget, however a couple of reports are still only partially complete.
	0.15 Mid term Review	40,125	9,557			49,682			Additional unbudgeted task.
	0.16 NZ visit March 2018	50,128	13,187			63,314			Additional unbudgeted task. Most costs picked up by MFAT under a separate contract, however GNS and UGM time and GNS direct disbursements that weren't covered by MFAT are captured here.
	Output 0. Project Management	89	0			89			(internal adjustment)
Output 1	Activity Toolkit	114,845	14,082	226,250	15,200	128,927	241,450	-47%	Toolkit is still being finalised - UGM web developers unavailable immediately
	1.1 Prepare Draft Activity Template	25,081	11,763	29,250		36,845	29,250	26%	GNS are spending more effort here than budgeted. UGM have spent less time to date. Compensated in part for underspend in 1.3.
	1.2 Annual reports learnings	13,661	1,422	48,000		15,082	48,000	-69%	Work on this has been captured elsewhere.
	1.3 Activity Toolkit - Draft	57,179	121	72,700		57,300	72,700	-21%	Underspent as time is being captured in 1.1.
	1.4 Activity Toolkit - Review	18,924	775	38,150		19,699	38,150	-48%	Toolkit will be further reviewed once web version developed
	1.5 Activity Toolkit - Finalise			38,150	15,200		53,350	-100%	Not yet started. UGM web developers initially unavailable. Toolkit training still to come
Output 2	DRR Network	334,619	229,013	406,700	359,718	563,632	766,418	-26%	Preparations for the final work shop have been deferred
	2.1 Development of University MoU's and letters of support	19,200	0	31,200	2,100	19,200	33,300	-42%	Completed under budget, however some have expired and now need renegotiating.
	2.2 MoU Finalisation and sign-off	12,000	2,100			14,100			
	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	145,221	146,020	151,350	149,915	291,241	301,265	-3%	
	2.7 Other Activities - website, newsletters	1,806	2,400	30,000		4,206	30,000	-86%	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)	95,994	44,295	49,750	74,048	140,289	123,798	13%	Time costs higher than budgeted, offset in part by reduced disbursements.
	Output 2. DRR Network	16,507	0			16,507			(internal adjustment)
	2.6 Final Workshop			36,450			36,450	-100%	The workshop has been deferred and preparations have not yet started
Output 3	Coaching & Mentoring	436,225	168,706	409,470	107,291	604,932	516,761	17%	Costs for the All District Visit exceeded budget.
	3.1 Coaching & Mentoring All District Visit	218,248	100,870	202,270	48,208	319,118	250,478	27%	Costs for this visit exceeded budget.
	3.2 Ongoing Support – Other	135,840	40,168	171,450	27,000	176,009	198,450	-11%	
	3.3 July 17 West Sumatra coaching visit	49,706	18,807	9,000	8,045	68,513	17,045	302%	Additional unbudgeted task.
	3.4 Aug17 Seluma_Morowali Coaching Visit	22,547	8,861	26,750	24,038	31,408	50,788	-38%	Additional unbudgeted task.
	3.5 Lombok Post EQ visit	9,884				9,884			Additional unbudgeted task.

Output	Description	Actual Expenditure		Planned Expenditure		Total Actual Expenditure	Total Planned Expenditure	Total Variance	Reason for Variance
		Time	Disbursement	Time	Disbursement				
Output 4	District Vulnerability Assessment & Profiles - Donggala, Agam, Bengkulu	432,275	108,547	387,250	148,338	540,822	535,588	1%	
	4.1 Vulnerability assessment - Donggala, Pessel, Bengkulu, Mataram	249,716	59,524	237,150	111,845	309,240	348,995	-11%	More time has been spent on profiles than budgeted. Offset by savings in airfares.
	4.2 Vulnerability assessments – Bengkulu Seluma, Sumbawa	71,293	14,292	42,900	8,130	85,586	51,030	68%	Time charged to other outputs (4.1). Savings made in airfares.
	4.3 Vulnerability 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	0			11,139			(internal adjustment)
Output 5	LG-SAT Adaptation & Application	69,416	5,385	117,900	7,350	74,801	125,250	-40%	Baseline Analysis took longer than expected but should save costs in final analysis
	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 Other districts	7,200	1,680	22,800	1,680	8,880	24,480	-64%	Completed under budget. Co-funded by Kemendes a.
	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	0			-7,423			(internal adjustment)
Output 6	DRR Action Plan support provided	498,592	300,774	604,550	389,858	799,366	994,408	-20%	COMPLETED
	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	0			165,816			(internal adjustment)
Output 7	Finalising Action Plan	393,891	131,487	355,720	161,849	525,379	517,569	2%	COMPLETED
	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	73,104	170,670	78,445	279,792	249,115	12%	More time inputs required than budgeted.
	7.3 Analysis of training attendance records		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	0			37,027			(internal adjustment)
Output 8	Study Tour	325,745	615,534	412,300	497,540	941,279	909,840	3%	COMPLETED
	8.1 NZ Study Tour 1 Donggala (A2), Pesisir Selatan(B2), Bengkulu Kota(C1), Mataram Kota (D1). Bengkulu. NTB Universities	240,241	282,161	201,800	245,790	522,402	447,590	17%	Budget required was underestimated.
	8.2 NZ Study Tour 2 Morowali(A3), Agam (B3), Bengkulu Seluma (C2), Sambawa (D2), Bengkulu, NTB Universities	280,356	333,373	210,500	251,750	613,729	462,250	33%	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	0			-194,852			(internal adjustment)
Output 9	Expert Training in Base isolation & Riskscape	255,552	328,742	288,500	371,673	584,294	660,173	-11%	Training has taken less than budgeted. 9.4 still to be completed
	9.1 Base isolation project	54,980	110,757	61,800	114,563	165,738	176,363	-6%	
	9.2 Riskscape Implementation	107,046	100,405	170,300	122,030	207,451	292,330	-29%	Time inputs were reduced due to fire 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%	
	9.4 Bappenas Risk Economic	21,716	56,480	23,650	72,630	78,196	96,280	-18%	New task. Report yet to be finalised
	Output 9. Expert Training in Base isolation & Riskscape	48,489	0			48,489			(internal adjustment)
Output 10	Community Projects	257,328	167,431	212,900	93,235	424,758	306,135	39%	Community projects have taken considerably more resource than budgeted
	10.0 Community Projects		0			0			
	10.1 Community Proj. 1 Seismometers in School	127,869	54,994	108,250	34,865	182,863	143,115	28%	Project overspent - finalisation deferred due to Palu Eq
	10.2 Community Proj. 2 Tsunami Preparedness	104,010	81,545	95,700	58,370	185,555	154,070	20%	Project overspent
	10.3 Vision Matauranga	15,524	30,891	8,950		46,415	8,950	419%	Under-budgeted and overspent
	10.4 Community Proj .4	5,555				5,555			(internal adjustment)
Grand Total		4,327,290	2,231,805	4,397,125	2,307,601	6,559,095	6,704,726	-2%	

Appendix B: Progress Towards Completing Outputs – December 2018

StIRRRD PROGRAMME OVERVIEW

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



STIRRRD PROGRAMME OVERVIEW

Scheduled tasks completed to date (in red) as at 31 December 2018.

Work plan by Output (to highlight period output will be produced)	Start Date	End date	Year 1				Year 2				Year 3				Year 4				Year 5				
			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	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	Jul to Sep 2018	Oct to Dec 2018	Jan to Mar 2019	Apr to Jun 2019	Jul to Sep 2019
Project Administration	1-Oct-2014	31-Dec-2019	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Activity Toolkit	1-Jul-2015	31-Dec-2018					█	█					█		█	█	█		█			█	
Risk Reduction Network support	1-Jan-2015	31-Dec-2018		█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Coaching and Mentoring Support	1-Oct-2014	30-Sep-2018	█	█	█		█	█	█		█	█	█		█	█	█	█	█	█		█	
District Vulnerability assessments	1-Oct-2014	31-Dec-2018	█	█	█	█	█												█				█
LG-SAT adaptation and application	1-Oct-2014	31-Mar-2019	█	█					█	█			█									█	
DRR Action Plan support provided	1-Oct-2014	30-Jun-2016	█	█	█	█	█	█	█	█	█	█											
Finalising DRR Action Plan Workshop	1-Oct-2015	31-Mar-2017					█	█	█		█	█	█										
Study Tours	1-Apr-2015	30-Jun-2016				█				█													
Expert Training in Base Isolation and Riskscape	1-Oct-2014	31-Mar-2015	█	█	█		█	█	█	█								█					
Community Projects	1-Jan-2017	31-Mar-2018											█	█	█	█	█	█	█	█	█	█	█

Tasks 100% Completed in the six months to 31 December 2018

0	Project Administration	0.1 0.2 0.3	Project administration as scheduled AGG meeting #8, September 2018 Liaison-Jakarta
1	Activity Toolkit	1.4	Review of toolkit and presentation to AGG
3	Coaching and Mentoring	3.1	Coaching as scheduled
10	Community Projects	10.1.2 10.2.3	Community Project #1 Preparation & start of Implementation Community project 2-Final visit Tsunami Awareness, Rawa Indah.

Tasks 100% Completed to date

0	Project Management	0.1 0.2 0.3 0.4 0.5 0.6	Project administration as scheduled AGG Meeting #1 – AGG meeting #7 Liaison-Jakarta as scheduled Activity Communications Plan Monthly reports as scheduled 2 Quarterly Reports 3 Annual Reports 4 Six-monthly Reports RiskScape Training Report Base Isolation Training Report Hazards 101 Report ALGG Meeting Minutes (x2) Mid-Term Workshop Report First New Zealand Comparative Study Visit Report Second New Zealand Comparative Study Visit Report
1	Activity Toolkit	1.1 1.2 1.3	Prepare Draft Template Learnings Prepare Draft Activity Toolkit
2	DRR Network Activities	2.1 2.2 2.3 2.4 2.5	MoU finalisation and sign-off KDPDTT (Kemendesa) DRR Workshop Two bi-annual DRR district meetings (ALGG) Mid-Term Workshop
3	Coaching and Mentoring	3.1 3.2	All Districts Visit On-going Support as scheduled
4	Vulnerability assessments	4.1-4.3	Introductory visits and profiles: Donggala, Pesisir Selatan, Mataram, Bengkulu, Seluma, Sumbawa, Morowali, Agam

5	LG-SAT	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	DRR Action Plan Support	6.1 6.2-6.3	Finalise Action Plan template First Action Plan workshops; Bengkulu, Donggala, Pesisir Selatan, Mataram, Seluma, Sumbawa, Morowali, Agam
7	Finalising Action Plan Workshops	7.1 7.2	Pesisir Selatan, Bengkulu, Donggala, Mataram, Sumbawa, Morowali, Seluma, Agam
8	New Zealand Comparative Study Visit	8.1 8.2	First New Zealand Comparative Study Visit Second New Zealand Comparative Study Visit
9	Expert Training	9.1 9.2 9.3	Base Isolation Training Riskscape Training Hazard & Risk 101 – Yogyakarta
10	Community Projects	10.1.1 10.1.2 10.2.1 10.2.2 10.3.1	Concept Note Prepare and implement Concept Note Community Project #2 Preparation & Implementation Community Project 3 Scope, Concept Note NB: This community project was removed from the programme in favour of completing an Economic Modelling exercise at the request of MFAT on behalf of Bappenas (Ministry for National Development Planning), Indonesia. This community project will be completed with HEF funding and managed by UGM.

Key Tasks Deferred to Next Reporting Period

0	Project Management	0.6	KDPDTT (Kemendesa) Workshop Report
1	Activity Toolkit	1.5 1.6	Finalisation of the StIRRRD Toolkit Present activity toolkit to provinces. Will now be presented at the programme final workshop in June 2019
10	Community Project	10.1.3	Due to Palu earthquake on 30 September, a redesign of the completion end of the project is required.


Tasks Undertaken Additional to Scope in the six months to 31 December 2018

0	Project Management	0.2 0.4	Special AGG meeting, December 2018 Communications – Several blogs and social media posts beyond original budget
2	Risk Reduction Network	2.8	StIRRRD session at DRR week, Medan, including Toolkit
3	Coaching and mentoring	3.?	A number of visits and discussions re Lombok and Palu earthquakes. Supply of tents to SIS schools ToT for Eq. damage assessments, Lombok Proposals for Eq. technical assistance Palu Tsunami Reconnaissance Palu (not funded by StIRRRD)
9	Expert Training	9.4	Integrated Spatial Decision Support System (ISDSS) for Disaster Risk Reduction

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 is in addition to Action Plan Progress reports for the eight new StIRRRD Districts when these are available. 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.

West Sumatra Province

<p>Pesisir Selatan</p>	
<p>31 Dec 2018</p>	<ol style="list-style-type: none"> 1. The Deputy of Preparedness Division, Mr. Marpaung retired in December 2018. The new head of BPBD Pessel, the new deputy of preparedness division, and the staff are proposing to the head of district to issue a district act through agency of community empowerment to use some of village budget (Nagari budget) for disaster preparedness. 2. Arbeiter Samaritan Bund (a German aid and welfare organisation) has worked with BPBD Pessel since 2017 to support 3 KSBs in one working area of Nagari. BPBD Pessel became key informants as well as main agency to work with ASB to strengthen the Nagari KSBs'. ASB project ends in December 2018, and the KSBs are expected to continue the DRR activities using the Nagari budget plan. 3. In October, BPBD Pessel held a workshop on preparedness due to weather conditions which triggered mass movement and floods in several spots. KSBs in several Nagari were strengthened to have precautions during bad weather. 4. In November, the head of BPBD Pessel stated that the district needed to be prepared for flood hazards due to the existence of six big rivers in Pessel. BPBD proposed to have river normalization to prevent floods to the government. 5. Members of Woman group in Kenagarian Api Api Pasar Baru Bayang, 15 persons, received batik painting training using village (nagari) budget (<i>dana desa</i>), initiated by its Walinagari. The head of Pessel District established Disaster Preparedness Group or <i>Kelompok Siaga Bencana</i> (KSB) in Nagari Tapan, sub district Basa Ampek Balai (BAB) Tapan and contended that 60 teams are to become <i>Kelompok Siaga Bencana</i> (KSB). 6. DRR Activities in 2018 consisted of EWS maintenance and dissemination of DRR in collaboration with KSB for 3 nagaris.

