#### Six Monthly Report 1 January - 30 June 2019 Strengthened Indonesian Resilience: Reducing Risk from Disasters (StIRRRD)

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GNS Science International Consultancy Report 2019#2



Strengthened Indonesian Resilience: Reducing Risk from Disasters (StIRRRD)

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





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#### **BIBLIOGRAPHIC REFERENCE**

Glassey PG, Fathani TF, Riches S, Ediningtyas F, Wilopo W. 2019. Six Monthly Report 1 January – 30 June 2019 Lower Hutt (New Zealand): GNS Science. p. 79. (GNS Science International Consultancy Report 2019/12).

## Six Monthly Progress Report: 31 January 2019–31 June 2019

# 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> <li>Effective DRR<sup>1</sup> activities – improved practice</li> <li>DRR strengthening model applied to other districts</li> <li>Strengthened DRR planning and implementation by Local Government</li> <li>Improved community DRR practice</li> </ul>
Short-term	<ul> <li>Increased stakeholder awareness and buy-in of DRR approach</li> <li>Local government staff have skills and knowledge to support DRR</li> <li>DRR Action Plans finalised</li> <li>Expert knowledge and skills applied to support DRR</li> <li>Improved community awareness of hazards and risks</li> </ul>

#### Contract or grant information

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

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

#### **Progress report preparation**

Prepared by	Phil Glassey, Teuku Faisal Fathani, Sylvia Riches, Fransisca Ediningtyas, Wahyu Wilopo.
Reviewed by	Michele Daly & Suzanne Paisley
Date of Report	20 August 2019
Report Number	GNS Science International Consultancy Report 2019/12

## Executive Summary

The StIRRRD Activity continues to make progress.

The total actual spend to date is \$6.97 M against a total planned budget of \$7.226 M (LOV2). Overall the budget is 4% underspent to the end of June 2019. This compares to an underspend of 2% at the end of December 2018. This comes about due to the deferring of the final Seminar until next quarter, which is a large proportion of the remaining budget to be spent.

In response