30 June 2018	<ol style="list-style-type: none"> 1. Little or no communication with Pesisir Selatan BPBD. UGM province coordinator, Arry Retnowati has gone to Taiwan for 3 months. A simulation was held on National DRR day on 26 April in a village. Head of BPBD being replaced and deputy is retiring.
31 Dec 2017	<ol style="list-style-type: none"> 1. BPBD worked with Salido Saiyo village – a coastal community - on a tsunami simulation (received from Dally Usman) during October 2017. 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. 3. BPBD Pesisir Selatan were unable to participate in DRR activities in Sorong as part of DRR month. 4. In November, staff from BPBD Pesisir Selatan held focus group meetings to share knowledge about DRR with women groups
30 June 2017	<ol style="list-style-type: none"> 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. 2. On 26 April, BPBD Pesisir Selatan coordinated the 'Disaster Preparedness Day'.
31 Dec 2016	<ol style="list-style-type: none"> 3. 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 4. 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. 5. As part of the implementation stage of the action plan, BPBD Pessel proposed 9 activities for preparedness funding to the parliament. 6. Because of central government budget reductions, there is concern within the BPBD that their budget will be severely cut. 7. BNPB have established a collaboration with UGM to install landslide early warning systems.

<p>30 June 2016</p>	<ol style="list-style-type: none"> 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. 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"> - initiate designing an action plan for their village and Nagari (sub-district), and - speak their thoughts and to be involved in more activities related to capacity building. <p>BPBD Pesisir Selatan will facilitate these activities related to DRR.</p>
<p>31 Dec 2015</p>	<ol style="list-style-type: none"> 1. BNPB look likely to fund a pilot in Pesisir Selatan based on the "Blue-Line" tsunami preparedness initiative in Wellington. 2. The budget for Activities planned for the first year of the Action Plan, 2016, has been approved by the district parliament. 3. Feedback from central government and other districts during the New Zealand comparative study visit encouraged Pesisir Selatan to prioritise Action Plan items and to change focus from response to DRR. 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 New Zealand MFAT and JICA. UGM-GNS Science-Beca could facilitate the design and the training, and JICA could support the provision of base isolation.

Agam



<p>30 Dec 2018</p>	<ol style="list-style-type: none"> 1. BPBD Agam with its PUSDALOPS (center of logistics, data, and operational unit) regularly check their early warning system equipment. In July, BPBD and BNPB worked together to check the Tsunami EWS. 2. BPBD conducted dissemination on disaster preparedness through school visit, strengthened KSB Nagari, i.e July dissemination of DRR for KSB Nagari Kotorantang Palupuah. 3. BPBD Agam participated in the West Sumatra DRR Jamboree held by BPBD Kota Padang in 3-7 September 2018. 4. In October 2018, BPBD Agam in collaboration with <i>BAZNAS Tanggap Bencana</i> (BTB) Agam held earthquake simulation at SD Negeri 32 Muaroputih, nagari Tiku V Jorong, sub District Tanjungmutiara. BPBD held refreshment course on preparedness to <i>Kelompok Siaga Bencana</i> (KSB) Nagari Kamangmudiak, sub District Kamangmagek. 5. BPBD Agam participated on the DRR Month held at Medan, North Sumatra 21-25 October 2018. 6. In November, Quick response task of force (TRC) BPBD Agam had water rescue training taught by search and rescue team (BASARNAS class A) Padang in Lubukbasung. BPBD Agam in collaboration with Agam Red Cross developed KSB sub-district of Ampeknagari, Matua, Palembang, Malalak and Palpuah to become quick response task force. 7. Head of Agam district received a recognition reward from BPBD for DRR efforts. 8. In 2018 There were 181 hazard events, dominated by flood and landslides. In September, a flood struck Agam, the biggest flood in the last 50 years 9. DRR Activities in 2018, comprised (a) dissemination to schools, communities, during religious activities in mosques, (b) establishment of disaster emergency response post in Maninjau Lake areas, (c) Monitoring of landslide prone areas with KSB and Removal of materials that may fall/move from the slopes, (d) Identification of cracks with land subsidence of more than 2 meters (e) Establishment of KSB, Kelompok Kaum and activation of DRR Forum, (f) Evacuation simulation for Marapi Mountain. Training for KSB on disaster and economic, in 2018 The Gov of AGam received an award from BNPB for economic strengthening activities in disaster prone areas. 10.
<p>30 June 2018</p>	<ol style="list-style-type: none"> 1. New head of BPBD has been appointed but little or no contact with Agam BPBD. UGM province coordinator, Arry Retnowati has gone to Taiwan for 3 months.

31 Dec 2017	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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.
31 Dec 2016	<ol style="list-style-type: none"> 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. 2. A fire simulation exercise involving BPBD Agam and the local community was conducted on the slopes of Gunung Marapi on 25 October, 2016. 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. 4. In conjunction with the aforementioned NGO, BPBD Agam are involved in capacity building with coastal area communities, especially in relation to tsunami planning. 5. Three new BPBD staff were inaugurated on 12-13 November 2016. 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. 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. 8. BNPB have established a collaboration with UGM to install landslide early warning systems.

<p>30 June 2016</p>	<ol style="list-style-type: none"> 1. Good support from Head of District, including fronting a disaster preparedness music video. 2. Improving preparedness facilities and infrastructure, for instance to be able to utilise landslide EWS to be installed by UGM. 3. Budget has been assigned to develop a purpose built BPBD building in 2016 indicating that DM is being prioritised. 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. 5. Jamboree for disaster preparedness groups adopting National activities to district level. The participants come from trained KSB of 16 sub-districts. 6. Regional act and regulations for Disaster Management were approved in May 2016 and are being "socialised"
<p>31 Dec 2015</p>	<ol style="list-style-type: none"> 7. 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.

**Padang
(Pilot District)**



<p>30 Dec 2018</p>	<ol style="list-style-type: none"> 1. September, Padang BPBD hosted West Sumatra DRR Jamboree. This activity was carried out by representatives of the Kelompok Siaga Bencana in West Sumatra. 2. Smart disaster supported school by BPBD Padang. 3. Training for KSB from all villages in Padang city. 4. Coordination meetings with disaster related stakeholders. 5. To anticipate the impact of the disaster, BPBD of Padang City conducted the provision and maintenance of evacuation route signs and evacuation guide billboards. 6. No follow up on Padang Wellington MoU at present
<p>30 June 2018</p>	<ol style="list-style-type: none"> 1. The head of Padang BPBD (Edi Hasymi) came to Wellington in March 2018 and signed a Letter of Intent with Wellington City outline collaboration on DRM. Edi gave two presentations on the Smart Cities DRR initiatives in Padang City at the one-day workshop, including their implementation of the tsunami blue line. 2. Phil Glassey attended and presented as an invited key note speaker on the impacts of the StIRRRD Activity at the International Conference on Disaster Management in held at Andalas University in Padang.
<p>31 Dec 2017</p>	<ol style="list-style-type: none"> 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. 2. BPBD Kota Padang participated in the DRR meeting in Sorong and gave a short presentation of their experience. 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 New Zealand in March 2018.

30 June 2017	<ol style="list-style-type: none"> 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. 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. 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.
31 Dec 2016	<ol style="list-style-type: none"> 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. 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 New Zealand, which Pak Rudy learned about during the Pilot Project's Study Visit to New Zealand in June 2012.
30 June 2016	<ol style="list-style-type: none"> 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.
31 Dec 2015	-
Previous	<ol style="list-style-type: none"> 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.

Other West Sumatra Province Activity




30 Dec 2018	<ol style="list-style-type: none"> In August 2018, Engineering Faculty Team of Universitas Andalas visited Universitas Mataram to participate in Lombok EQ disaster management by carrying out training on building assessment and visit to several affected buildings. Representatives from all BPBDs attended DRR Month in Sumatera Utara on 19-26 October 2018. STIRRRD hosted Knowledge Sharing Session 13 (KS#13): Strengthened Indonesian Resilience Reducing Risk from Disaster (StIRRRD) on 23 October 2018. STIRRRD also gave a presentation on Toolkit.
30 June 2018	<ol style="list-style-type: none"> UNAND hosted 5th annual scientific meeting (PIT) on 1-4 May 2018. A series of activities was conducted namely international conference, national seminar, disaster expo, disaster management event, the inauguration of Disaster Education Park or <i>Taman Edukasi Bencana</i> (TEB) and special lectures. STIRRRD participated in this event as an Invited Speaker, presenting a paper "Measuring The Impacts of StIRRRD: A Disaster Risk Reduction Capacity Building Activity In Indonesia".
31 Dec 2017	<ol style="list-style-type: none"> No updates for this reporting period
30 June 2017	<ol style="list-style-type: none"> StIRRRD alumni from Andalas University have been doing some DRR work in Padang-Pariaman retro-fitting residential houses to make them more resilient to earthquakes. An extension of this programme is being considered for Agam.
31 Dec 2016	<ol style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. Provincial BPBD staff will conduct a meeting with UNAND and if possible will visit UGM for further discussions.



(a). Participants at the West Sumatra DRR Workshop. (b) Pak Faisal and Pak Hakam (nearest camera) attended and presented at the Workshop.

2. West Sumatra had a BPBD District Jamboree at the end of September 2016. Agam District won the jamboree.

Bengkulu Province

<p>Bengkulu City</p>	
<p>30 Dec 2018</p>	<ul style="list-style-type: none">○ Bengkulu City BPBD continue to implement initiatives identified in their DRR Action Plan, and their overall budget has increased slightly from 2017/18. Activity impacts noted during our most recent visit in July 2018 include:○ Coordination and communication remains a priority, with BPBD holding regular talks with other agencies (health, military, police, port).○ MoU's have been developed with 1 hotel and 1 university to use their facilities as tsunami evacuation points. There are plans to add additional buildings, along with required signage.○ A scheme where local businesses can sponsor and put their name on a tsunami evacuation sign has been started, and has been very successful.○ There are still plans to develop the tsunami 'Blue Line' program further, but additional work to decide major evacuation routes and central muster points is required before this occurs.○ An annual review of evacuation plans is conducted, to reflect current circumstances – e.g. some evacuation points may need to be changed due to new development.○ Empowerment of DRM volunteer○ DRR socialization through mass media○ Marine school program during 2018○ Flood contingency plan designing.○ DRR forum at municipal level.

<p>30 June 2018</p>	<p>1. Some of the StIRRRD team caught up with Kota Bengkulu BPBD in March 2018. It seems that the BPBD are working well across OPDs and also involving local universities, industries and NGOs. Initiatives include:</p> <ul style="list-style-type: none"> a. A local hotel close to the beach has been designated as a tsunami evacuation shelter and a new access road will be constructed by PU. b. They are rethinking their tsunami blue line initiative and utilising the experiences and resources from Padang City. They have had offers of support for evacuation signage from local car companies (i.e branded signage). They are updating tsunami hazard and evacuation maps. c. They are working with University of Muhammadiyah in Identifying evacuation shelters on the campus. d. The US Navy are building Evacuation shelters and doing socialisation and simulations in Bengkulu City. e. The BPBD have been allocated a site next to the Mayor's office to run building clinics for local artesans and build an earthquake resistant house. They are negotiating with Padang Cement on collaborative funding. f. New draft decree (PURDA regulation) that all new development must consult with BPBD re. hazards. g. They are maintaining school DRR education. h. They have a letter from UNISDR inviting them to participate in a Making Cities Resilient project. i. It was noted that unfortunately there are political issues regarding the tsunami shelter at Teluk Sapang, and the shelter is not being well maintained.
<p>31 Dec 2017</p>	<p>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.</p> <p>2. Political support for DRR activities remains strong, with commitment expressed publicly by DPRD and the Mayor of Bengkulu.</p> <p>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.</p> <p>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:</p>



	<ul style="list-style-type: none"> 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.
	<ul style="list-style-type: none"> 1. Pak Farid from UNIB, an alumni of the StIRRRD program, published reports on disaster mitigation and preparedness. 2. BPBD has a MoU with Putri Gading Hotel in Sepanjang Beach for utilized the hotel a shelter during tsunami or evacuation drill. 3. 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.
30 June 2017	<ul style="list-style-type: none"> 1. Support for the StIRRRD programme from city politicians and parliament remains strong, and a competent BPBD leadership team (Head: Selupati / ZIC: Noprisman) was appointed in January. 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. 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. 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 http://www.bengkulukota.go.id/berita-648_cegah-banjir-walikota-target-bangun-waduk-di-2017.html. 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.

	<p>5. UNIB are looking to facilitate the establishment of a Lifelines Group in Bengkulu and/or Seluma and undertake research around lifelines vulnerability.</p>
31 Dec 2016	<ol style="list-style-type: none"> 1. Pak Farid remains interested in facilitating the construction training for Seluma and Bengkulu at UNIB. 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 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. 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 http://harianrakyatbengkulu.com/ver3/2016/11/10/banjir-landa-kota-dan-seluma/ 5. All sectors were involved in EQ and tsunami simulation activities conducted 24-26 October 2016. UNIB represented StIRRRD.
30 June 2016	-
31 Dec 2015	<ol style="list-style-type: none"> 1. Kota Bengkulu Parliament endorsed Action Plan in principle. 2. There is support from city politicians for the programme and from parliament to support budget for DRR activity. 3. There is a commitment to hold more regular coordination meetings for all stakeholders in the city for DRR. 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.

Seluma



30 Dec
2018

1. The capacity of BPBD staff has continued to improve. Pak Muhpian was appointed in September, and his previous position on the Regent's Expert Staff has helped to further enhance the capacity and status of BPBD within Seluma District local government. The Head of the Planning and Reporting Sub-Division (Pak Eko Ardiyanto) continues to liaise with the StIRRRD team about the most appropriate methods to achieve disaster risk reduction goals in Seluma.
2. Seluma BPBD's final DRR budget for 2018 was \$NZD143,000, which is a significant increase on the 2017 budget of \$59,000. The overall budget for BPBD has increased from \$NZD393,534 in 2017 to \$545,494 in 2018.
3. The head of Rawa Indah Village confirmed there was some concern amongst his community following the earthquake and tsunami in Palu on 28 September. However, he said that people were generally not too scared because they feel they have a good level of tsunami understanding and preparedness, following the community project undertaken there this year.
4. The Rawa Indah project helped to inform other tsunami preparedness work in Seluma. In November and December, BPBD tested tsunami disaster contingency plans with 17 other coastal villages, working together with other institutions such as Tagana, PMI, Pramuka, Kokam (Muhammadiyah Youth), TNI / POLRI, schools, and hospitals. The activity was carried out over 3 days, with a focus on early warning systems, evacuation of residents and the commitment of other institutions. As well as these simulation type events, Disaster Resilient or Tangguh Bencana Village programs have been implemented in the following villages which directly face the Indian Ocean:
 - a. Padang Bakung (Seluma BPBD funding)
 - b. Pasar Ngalam (Bengkulu Province BPBD Funding)
 - c. Lawang Agung Village and Penago Baru (PMI Seluma)



BPBD volunteers planting mangrove seedlings in Padang Bakung (Credit: Andika DieI)

5. Additional funding was provided to undertake rehabilitation work on the Rawa Indah Tsunami shelter in December 2018. As noted during development of the community project, a key task is to re-connect electricity to this shelter, and this is underway.
6. The Ministry of Villages is considering an opportunity to create Early Warning Systems (EWS) in as many as 10 locations / villages in 2019, as shown in the map below. At present, the Ministry's focus for EWS is solely for flooding, but negotiations are underway to expand this to include tsunami warnings.



Proposed Tsunami Early Warning System sites – Seluma District

7. BPBD Seluma has conducted the following activities:
 - Village resilient program
 - Training for Disaster response volunteers
 - Safe schools initiatives
 - Shelter officers training

30 June 2018	<p>The increased level of DRR activity (and associated impacts) observed in Seluma in 2017 has continued through to the first half of 2018, despite the departure of the longstanding head of BPBD, Pak Azwardi in February. The new (acting) head is Pak Mirin Ajib, previously the government assistant for community welfare. Although the involvement of StIRRRD in the tsunami community awareness project has probably helped to maintain the focus on DRR, it is clear that Seluma BPBD is becoming more confident and ambitious in its plans to reduce disaster risk in the district. DRR improvements and impacts observed in the reporting period are outlined below:</p> <ol style="list-style-type: none"> 1. BPBD, together with BMKG have installed a small network of monitoring devices which are monitored 24/7 by BPBD staff. These can be used to warn communities of approaching flood events, including via sirens and social media. 2. The capacity of BPBD staff has continued to increase. A recent addition is Andika Diel, who previously led the Seluma PMI team, and who specialises in community engagement and DRR socialisation in schools. 3. The 2019 program and budget for Seluma BPBD was presented to the Bupati on 2 July. The overall budget requested was \$NZD 281,000 to fund 7 programs and 34 specific activities, many of which have been derived from the StIRRRD program, including Action Plan development. Activities with a specific DRR focus include: <ol style="list-style-type: none"> a. An early prevention and response program for natural disasters. b. Preparation of disaster-specific contingency plans - forest fire, flood, extreme weather. c. Procurement of radio communication equipment for the Rawa Indah Tsunami Shelter. d. Additional units for BPBD's Early Warning System. e. Dissemination of disaster information to 14 sub-districts. f. Data collection and mapping of disaster-prone areas. g. A preparedness simulation for 200 people h. An increased budget for maintaining the Rawa Indah Tsunami Shelter. i. Resources (including 2 staff) to establish additional Disaster Resilient Villages. j. A requirement that the Disaster Risk Reduction Forum holds 3 meetings throughout the year. 4. As noted elsewhere in this report, the tsunami community awareness and preparedness project started in Rawa Indah in February 2018 and has been very well supported by BPBD, UNIB, PMI and local agencies in Rawa Indah Village (Polmas, KSB, Tagana).
31 Dec 2017	<p>There were 2 StIRRRD visits to the Seluma District in the 2nd 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.</p> <ol style="list-style-type: none"> 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.
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.
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.

30 June 2017	<ol style="list-style-type: none"> 1. There was a landslide in Talo Sub-District, Seluma on May 19, 2007 http://penanggulangan Krisis.kemkes.go.id/Tanah%20Longsor-di-SELUMA-BENGGKULU-19-05-2017-28 2. UNIB are looking to facilitate the establishment of a Lifelines Group in Bengkulu and/or Seluma and undertake research around lifelines vulnerability. 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 its 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.
31 Dec 2016	<ol style="list-style-type: none"> 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. 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. 3. BNPB is providing support to Seluma for developing structures for coastal erosion mitigation (around 9 billion Rupiah). 4. BNPB have established a collaboration with UGM to install landslide early warning systems. 5. Kemendesa are providing financial support to Seluma for water supply and sanitation distribution (around 1 billion Rupiah).
30 June 2016	<ol style="list-style-type: none"> 1. DRR mainstreaming amongst social groups and family is now being prioritised along with Disaster preparedness schools. Initial roll out has started. 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. 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. 4. Participative plan for earthquake resistant construction clinics has been developed.
31 Dec 2015	<ol style="list-style-type: none"> 1. Good engagement in Action Plan workshops.

Nusa Tenggara Barat Province

Mataram



30 Dec
2018



TOT for Building Assessment in UNRAM and Public Works Office

1. Social Assessment – Stakeholders Mapping was conducted in August 2018 to assess how the stakeholders in Mataram responded to the Lombok earthquake. After the Lombok EQ is considered the right moment to evaluate how the DRR Action Plan was carried out, particularly whether coordination inter OPD was implemented.



Interview with the gov of Mataram and visit to the affected area

2. At present, BPBD of Mataram is assigned to lead the coordination of Lombok EQ management from Post EQ- Emergency Response-Recovery-Rehab and Recon-In Situ Rehab Phase until Relocation Phase as the final phase. From July-Dec 2018, all of BPBD staffs are assigned for post disaster management.

30 June 2018	<ol style="list-style-type: none"> 1. Installation of evacuation signs has been completed in 10 Primary Schools and Junior High Schools. 2. Stretchers have been donated by BPBD to the 10 Primary and Junior High Schools that installed evacuation signs. 3. Dissemination on DRR in schools.
31 Dec 2017	<ol style="list-style-type: none"> 1. No update for this reporting period.
30 June 2017	<ol style="list-style-type: none"> 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. 2. A mayoral regulation (Perwal) on DRR has been approved by the mayor. 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. 4. RJPMD Kota Mataram (Regional Medium-Term Development Plan) has already covered the perspective of disaster. 5. The MOU between UNRAM and BPBD Kota Mataram is currently being approved by the mayor. 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.
31 Dec 2016	<ol style="list-style-type: none"> 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. 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. 3. Budget cuts from central government impeded progress for some of the existing Action Plan tasks. 4. Mataram's Parliament supports the proposed MOU between UGM, Kota Mataram and UNRAM 5. New mayoral regulation (Perwal) supported by Parliament and to be prepared and submitted in 2017. 6. Mataram's Bappeda supports additional funds for DRR activity for BPBD

30 June 2016	<ol style="list-style-type: none"> 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. 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.
31 Dec 2015	<ol style="list-style-type: none"> 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). 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.

Sumbawa




<p>30 Dec 2018</p>	<ol style="list-style-type: none"> 1. Sumbawa was also affected by the Lombok earthquake and reported IDR 582.72 B damage but no casualties. 2. The Sumbawa community flood project was approved through the Ambassador's Fund. 3. Action Plan implementation has focussed on establishing one more Resilient Village and further training for teachers within schools. 4. Due to limited budget, other action plan activities are not progressing in full. 5. In August 2018, BPBD Sumbawa established Resilient Village in Karang Dima Village, Labuan Badas sub District.
<p>30 June 2018</p>	<ol style="list-style-type: none"> 1. There were no activities conducted between January and June 2018 because of a lack of funding. In July, a disaster resilient village will be established in Karang Dima Village, Labuan Badas sub District. The village is very prone to flooding.
<p>31 Dec 2017</p>	<ol style="list-style-type: none"> 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 Kukin 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"> 8. 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 stakeholder 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. 9. 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. 10. 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. 11. 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.
31 Dec 2016	<ol style="list-style-type: none"> 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 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. 3. BNPB is providing support to Sumbawa for developing structures for coastal erosion mitigation.
30 June 2016	<ol style="list-style-type: none"> 1. New bylaw being created with greater focus on mitigation and DRR (vs. response only previously). 2. Coastal infrastructure (seawall and road) extended in Sumbawa to mitigate erosion.

31 Dec 2015	<ol style="list-style-type: none">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.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.3. Sustained involvement in activities from Mataram University (UNRAM).4. BPBD is now more conscious that all three groups of stakeholders must be involved in discussions and activities (Government, Community and Private sector).
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Central Sulawesi Province

<p style="text-align: center;">Donggala</p>	
<p>30 Dec 2018</p>	<ol style="list-style-type: none"> 1. The Seismometers in Schools programme is progressing in all schools. SMA 1 Banawa has used the seismometer to support learning activities in Physics. However, the seismometer was stolen after the Palu-Donggala EQ in September 2018. 2. A series of Eq and tsunami hit Donggala and Palu on 28 September 2018, at 18.00 WITA (https://reliefweb.int/report/indonesia/indonesia-earthquake-donggala-south-east-sulawesi-information-bulletin-n-1) 3. The 7.4 Mw EQ severely damaged Donggala, Palu, and Sigi. The tsunami wiped out the coastal area of Palu and Donggala. The epicenter is located 26 kilometers north of Donggala, at a depth of 11 km. 4. The number of affected villages were 132. 5. StIRRRD conducted assessment in December to learn the impact of the disaster to Donggala and the disaster management conducted by OPD of Donggala. 6. Based on the assessment, the emergency response could not be carried out optimally due to limited access as most roads and bridges were damaged and also due to lack of coordination between OPDs. 7. There were 212 casualties, 175 wounded, and 17 missing (based on BPBD data) and 36,346 evacuees in 52 villages. 8. Based on Bappenas Data: the damage in the residential areas is about IDR 1.3T, loss is about IDR 227,5B
<p>30 June 2018</p>	<ol style="list-style-type: none"> 1. BPBD Donggala is committed to support the implementation of the Seismometers in Schools Program in SMAN 1 Banawa Donggala and will involve the school in their DRR activities. 2. StIRRRD has made a cooperation agreement on the Implementation of Seismometers in Schools Program with 4 SMAs/MANs (SMA N Madani Palu, MAN 1 Palu, SMA N 1 Banawa Donggala, SMA N 1 Bahudopi Morowali), 3 BPBDs (Palu, Donggala, Morowali), Geophysics Station Palu-BMKG, Ministry of Religious Affairs of Central Sulawesi Province, Education Office of Central Sulawesi Province, and Universitas Tadulako. 3. BPBD Donggala continues to carry out Program Juru Bencana "Disaster Preparedness Officers Program" that has been implemented since 2016.
<p>31 Dec 2017</p>	<ol style="list-style-type: none"> 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

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.
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.
3. BPBD are recruiting one person in every village to be a local liaison officer to deliver DRR and preparedness socialisation.
4. Local building regulations have been reviewed and updated as a result of StIRRRD.
5. A physical Centre of Communications, Operations and Logistics has been established.
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.

<p>31 Dec 2016</p>	<ol style="list-style-type: none"> 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. 2. Budget for DRM in Donggala has increased from IDR 3 billion in 2014 to IDR 16 billion in 2017. 3. BNPB is providing support to Donggala for developing structures for coastal erosion mitigation. 4. BNPB have established a collaboration with UGM to install landslide early warning systems.
<p>30 June 2016</p>	<ol style="list-style-type: none"> 1. BPBD and PU staff seem to have successfully lobbied for spatial control of aggregate mining activities along the coast. 2. Physical coastal protection measures have been constructed at one of the beaches on advice from StIRRRD experts present during the Action Plan Workshop.
<p>31 Dec 2015</p>	<ol style="list-style-type: none"> 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. 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"> - 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. - 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. - 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. 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.

Morowali



30 Dec
2018

1. The SIS Morowali school is still committed to the programme. However, SMAN 1 Bahodopi is having difficulty in utilizing the seismometer due to limited internet access.
2. In September 2018, BPBD of Morowali conducted a meeting to develop Contingency Plan for Flash Flood involving 22 stakeholders, namely Public Works, Public Housing, Education, Communication, Bappeda, Sat Pol PP, Health, Social, Transportation, Environmental, Kodim (District Military Command), Polres Morowali, Puskesmas Bahodopi, Head of Bahodopi sub District, RSUD Morowali, Untad II, BPS, PDAM, PLN, Basarnas, PT. Wanxiang Group, and PT. Bintang Delapan Mineral Group.



Flash Flood Contingency Plan Meeting
in BPBD Morowali.

3. As a follow up from the Flash Flood Contingency Plan, an evacuation simulation was held in Ipi Village, Bungku Tengah sub District on 1 November 2018. Several government institution and related organizations were involved, which are Kodim 1311, Polres, Basarnas, Health Agency, Communication and Information Agency, Social Agency, Transportation Agency, Tagana, BMKG, Satpol-PP and Fire Dept, and several NGOs.
4. A reduction in budgets due to upcoming elections has impacted action plan implementation.

30 June 2018	<ol style="list-style-type: none"> 1. BPBD Morowali is committed to support the implementation of the Seismometers In Schools Program in SMAN 1 Bahudopi Morowali and will involve the school in their DRR Activity. 2. StIRRRD has made a cooperation agreement on the Implementation of Seismometers in Schools Program with 4 SMAs/MANs (SMA N Madani Palu, MAN 1 Palu, SMA N 1 Banawa Donggala, SMA N 1 Bahudopi Morowali), 3 BPBDs (Palu, Donggala, Morowali), Geophysics Station Palu-BMKG, Ministry of Religious Affairs of Central Sulawesi Province, Education Office of Central Sulawesi Province, and Universitas Tadulako. 3. BMKG Palu considers to propose to BMKG to establish a geophysics station in Morowali as the nearest one is in Palu (12 hour drive from Bungku, the Capital City of Morowali) and in Kendari (8 hour drive from Bungku, Morowali).
31 Dec 2017	<ol style="list-style-type: none"> 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'. 2. Over the same period, UNTAD and public works have been consulting on earthquake resilient infrastructure construction. 3. Between June and November, UNTAD and Public Works established an 'Advisory Team for Building Development (TABG)' (Tim Ahli Bangunan Gedung). 4. In July, an MoU was developed between Morowali BPBD and BNPB regarding post-disaster grant assistance. 5. Also in July, normalisation activities were undertaken on the Kontobamalanga River. 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 pilot districts for this technology. A test of the technology was implemented during the national DRR month event in October. 7. Morowali BPBD has developed agreements with the army, head of subdistricts and head of villages regarding DRR activities. 8. A river revetment was constructed on the Umbele River in August while breakwaters and river revetments were constructed in Keura Village in September.
30 June 2017	<ol style="list-style-type: none"> 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: https://stirrrd.org/2017/07/02/may-a-shaky-month-for-central-sulawesi/ 2. Morowali BPBD have partnered with Telkomsel and Indosat (national mobile providers) to develop better alerting systems e.g. emergency text messages. 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.

	<ol style="list-style-type: none"> 4. Morowali Parliament are reviewing the consideration of hazard and risk information in spatial planning which includes land use policies (RTRW). 5. A project to develop a Perda (District Decree) for DRR is underway being led by BPBD and Parliament. 6. A review has been conducted of the Morowali risk assessment document and is being reviewed by BNPB this year. 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. 8. BPBD have constructed a structure on Sambori Island to be used as a tsunami vertical evacuation shelter targeted for tourists. 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. 10. Breakwaters to reduce the impacts of waves in coastal areas have been constructed in Bahomotepe, Kamurea and Bahururu.
31 Dec 2016	<ol style="list-style-type: none"> 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. 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. 3. There is a desire from Morowali parliament representatives to develop DRR regulations for the district. This has been included in the AP. 4. BNPB is providing support to Morowali for developing structures for coastal erosion mitigation (around 38 billion rupiah).
30 June 2016	<ol style="list-style-type: none"> 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. 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.
31 Dec 2015	-

Palu City (Pilot District)



30 Dec
2018

1. Action Plan implementation was significantly impacted by the September earthquake and tsunami as efforts focussed on Response and Recovery efforts.
2. The Seismometers in Schools programme is progressing in all schools. UNRAM's seismometer was damaged during the September earthquake but has since been repaired.
3. SMA Madani and MAN 1 Palu Banawa have used the seismometer to support learning activities in Physics.
4. A series of Eq and tsunami hit Donggala and Palu on 28 September 2018, at 18.00 WITA (<https://reliefweb.int/report/indonesia/indonesia-earthquake-donggala-south-east-sulawesi-information-bulletin-n-1>)
5. The 7.4 Mw EQ severely damaged Donggala, Palu, and Sigi. The tsunami wiped out the coastal area of Palu and Donggala. The epicenter is located 26 kilometers north of Donggala, at a depth of 11 km.
6. StIRRRD conducted assessment in December to learn the impact of the disaster to Palu and the disaster management conducted by OPD of Palu.
7. Based on the assessment, the emergency response could not be carried out optimally due to limited access as most roads and bridges were damaged and due to lack of coordination between OPDs.
8. Based on BPBD of Palu data, the number of casualties is 2131 people and 532 were reported missing. The number of evacuees is 40,738 people.
9. According to BPBD Palu data: 9,181 houses were severely damaged, 12,717 houses suffered moderate damage, 17,293 suffered light damage and 3,673 houses were missing.
10. The Ministry of Public Works and Public Housing will build 285 HUNTARA (temporary houses).
11. Vulnerability Map for Palu and its Surrounding Areas has been published. The map was agreed and signed by Bappenas, BPN, Ministry of Energy and Mineral Resources, BMKG, Ministry of Public Works and Public Housing on 12 December 2018. The Map described Post Disaster Spatial Planning, Criteria, Typology and Zoning. Based on the Zones and Typology, Palu and Its Surrounding Areas consist of 4 zones; Red Zone (Forbidden Zone) that includes Balaroa, Petobko, Jono Oge, and Sibalaya, Dark Yellow (Limited Zone), Yellow Zone and Light Yellow Zone. In general, the four zones are High EQ Risk Zone. The map is completed with post disaster spatial planning that will be the guideline for the revision of Spatial Planning of Central Sulawesi, Palu City, Sigi, Donggala, and for the development of detailed spatial plan for Palu, Sigi, and Donggala.

30 June 2018	<ol style="list-style-type: none"> 1. BPBD Palu collaborated with UNTAD to carry out a microzonation assessment for earthquake hazard. 2. BPBD Palu is committed to support the implementation of Seismometer In School Program in SMAN 1 Madani and MAN 1 Palu and will involve the schools in their DR Activities. 3. StIRRRD has made a cooperation agreement on the Implementation of Seismometers in Schools Program with 4 SMAs/MANs (SMA N Madani Palu, MAN 1 Palu, SMA N 1 Banawa Donggala, SMA N 1 Bahudopi Morowali), 3 BPBDs (Palu, Donggala, Morowali), Geophysics Station Palu-BMKG, Ministry of Religious Affairs of Central Sulawesi Province, Education Office of Central Sulawesi Province, and Universitas Tadulako. 4. BPBD, BMKG and Untad carried out Microzonation mapping in Palu.
Dec 2017	<ol style="list-style-type: none"> 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. 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.
30 June 2017	<ol style="list-style-type: none"> 1. 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 New Zealand. The Palu-Koru Fault Expedition is based on the Wellington <i>It's Our Fault</i> programme. 2. 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.
31 Dec 2016	<ol style="list-style-type: none"> 1. There has been significant staff rotation in Palu City this year. <ul style="list-style-type: none"> - 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. - 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. - Pak Asri has moved from the Head of BPBD to the Mayor's Secretary. - Pak Presely Tampubolon has moved from the Head of the Industry Agency to the Head of BPBD. 2. BNPB have established a collaboration with UGM to install landslide early warning systems.
30 June 2016	-

31 Dec 2015	<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"> - Compilation of Threats / Disaster Prone Maps (liquefaction, landslides, debris floods, tsunamis), - Rapid screening of lifeline facilities to gauge resilience to hazards, - Evacuation Management in Public Buildings, - Disaster socialization problems through various media (television, radio, leaflets), - The establishment of a Regional Planning Department, in the faculty of Engineering UNTAD, - The formation of geological engineering study programmes at the Faculty of Engineering UNTAD in 2014, - The formation of a geology department at UNTAD, - Adding special education courses on DRR in the Physics Department (UNTAD) and in City Government departments.

Other Impacts



<p>30 Dec 2018</p>	<ol style="list-style-type: none"> 1. Esti was invited to participate in the Social Panel, initiated by LIPI. 2 Activities were conducted in relation to the establishment of Social Science Panel for Disaster Management; 1) Social Panel Workshop, discussing “<i>Peranan Ilmu Sosial Dalam Manajemen Risiko Bencana/The Role of Social Science in Disaster Risk Management</i>” : <i>Pembelajaran dari Para Penyintas Triple Disasters Di Sulawesi Tengah/Lesson Learned from the Survivors of Triple Disasters in the Central Sulawesi</i> (3 December 2018) dan 2) Post Palu Disaster Research Workshop Palu, Central Sulawesi (19 December 2018). 2. The Embassy of NZ has supported Sumbawa Community Project through HEF. The project will be implemented from 1 April 2019 to 31 October 2019.
<p>30 June 2018</p>	<ol style="list-style-type: none"> 1. Kemendesa have finally published their book on DRR (<i>DRR in Disadvantaged Regions: Disaster Management Guidelines based on Policy and Best Practice. Dec 2017</i>). It includes a chapter on StIRRRD, and also a chapter on one of StIRRRD’ districts, Seluma. <div data-bbox="391 1104 1349 1562" data-label="Image"> </div> <p style="text-align: center;"><i>Kemendesa’s DRR Book which features a chapter on StIRRRD and a profile of one of StIRRRD’s districts.</i></p> <ol style="list-style-type: none"> 2. Esti Anantasari (UGM) was invited to be the resource person for Regular Discussion in the Department of Anthropology UGM, topic: “Anthropology and Study on Disaster” on 25 April 2018.
<p>31 Dec 2017</p>	<ol style="list-style-type: none"> 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 Wilopo presented on DRR and held a focus group discussion with 70

	<p>participants. UGM are increasingly in demand to help set-up such workshops in non-StIRRRD districts.</p> <ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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 New Zealand Aid programme scholarship to New Zealand. 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.
31 Dec 2016	<ol style="list-style-type: none"> 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. 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." 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. 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>

Appendix D: Activity Results – Results Framework

The tables below record the **results** achieved or progressed during this assessment period **(to end December 2018)**

<i>From agreed Results Measurement Table in the Activity Design Document</i>				<i>Data up to and including this reporting period</i>	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)	Variance explanation (incl. information sources)
Long-term outcomes					
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)	<p><u>2018 = 2</u></p> <p>Seluma & Bengkulu: ✓ DRR work is now incorporated in annual work plan.</p> <p>Agam & Pesisir Selatan: Not assessed – limited contact and information not available</p> <p>Sumbawa & Mataram: Not assessed – both affected by Earthquake</p> <p>Donggala & Palu: Not assessed – both affected by Earthquake</p> <p>Morowali: Not assessed – limited contact and information not available</p> <p><u>2017 = 8</u></p> <p>All 8 new districts have undertaken at least one complete review of their Action Plans in the reporting period.</p>	<p>Source: Field visits during 2018</p> <p>Sources: All Districts Visit Report (GNS Science International Consultancy Report 2017/11), coaching visits and direct communication.</p>

<i>Activity Design Document</i>				<i>From agreed Results Measurement Table in the</i>		<i>Data up to and including this reporting period</i>	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)	
				Three districts (Seluma, Sumbawa and Mataram) have been through 2 review cycles this reporting period.		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	<p><u>2018</u></p> <p>Government Regulation 2/2018 concerns Minimum Standards for Public Service Standards on DRR. This regulation stipulates that each Regional Government must have minimum standards of public services for disaster-prone information services, disaster prevention and preparedness.</p> <p><u>Agam</u> has Regional regulation on Disaster Management No. 6/2016. DRR activities are included in RPJMD and some aligned with StIRRRD AP</p> <p><u>Bengkulu</u> has Regulation Number 2 Year 2017 on Disaster Management. DRR is included in province RPJMD.</p> <p><u>Palu</u> – DRR mentioned in 2016-2021 RPJMD plan but not prioritized. Initiatives included in other development priorities.</p> <p><u>Pesisir Selatan</u>: -Information Limited. Some StIRRRD AP initiatives align with 2017 BPBD annual plan.</p> <p><u>Donggala</u>: -Regulation 5/2016 but Information Limited</p> <p><u>Sumbawa</u>: -Regulation 5/2016. DM included in RPJMD but limited. Some StIRRRD AP initiatives align.</p>		<p>Research by Prillia Astuti</p> <p>NB: -The most recent RPJMDs for many districts was not accessible</p>	

<i>Activity Design Document</i>				<i>From agreed Results Measurement Table in the</i>		<i>Data up to and including this reporting period</i>	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)	
				<p><u>Mataram</u>: - Mayoral regulation 7/2017 and Regional Regulation 4/2015. Limited other information</p> <p><u>Seluma</u>: - Limited information available</p> <p><u>Morowali</u>: - Limited information available 2017</p> <p>Some changes to policies are being discussed at AGG. None formally adopted yet to our knowledge.</p>		<p>Sources: AGG Policy and Recommendations Matrix and Minutes of AGG Meetings.</p>	
	National Risk Index for the districts is reducing ⁴ .	All 10 districts have reduced Risk Indices by the end of the Activity.	Risk Index as at 2013.	<p><u>2018 (no info available)</u></p> <p><u>2013 (Baseline)</u></p> <p>Palu: 181</p> <p>Donggala: 189</p> <p>Morowali: 177</p> <p>Sumbawa: 150</p> <p>Mataram: 149</p> <p>Padang: 209</p> <p>Pesisir Selatan: 190</p> <p>Agam: 209</p> <p>Bengkulu: 170</p>		<p>The Risk Index is currently under review by BNPB and Bappenas.</p> <p>Source: National Disaster Risk Index for Indonesia for 2013 (BNPB, 2014).</p> <p>No further update available.</p>	

⁴ New Indicator introduced in 2016.

<i>Activity Design Document</i>				<i>From agreed Results Measurement Table in the</i>		<i>Data up to and including this reporting period</i>	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)	
				Seluma: 191			
Effective DRR activities – improved practice (buildings, land-issues, etc.)	No. of DRR implementation projects operational	20 implementation projects operational by June 2019	None	<u>2018</u> Seluma: 27/33 (at June 2018) Bengkulu: 15/20 (at June 2018) Other districts: Not able to be assessed due to no information available <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: Field visit, info from UGM Lombok and Palu earthquakes have interrupted Action Plan assessments for 4 districts 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 PU (e.g. buildings, land-use etc.)	1 policy and/or regulation change in each district by June 2019.	None	<u>2018</u> Mataram City: Mayoral regulation 7/2017 – Guidance on DM Sumbawa: Regional regulation on Wildfire 5/2015 Padang: Mayoral regulation 14/2010 on tsunami EWS		Prillia Astuti's Research	

<i>Activity Design Document</i>				<i>From agreed Results Measurement Table in the</i>		<i>Data up to and including this reporting period</i>	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)	Variance explanation (incl. information sources)		
				<u>2017</u> DRM/DRR regulations are in place in the following StIRRRD districts: Mataram: Regional regulation 4/2015 Sumbawa: Regional Regulation 5/2016 Agam: Regional Regulation 6/2016 Donggala: Regional regulation 5/2011. Seluma: Regional regulation 7/2015 Palu: Regional regulation 5/2011 Pesisir Selatan (2016) Padang (date unknown) Bengkulu: Regional regulation 2/2017	Source: Communications with the Districts. All report the regulations have been inspired by StIRRRD.		
Medium-term Outcomes							
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)	<u>2018</u> No update this reporting period <u>2017</u> The following districts have adopted a modified version of the StIRRRD programme: Temanggung (Central Java) Purworejo (Central Java) Klaten (Central Java) Trenggalek (East Java)	UGM staff (GAMA-INATek) are involved in implementation unless stated otherwise. Source: Communications with the Districts and UGM.		

<i>Activity Design Document</i>				<i>From agreed Results Measurement Table in the</i>		<i>Data up to and including this reporting period</i>	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)	
				<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>Sawahlunto District (West Sumatra) – is working with Andalas on DRR projects.</p> <p>Total = 17 (including baseline)</p>			
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	<p><u>2018</u></p> <p>All 8 districts now separate their DRR budget from their total budget.</p> <p><u>2017</u></p> <p>A total of four districts have reported a separate DRR budget (Pesisir Selatan, Sumbawa, Palu, Morowali)</p> <p>Refer to Appendix C for the graph of the budget differentiation.</p> <p>Budget reporting is variable across the districts.</p> <p><u>2016</u></p> <p>2 Districts (Palu City and Donggala)</p>		<p>Confirmation required from UGM.</p> <p>Source: Pilot Project Completion Report (GNS Science Client Report 2012/306)</p> <p>Action Plan progress presentation from Donggala.</p> <p>Direct request for budget information from each district.</p>	

<i>Activity Design Document</i>				<i>From agreed Results Measurement Table in the</i>		<i>Data up to and including this reporting period</i>	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)	
	No. of RPJMD plans that contain DRR policy and actions.	RPJMD in 10 districts contain risk reduction policies and plans by June 2019.	None	<u>2018</u> 3 - Agam, Palu, Sumbawa		Prillia Astuti's research	
				<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.	
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	<u>2018</u> No analysis able to be undertaken		Lombok and Palu earthquakes have diverted team resources away from M&E	
				<u>2017</u> Summary graphs of DRM budgets and trends can be found in Appendix C below. 7 districts out of 10 (70%) (Agam, Bengkulu, Donggala, Palu, Pesisir Selatan, Seluma, Sumbawa). Agam: 2,932,770,294 (2014) and 10,285,152,917 (2016) 251% increase. Bengkulu: 1,066,880,000 (2014) and 1,512,608,750 (2017) 42% increase. Donggala: 2,585,000,000 (2014) and 9,835,436,000 (2016) 280% increase. Mataram: 3,441,963,302 (2014) and 2,355,615,000 (2017) 32% decrease.		Source: Pilot Project Completion Report (GNS Science Client Report 2012/306). Source: District communications.	

<i>Activity Design Document</i>				<i>From agreed Results Measurement Table in the</i>		<i>Data up to and including this reporting period</i>	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)	Variance explanation (incl. information sources)		
				<p>Morowali: 16,507,983,279 (2014) and 1,710,175,000 (2017) 90% decrease.</p> <p>Padang: No data.</p> <p>Palu: 408,120,950 (2014) and 2,769,480,700 (2017) 579% increase.</p> <p>Pesisir Selatan: 7,622,883,936 (2014) and 8,202,086,304 (2016) 8% increase.</p> <p>Seluma: 3,225,511,500 (2014) and 4,498,266,000 (2016) 39% increase.</p> <p>Sumbawa: 6,070,375,364 (2014) and 6,078,000,000 (2017) <1% increase.</p> <p><u>2016</u></p> <p>3 districts out of 10 (30%) (Donggala, Pesisir Selatan, Seluma)</p> <p>Donggala: 2015 IDR 12,238,022,536 and 2016 IDR 14,162,552,045 (15.7% increase)</p> <p>Pesisir Selatan: the overall budget of BPBD decreased, but the budget for DRR increased 50%, the budget for DRR included the budget from BNPB.</p> <p>Seluma: the budget from the district government decreased but BPBD Seluma received funding from BNPB (IDR 9 billion for a rock groyne construction) and from Kemendesa (IDR 900 million for sanitation)</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>		

<i>Activity Design Document</i>				<i>From agreed Results Measurement Table in the</i>		<i>Data up to and including this reporting period</i>	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)	
				<u>2012</u> 10% (Palu)			
	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.	<u>2018</u> Baseline (2015) radar plots can be found at the end of this Table.		Source: Anantasari et al, 2017. Second LG-SAT assessment will be undertaken in 2019.	
Short-term Outcomes							
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	<u>2018</u> : 5 districts Agam, Bengkulu City, Morowali Padang, Seluma 12 DRR forums at Village level were established in 12 resilient villages/Destana out of 129 villages in Sumbawa. In Morowali, BPBD of Morowali has initiated communication with NGOs, private sectors, and the community for this. BPBD will propose to the Head of District to issue a formal decree for the DRR Forum establishment.		Prillia Astuti's Reserach District Communications Source: District communications	
				<u>2017</u> = 4 districts Of the 5 western districts, 4 out of 5 have an active DRR forum: Agam, Padang, Bengkulu and Seluma.			

Activity Design Document				From agreed Results Measurement Table in the		Data up to and including this reporting period	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)	Variance explanation (incl. information sources)		
				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.			
	Mid-Term and Final DRR Seminars No. of district training workshops that 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>2018</u> No update available this reporting period. Final Seminar held in 2019.</p> <p><u>2017</u> (Mid Term Seminar) 15 in total. 10 from StIRRD districts + 5 from other districts. 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> Not able to be assessed (Mid-Term Seminar deferred to Feb 2017)</p>	<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.</p> <p>The Final Seminar is scheduled for June 2019.</p>		
	No. of collaborative research projects being undertaken to better understand and manage hazards	At least one collaborative university/local government research	One (in Palu)	<u>2018</u> : Agam with Institute of Technology (ITP), Padang	Prillia Astuti's research		

Activity Design Document				From agreed Results Measurement Table in the		Data up to and including this reporting period	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)	
		project is underway in each district by 2019.		<u>2017</u> Central Sulawesi: 4 NTB: 0 West Sumatra: 1 Bengkulu: 3 National: 1 Total = 8 (incl. one national project and the baseline project)		Source: District and university communications. 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>2018</u> Agam Bengkulu Donggala Mataram Morowali Pesisir Selatan Seluma Sumbawa Other districts TOTAL Central govt. 12 people from 5 Institutes.	82 69 62 68 68 74 48 91 22 (from 14 districts)	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	

Activity Design Document				Data up to and including this reporting period		
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)
				<u>%Women</u> Agam Bengkulu Donggala Mataram Morowali Pesisir Selatan Seluma Sumbawa Total (average)	 25% 21% 27% 9% 15% 18% 22% 13% 19%	
	% of trainees that are senior decision makers trained	25% of trainees are senior decision makers by June 2019	None	<u>2016</u> Agam Bengkulu Donggala Mataram Morowali Pesisir Selatan Seluma Sumbawa	%Senior 57% 47% 68% 52% 63% 56% 67% 33%	Senior = position defined as "head" or "deputy-head" for govt positions only. Source: Training Attendance Records

<i>Activity Design Document</i>				<i>From agreed Results Measurement Table in the</i>			<i>Data up to and including this reporting period</i>		
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)			
				Total (average) <u>2017</u> Bengkulu 47% Donggala 40% Mataram 41% Morowali 50% Seluma 26% Sumbawa 36% Total (average) 40% <u>2018</u> Seluma 54%					
	% 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>2018</u> N/A – Elements of the DRR Action Plans have now been incorporated into BPBD annual processes (budget and work programs) for Bengkulu and Seluma. The original plans are still referred to where relevant. <u>2017</u> 9 (out of 10, incl. Pilot districts)		Source: Field visits, observations			

<i>Activity Design Document</i>				<i>From agreed Results Measurement Table in the</i>		<i>Data up to and including this reporting period</i>	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)	
				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	<p><u>2018</u></p> <p>The 2017 content analysis found that, in general, the finalised Action Plans did identify an adequate range of objectives. Education and Training was a common strength. The AP's also reflected the key concerns and issues identified at the time of preparation. However, and as above, the elements of the AP's which are still considered a priority have been incorporated into annual work programs.</p> <p><u>2017</u></p> <p>An analysis of Action Plan content against 9 criteria was undertaken, a summary of which can be found at the end of this Table.</p>		Sources: Final Action Plan Visit notes; All Districts Report (GNS Science International Consultancy Report 2017/11).	
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	<p><u>2018</u></p> <p>None specifically known.</p> <p><u>2017</u></p> <p>None specifically known.</p>		Source: District Communications	

<i>Activity Design Document</i>				<i>From agreed Results Measurement Table in the</i>		<i>Data up to and including this reporting period</i>	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)	Variance explanation (incl. information sources)		
				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.			
Improved community awareness of hazards and risks	Evidence of increasing levels of community engagement.	Increasing number of engagements	None	<p><u>2018</u> As for 2017 an increasing focus on engaging with local communities was observed in 2018. This is particularly true for Seluma, Donggala and Morowali districts, where community projects were implemented.</p> <p><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).</p>	Source: Field observations		
	No. of community-based actions in district Action Plans	At least 1 community-based action planned in each district BPBD Action Plan.	None	<p><u>2018:</u> N/A</p> <p><u>2017:</u> = Achieved</p> <p>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.</p>	Source: District Action Plans		

<i>Activity Design Document</i>				<i>From agreed Results Measurement Table in the</i>		<i>Data up to and including this reporting period</i>	
Outcomes	Indicators	Targets (planned)	Baseline	Results (actual)		Variance explanation (incl. information sources)	
	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>2018</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).	
	Community Project 1 (Seismometers in Schools)	Contact with at least 100 people during visits.	None	<u>2018</u> Total excluding Universities 298 Govt Organisations 82 Media 2 Schools 205 Others 1 Female 129		Source: attendance lists.	
	Community Project 2 (Tsunami Preparedness)	Contact with at least 100 people during visits.	None	<u>2018</u> Total excluding Universities 151 Govt Organisations 42 Village 87 Schools 14 NGO 8 Female 34 Plus contacts with villagers during prayer meetings, aerobics, movie night etc and school children during school visits.		Source: attendance lists	

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	<u>2018</u> Behind Schedule. Draft Toolkit presented to AGG in September 2018 who signed off on the approach.	AGG Meeting Minutes.
	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 (ALGG) meetings held.	2 in total	None	<u>2018</u> No further update, completed in 2017 <u>2017</u> = Achieved 2 (Jan 2016; Feb 2017)	Source: ALGG Report, 2016, ALGG meeting minutes 2017
	No. of people that attend Risk Reduction Network 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>2018</u> No further update, completed in 2017 <u>2017</u> = Not Achieved 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	Source: ALGG Meeting Minutes 2017 Source: ALGG Meeting Minutes 2016

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)
				Organisations represented = 1 (BPBD) 7 districts (Mataram, Sumbawa, Pesisir Selatan, Padang, Agam, Seluma, Donggala) Total Attending = 13	
	No. of women's Focus Group Discussions held	1 in each of 8 districts (i.e. 8).	None	<u>2018</u> No additional meetings identified. <u>2017</u> = Achieved 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, https://kaba12.co.id/2017/02/23/peran-perempuan-penting-prb/	Source: Action Plan workshop reports
	No. of Risk Reduction Network seminars held.	2 in total (or 3 incl. KPDT workshop)	None	<u>2018</u> 3 (held in 2014, 2017 and 2018)	Kemendesa (KPDT) HRNA workshop held Nov. 2014 - this included a national DRR module. Mid-Term Seminar held in Feb. 2017. National DRR week held in October 2018

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)
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	<p><u>2017 = Achieved</u> Agam 3 (Jan visit; all districts visit; July visit) Bengkulu 3 (Jan visit; all districts visit; July visit). Donggala 3 (Jan visit, all districts visit, community project visit). Mataram 3 (Jan visit; all districts visit, Aug visit). Morowali 3 (Jan visit; all districts visit; Aug visit) Pesisir Selatan 3 (Jan visit; all districts visit: July visit) Seluma 4 (Jan visit; all districts visit; July visit; Community Project visit) Sumbawa 3 (Jan visit; all districts visit; Aug visit) Palu 2 (side visit; Community project) Padang 3 (side visits)</p>	<p><u>2018 = Almost achieved</u> Agam 0 Bengkulu 1 (Uni of Bengkulu collaborations, APs). Donggala 2 (Community Project 1, post EQ visit & assessment) Mataram 2 (mid-term review, post EQ visit & assessment) Morowali 1 (Community Project 1) Pesisir Selatan 1 (mid-term review) Seluma 4 (Community Project 2, hammer test) Sumbawa 1 (mid-term review) Palu 3 (Community project 1, post EQ assessment) Padang 4 (ICEDM attendance, Ambassador visit, mid-term review, PITIABI (scientific annual meeting)) Medan 1 (DRR week)</p>	<p>Source: Monthly Reports</p> <p>Note: Some additional visits by UGM to some of the districts may not have been all accounted for here. This will be attempted to be rectified for the next report.</p>

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)
	No. of monthly progress contacts with districts	12 per district per year	None	<u>2018</u> Agam 28 Bengkulu 27 Donggala 40 Mataram 27 Morowali 21 Pesisir Selatan 23 Seluma 42 Sumbawa 27 Palu 10 <u>2017</u> Agam 57 Bengkulu 35 Donggala 35 Mataram 44 Morowali 63 Pesisir Selatan 35 Seluma 31 Sumbawa 37		Source: Monthly Reports Note that only the 8 StIRRRD districts are reported on consistently.
	District learning/ support issues log and response process maintained	Log and response process maintained - on-going	None	<u>2018</u> No review of the Policy Matrix by the AGG in 2018. <u>2017</u> <u>Not achieved</u> as originally envisaged (too time consuming and late in the Activity).		Focus for AGG in 2018 has been on single issues in order to improve meeting effectiveness. 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.
	No. of district vulnerability assessments completed	8	None	<u>2018</u> No further update, completed in 2017 <u>2017</u> <u>Achieved</u>		Source: Monthly Reports and StIRRRD website.

<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)
4. District vulnerability assessments and profiles produced (P1)				8 (short profiles in both English and Bahasa Indonesia)	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>2018</u> No further update, completed in 2017 <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>2018</u> No further update, completed in 2017 <u>2017</u> LG-SAT questionnaire has been finalised but requires some adjustments.	Source: Anantasari et al, 2017.
	No. of districts with LG-SAT assessments	LG-SAT assessments for 10 districts by June 2017	None	<u>2018</u> No further update, completed in 2017 <u>2017</u> <u>Achieved</u> 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	The scheduled pilot LG-SAT assessments in Palu and Padang were replaced by LG-SAT assessments in the KPDT districts. Source: Monthly Reports Baseline (2015) radar plots can be found at the end of this Table.

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)
		10 letters of support (one per district) by Dec 2015	Two districts as part of Pilot	<u>2018</u> 4 of the letter of supports have expired, Pesisir Selatan, Donggala, Bengkulu and Seluma. <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>2018</u> 2 have expired, Tadulako and Andalas. <u>2017</u> <u>Achieved</u> Total = 4	Source: Monthly Reports and copies of MoU. 2017 Note: 2/4 have expired and a third expires in 2018.
	No. of people attending training in DRR workshops (in Indonesia) DRI 11.1 D	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 Morowali Pesisir Selatan 157 Seluma 61	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)
				Sumbawa	60	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
					96	
				Sub-total		
				Pilot	678	
				Total	40	
					718	
	% of workshop participants that report increased specialist knowledge (pre-post workshop testing)	85% of participants by Dec 2016	Scores in pre workshop questionnaire	<u>2017/2018</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>2018</u> No further update, completed in 2017 <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 DRI 11.3 D	Identified stakeholder representations achieved <i>(agencies attending at a minimum include: BPBD, PU, Bappeda, province, sub-district, private sector, NGO)</i>	None	<u>2018</u> No further update, completed <u>2017</u> BPBD Bappeda Province University NGO Other Govt. Depts.	147 8 17 51 47 250	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)
				Sub-district	41	Source: Training Attendance Records 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 & DRR Forums	22	
				Press	2	
				Village	21	
				State Bank	4	
				Total	610	
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>2018</u> No further update, completed <u>2017</u> BPBD	111	Count includes <u>all</u> participants at NZ Study Visits, Final AP Workshop, Mid-Term Seminar + All Districts Visit Source: Training Attendance Records
				Bappeda	9	
				Province	41	
				University	96	
				NGO	9	
				Other Govt. Depts.	85	
				Sub-district	1	
				KSB Disaster Prepared Group & DRR Forums	2	
				Press		
				Village	1	
				State Bank	1	
				Central Govt	22	

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)
				Parliament/ Head of District	21	
				Total	399	
	No. of people attending training	150 by Dec 2016	30 (pilot phase)	<u>2018</u> No further update, completed <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>2017/18</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>2018</u> One of the StIRRRD WhatsApp Group comprises many staff who attended the study tours. The group continues to operate on a regular basis, with information being shared, and reference made to observations and lessons learnt during those tours. <u>2017</u>		Action Plan Implementation Progress Report (Annual Report)

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)
				<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) <u>2016</u></p> <p>Study Visit 1 = 100% of survey respondents report that they had made some or many changes to their Action Plans as a result of the Study Visit.</p> <p>Study Visit 2 = 100% of survey respondents report that they had made some or many changes to their Action Plans as a result of the Study Visit.</p>	<p>Sources:</p> <p>Study Visit 1 Report (GNS Science Intl Consultancy Report 2015/10).</p> <p>Study Visit 2 Report (GNS Science Intl Consultancy Report 2016/35).</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>2018</u> No further update, completed</p> <p><u>2017</u></p> <p><u>Achieved (less 1)</u></p> <p>Pilot = 15</p> <p>Study Visit 1 = 25 (8 female)</p> <p>(3 central govt; 1 provincial govt; 2 parliamentarians; 5 district BPBD; 1 district PU; 7 local university; 6 UGM)</p> <p>Study Visit 2 = 28 (8 female)</p> <p>(3 central govt; 4 parliamentarians/Head of Districts; 5 district BPBD; 2 district Bappeda; 6 local university; 8 UGM)</p>	<p>Source: Study Visit Report (GNS Science Intl Consultancy Report 2015/10)</p> <p>Study Visit 2 Report (GNS Science Intl Consultancy Report 2016/35).</p>

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)
				Total = 68 (incl. baseline)	
	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>2018</u> No further update, completed <u>2017</u> <u>Achieved</u> Pilot = 9 Study Visit 1 = 13 (3 female) (UNTAD: 1; UNAND: 2; UNRAM; 2; UNIB: 2; UGM: 6) Study Visit 2 = 14 (6 female) (UNTAD: 2; UNAND: 1; UNRAM; 1; UNIB: 2; UGM: 8) Total = 36 (incl. baseline)	Source: Study Visit Report (GNS Science Intl Consultancy Report 2015/10) Study Visit 2 Report (GNS Science Intl Consultancy Report 2016/35).
	% 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>2017/18</u> No further update, completed in 2016 <u>2016</u> <u>Achieved</u> Study Visit 1 Expectations exceeded $\geq 8/10 = 83\%$ Will help with work $\geq 8/10 = 100\%$ Overall quality and usefulness $\geq 8/10 = 94\%$ Study Visit 2 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 2016/35).

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)
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). DRI 11.1 D	20 attend by June 2015 (and identified level of representations achieved)	None	<p><u>2018</u> No further update, completed</p> <p><u>2017</u> <u>Achieved</u></p> <p>Base Isolation Training 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>Risk Scape Training 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 - 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>

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)
	% of expert training participants that report increased specialist knowledge (pre-post training testing)	80% of participants by June 2015	None	<p><u>2017/18</u> No further update, completed in 2016</p> <p><u>2016</u> Achieved in part Base isolation expectations exceeded $\geq 8/10 = 86\%$ Will help with work $\geq 8/10 = 91\%$ Overall quality and usefulness $\geq 8/10 = 97\%$ Average = 91% Riskscape expectations exceeded $\geq 8/10 = 76\%$ Will help with work $\geq 8/10 = 75\%$ Overall Quality and usefulness $\geq 8/10 = 83\%$ Average = 78%</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>
10. Community projects – design and implementation (P2)	No. of community project designed and implemented	3 community projects by Dec 2019.	None	<p><u>2018</u></p> <p>1 Community Project (Tsunami Awareness) completed (report still being finalised) 1 Community Project (Seismometers in Schools) underway and awaiting evaluation 1 Community Project funded through HEF fund and will; be implemented in 2019</p> <p><u>2017</u></p> <p>2 community projects have been designed and are currently being implemented. Implementation is behind schedule but on track to revised timeframes.</p>	<p>The number of Community Projects was increased from 2 to 4 as a result of the budget redistribution in 2017 (LOV1). This was reduced back to 2 (LOV2), although the 3rd Community Project has in part been funded by HEF (NZ Ambassador's discretionary fund) (2018).</p>

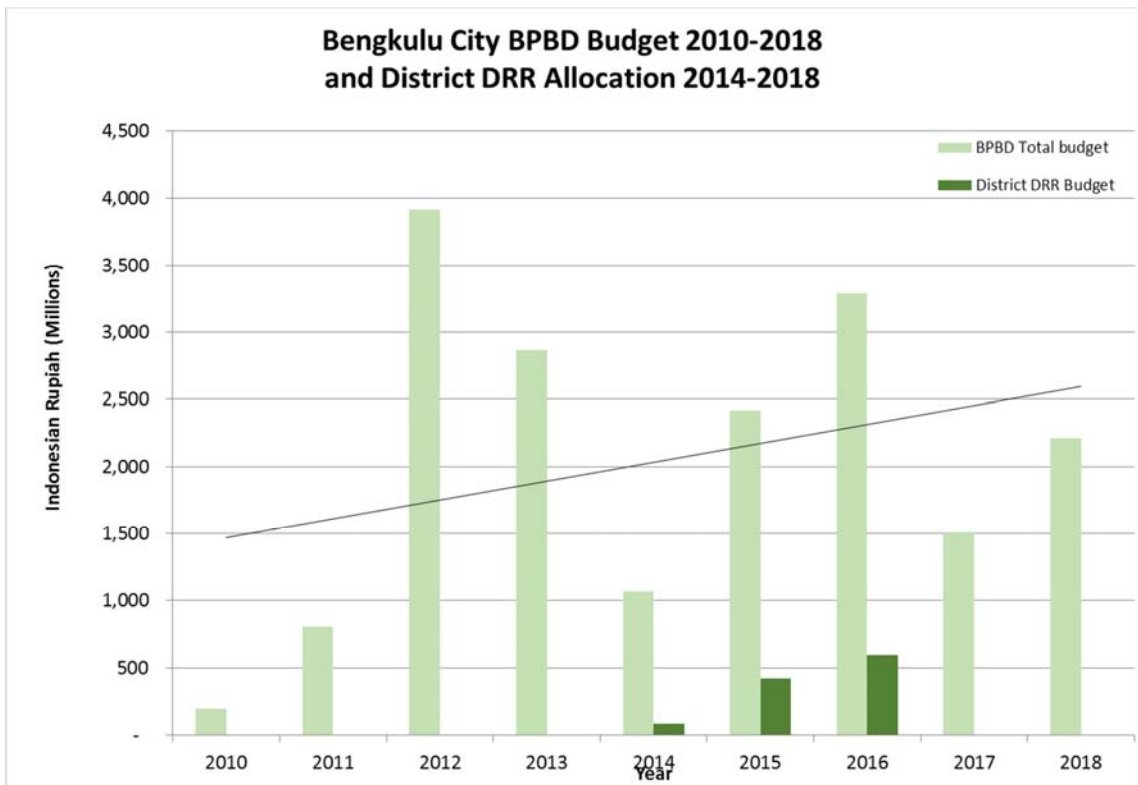
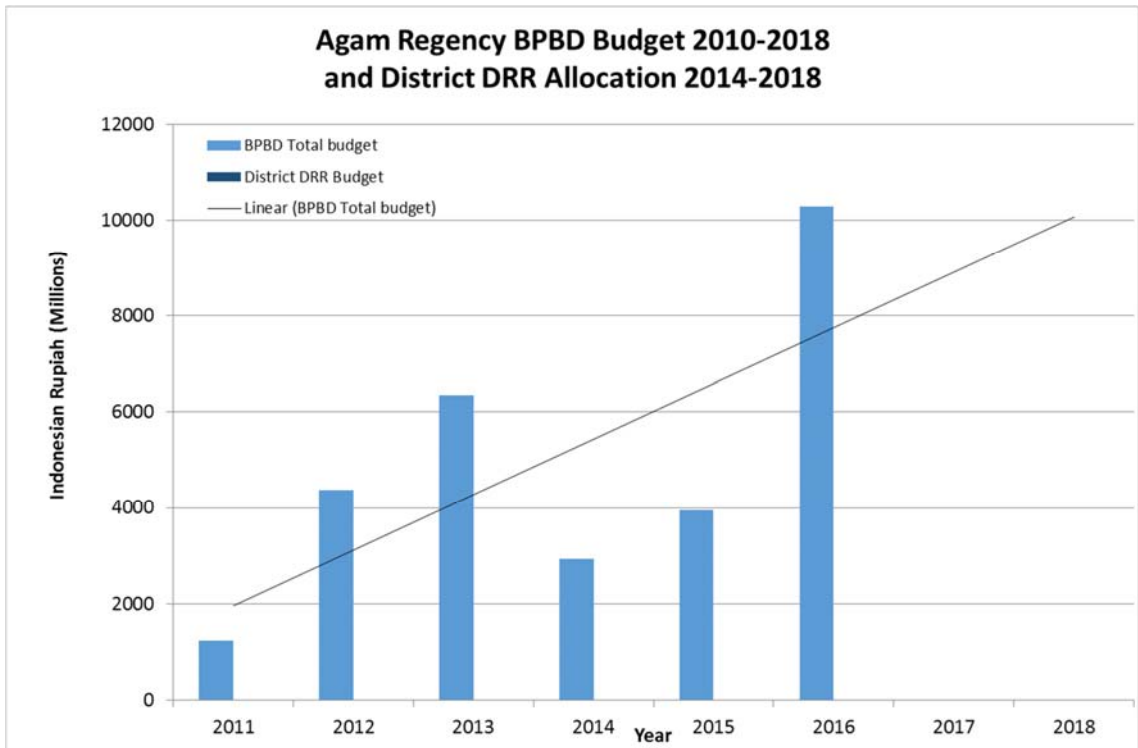
A. LG-SAT (Local Government Self-Assessment Tool) – Baseline as at 2014-2016

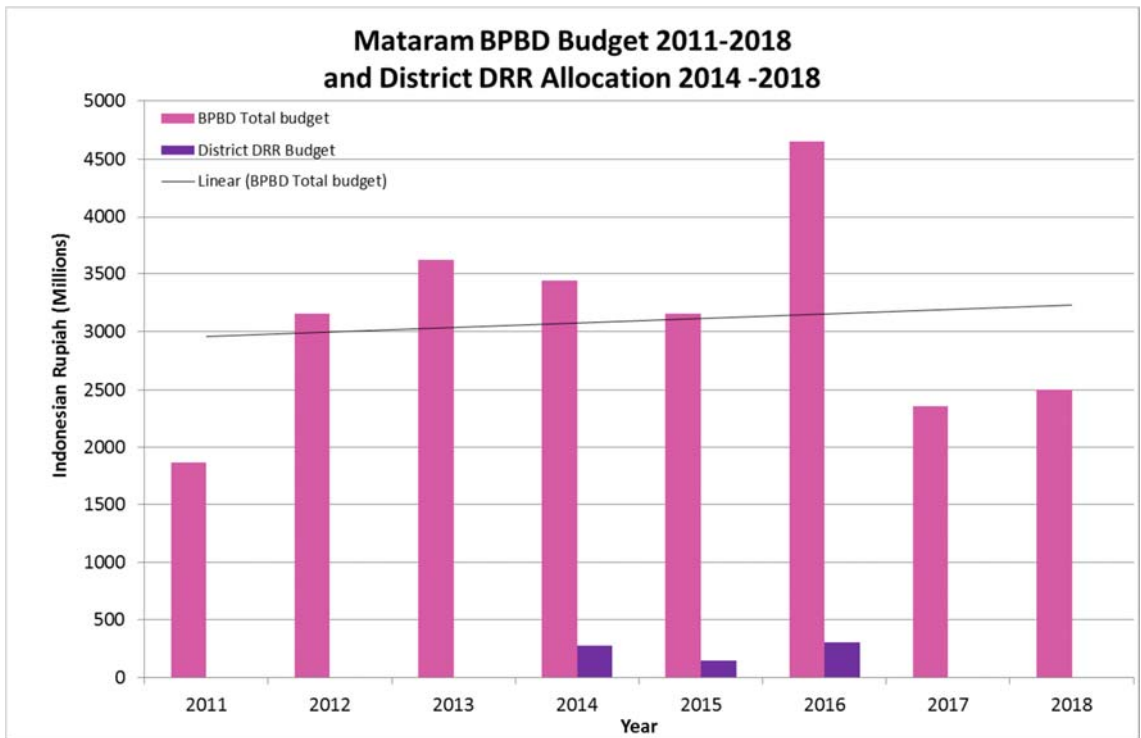
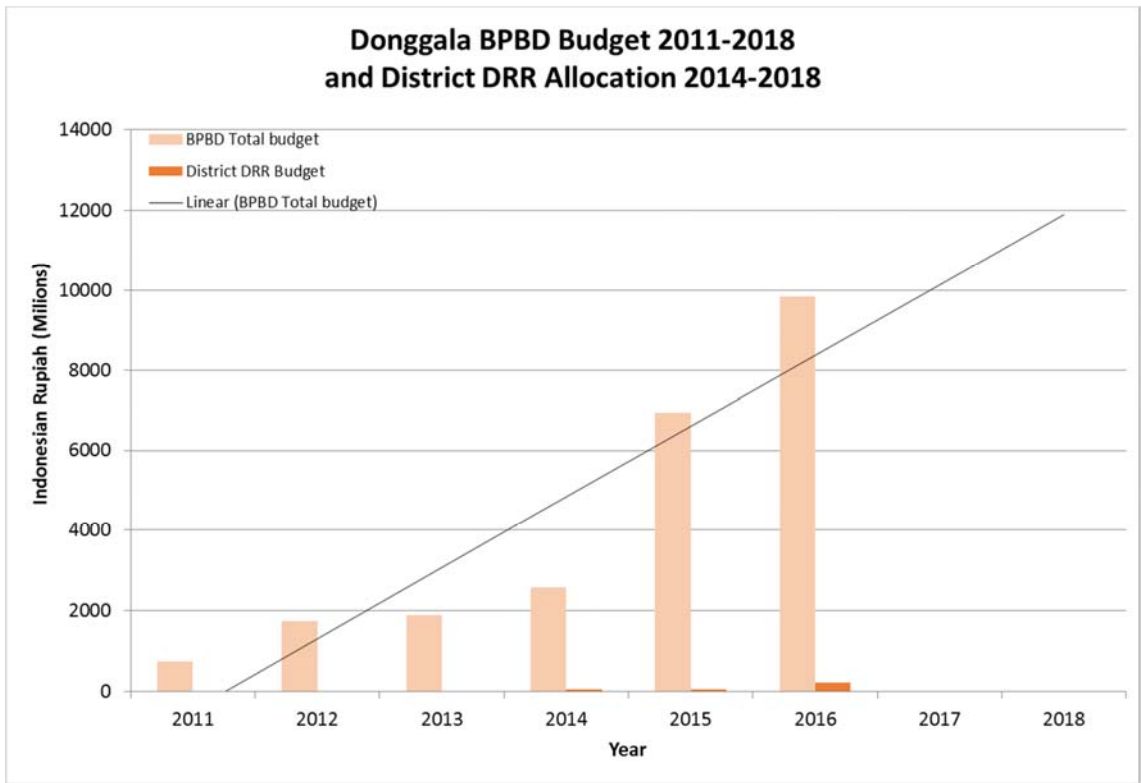


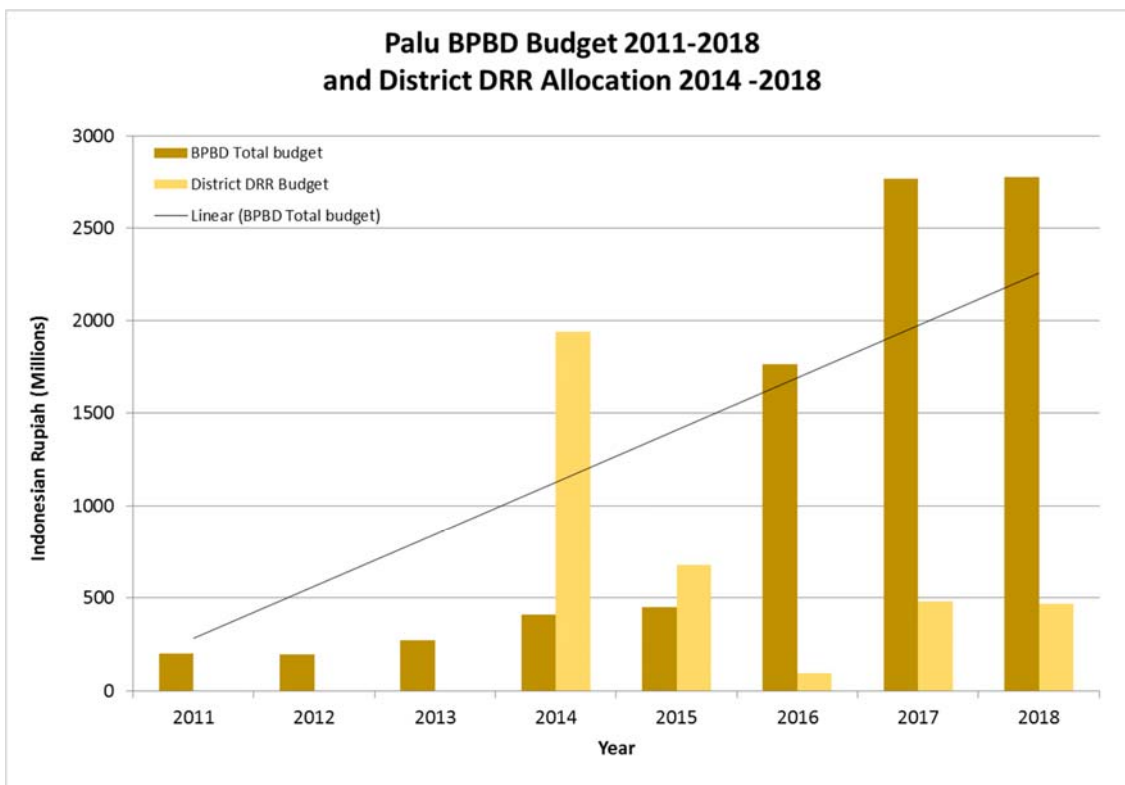
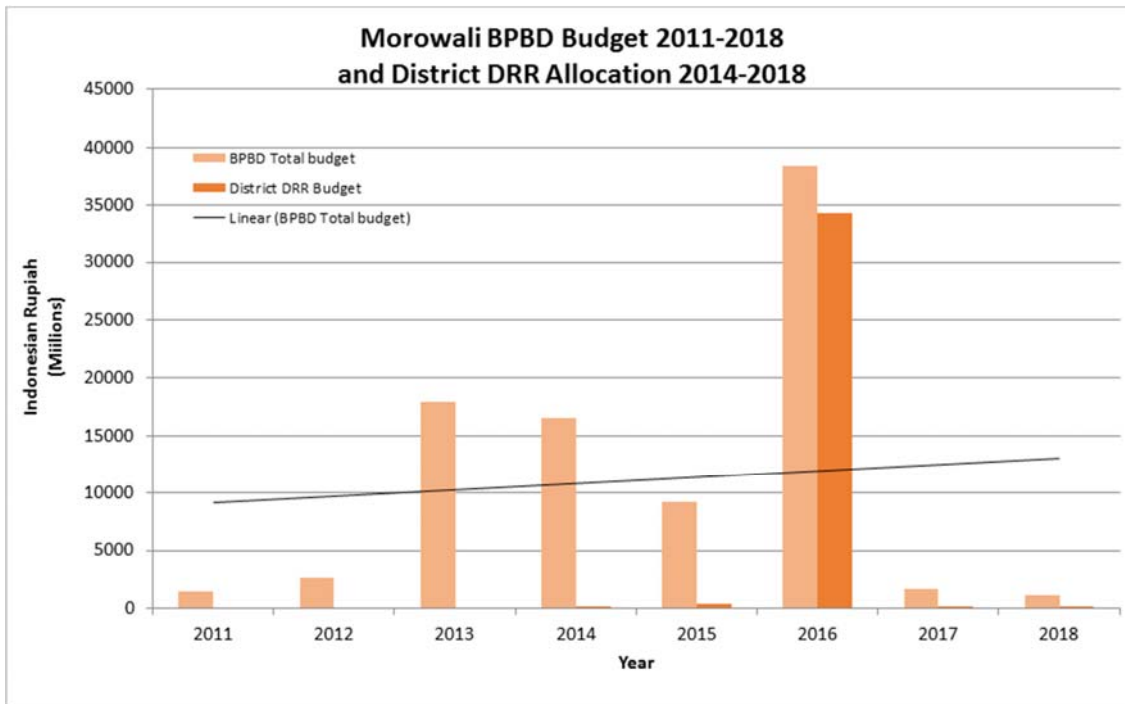
A. List of Research Projects as at end 2018

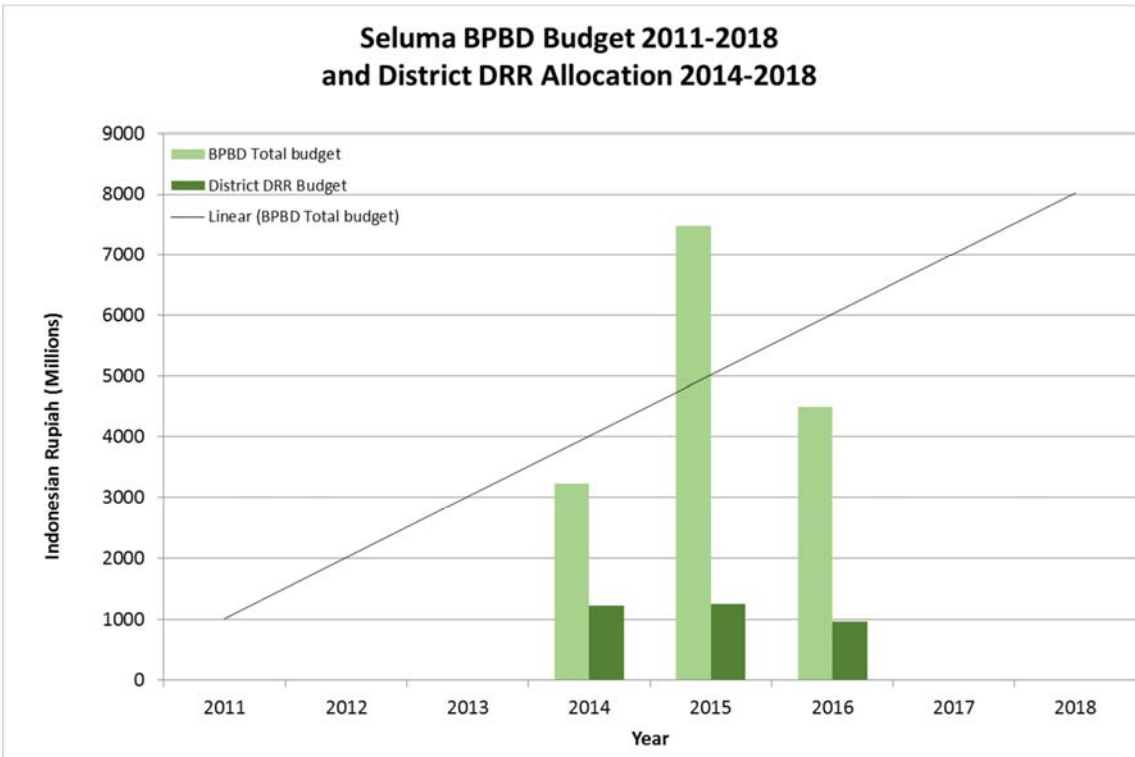
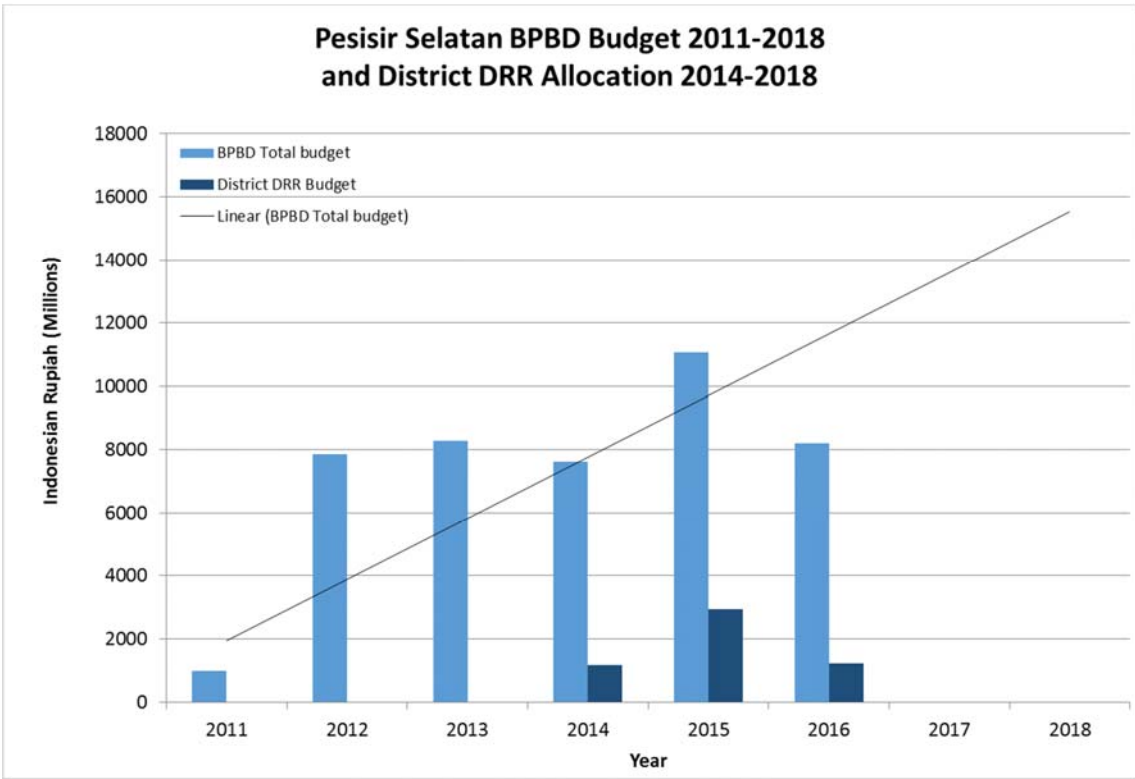
<i>Location</i>	<i>Collaborators</i>	<i>Research project/ Activity</i>
Agam 2018	BPBD ITP (Institute of Technology, Padang	No information available.
Seluma 2017	UNIB BPBD	Workshop with BPBD for Involvement of Disaster Risk Reduction with Private Sector. http://harianrakyatbengkulu.com/ver3/2016/12/15/bpbd-ajak-perusahaan-kerjasama-tanggulangi-bencana/
Bengkulu 2017	UNIB BPBD	Joint research between BPBD with Universitas Bengkulu for student community service (KKN) related to disaster risk reduction. https://bpbd.bengkuluprov.go.id/bpbd-provinsi-bengkulu-memberikan-materi-kebencanaan-dalam-kegiatan-pembekalan-kkn-universitas-bengkulu-periode-79-tahun-2016/
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.

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

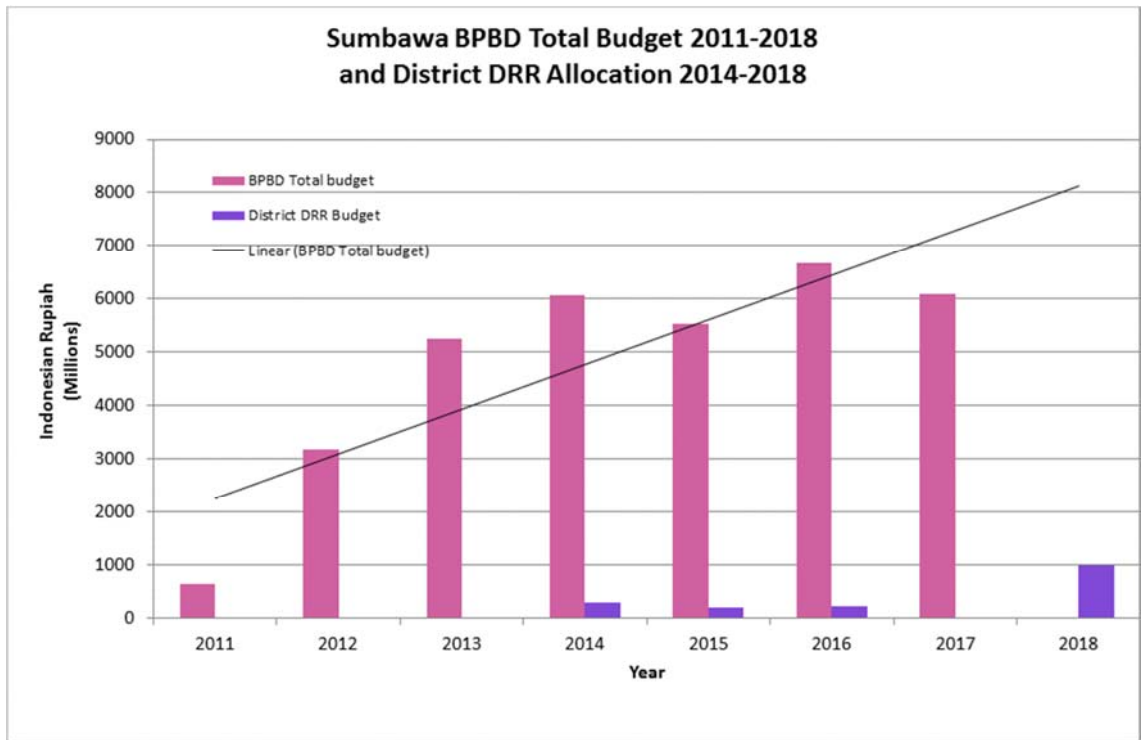








Sumbawa BPBD Total Budget 2011-2018 and District DRR Allocation 2014-2018



C. 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'.

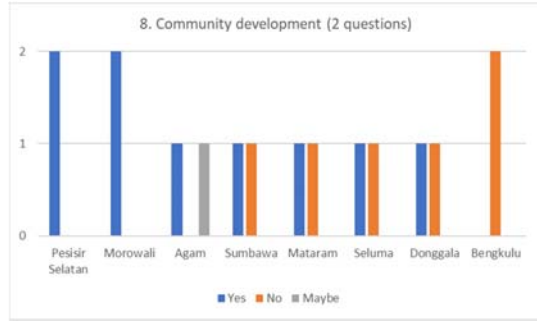
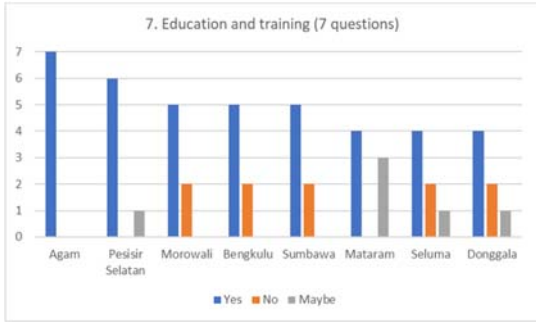
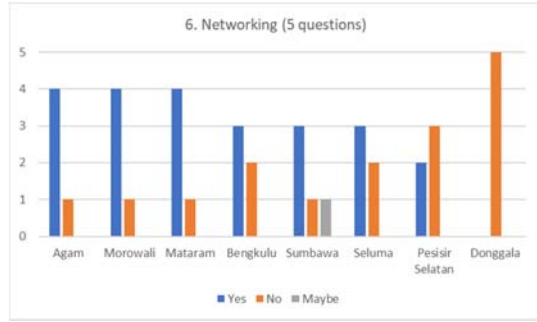
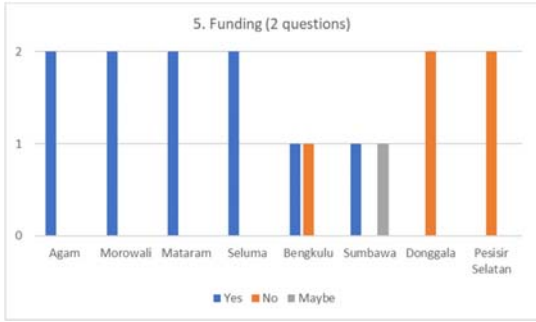
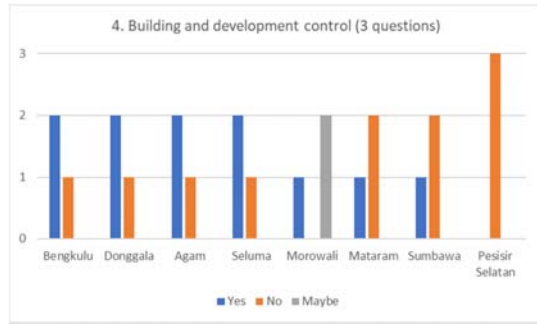
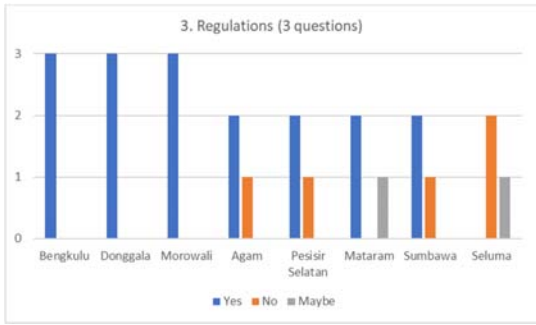
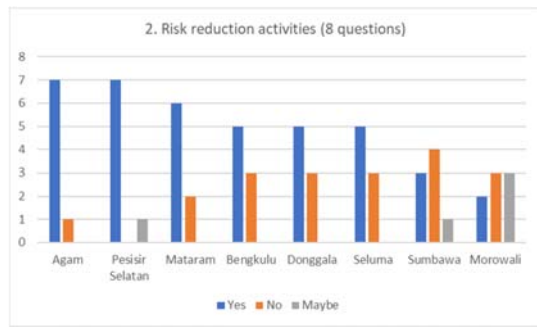
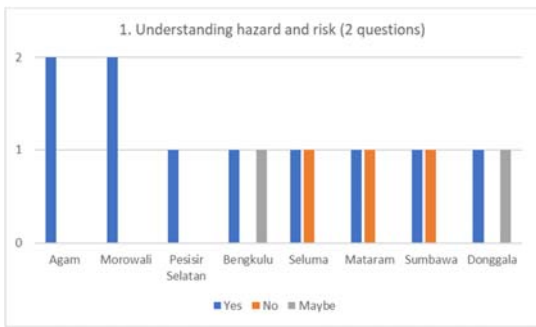
Results.

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 StIRRD 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 2018.

AGG meeting	Actions by StIRRRD	Comment	Progress
17 Dec 2018	None.	This meeting was a Special Meeting to consider 3 proposals for technical support in Palu following the earthquake, tsunami and landslides.	N/A
19 Sept 2018	<p>Continue to promote and socialise the Lombok EQ assessment results (both building and social assessments).</p> <ul style="list-style-type: none"> At DRR Awareness Week in Medan (23-25 Oct 2018) Provide a summary and make available publicly 	<p>Progress interrupted by Palu earthquake and tsunami.</p> <p>Wasn't part of the Medan session</p>	
	Undertake a soft launch of the toolbox at DRR Awareness Week in Medan (23-25 Oct 2018).	Presented at Medan. Encouraging response	Completed.
	Consider web-based versions of the Toolbox, including a link from, or hosted by, BNPB's website.		UGM are currently translating the Toolbox contents and preparing to host a version on the StIRRRD website, at least initially. A link to this can be made on BNPB's website.
	Submit the results of the structural assessment of the Vertical Evacuation Shelter in Rawa Indah to BNPB and Bappenas.	PU have instigated a plan to do structural assessments and retrofitting options for VES	
	Continue discussions on a StIRRRD Exit Strategy at subsequent AGG meetings.		

AGG meeting	Actions by StIRRRD	Comment	Progress
15 Dec 2017	Recommendation that StIRRRD again participate in the next DRR Awareness Week.	Will need additional budget to do this.	Completed. UGM participated in the Oct 2018 DRR week.
	Continue engagement with Bappenas re spatial dynamic modelling.		Completed. An Integrated Spatial Decision Support System (ISDSS) is being explored with Bappenas.
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.	Completed. A special AGG meeting on this topic was 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).		An Integrated Spatial Decision Support System (ISDSS) is being introduced which is probably the best tool available to look at cost:benefit of investment in DRR.
	Policy matrix needs updating in both English and Bahasa.	Both versions exists – they need aligning.	-
	Future AGG meetings to be held at BNPB.		Completed. Dec 2017 meeting and all subsequent AGG meetings have been 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)		Completed. Two meetings with the Bappenas team were held in the second half of 2017. Engagement continues through the ISDSS project.

AGG meeting	Actions by StIRRRD	Comment	Progress
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.
	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.	-
	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.

AGG meeting	Actions by StIRRRD	Comment	Progress
	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.
	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: New Zealand Organisations involved in StIRRRD as at 31 December 2018

<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 (New Zealand 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 (New Zealand 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 New Zealand education sector	University
Canterbury University	Subject matter expert – volcanic ash impacts	University
Auckland University of Technology	Function host ; New Zealand 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

Appendix G: Activity Risk Matrix – as at 31 December 2018

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 may be delayed in part.	Minor	Likely	Medium	Allowing realistic time for actions to be completed. Actions Log for meetings. PM to follow up on actions as required.	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
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 StIRRRD. UGM have assigned non-StIRRRD 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	Likely	Medium	Build capacity within the team; identify preferred suppliers (e.g. NIWA, Michael Goldsmith, subject matter experts), manage scope of sub-contracts.	Open	Michele	Michele/Phil
13	H&S	Sylvia Riches	8/07/2015	<i>Driving Conditions in Indonesia.</i> If GNS staff, seconders 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. Project Team members taking on additional tasks particularly as the end of the project gets closer. Time commitments are reducing but risk remains the same (Sept 2018), Personnel changes effective March 2019 due to change of role of Michele Daly (Director).	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) leaves GNS or UGM 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. Palu Response work, Economics work = scope change.	Moderate	Likely	High	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. Securing extension to timeframes/deliverables in consultation with MFAT. Covering off with variations.	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	Medium	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
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. Build more capacity into the project.	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
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. Remains MD/PG to discuss with UGM during Sept visit (Sept 2018). Refer #35. Have closed and wrapped risk #30 into this one.	Moderate	Likely	High	Regular communication with UGM programme directors. Fortnightly Province Coordinator meetings established. Could function better particularly in the Western Districts. SR to discuss possible options with SE. 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 Firlu at MFAT to assist in resolving this issue. Physical visits required. May resolve itself once Community projects get underway. MD/PG to speak to UGM about driving the PC meetings going forward (Sept 2018).	Open	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
25	Contract Performance	Michele Daly	10/12/2015	If AGG meetings are not better run & organised, GoI could lose interest in the Activity and the project will not be sustainable. Remains high only 2 meetings left.	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. MFAT taking on more duties. Special session AGGs to be held to focus on single issues (e.g. sustainability). UGM need to focus on sustainability of StIRRRD and the DRR network. Discussions will be held during Sept visit (Sept 2018).	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. Avoid Jakarta during Asian games 18 August-2 September or any other large events we are aware of.	Open	Michele	Sylvia
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	possible	medium	Bring in additional resources. Focus on catching up. Good communication with MFAT. Have completed two reports that were outstanding.	Open	Michele	Michele/ Phil
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

Risk ID	Risk categories	Author	Date Registered	Description	Impact severity	Probability of occurring	Overall Risk Rating	Risk Treatment	Risk Status	Risk Owner	Risk Actionee
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 the districts 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 #21.	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). Note: Likely to have to accept Mataram will fall by the wayside. No longer higher than any of the other districts, UGM are actively working with the relevant districts.	Open	Michele	Province co-ordinators
40	Reputation/Brand	Michele Daly	15/06/2017	If other MFAT/GNS contracts are under-performing it could affect our relationship with MFAT.	Low	Unlikely	Low	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 GoI (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. Remain.	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). Next AGG meeting to focus on sustainability issues. More confident that StIRRRD is being referred to in long term strategies. MD will address at AGG Sept 2018. Continue to address at remaining AGG meetings.	Open	Michele	Michele
48	Reputation/Brand	Michele Daly	13/09/2018	Risk that evacuation shelters may be damaged during a natural disaster and not be fit for purpose for evacuees.	Moderate	Possible	Medium	Discussions to be held at September AGG. Communication to villages as to a plan B if this is the case. Follow up required with UGM/AGG, consider putting on AGG agenda.	Open	Michele	Michele
49	Financial/Resourcing	Michele Daly	23/01/2019	If MFAT reducing aid spend in Indonesia, then this may have an impact on funding StIRRRD3	Moderate	Likely	High	Recent disasters may change MFAT view of aid spending. GNS to keep in touch with MFAT, meet and liaise with G2G staff and learn processes.	Open	Michele	Michele

APPENDIX H – 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 KDPDPT)
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)
TOT	Training of Trainers (term referring to capacity building by training or upskilling professionals whose job it is to train others).
UGM	University of 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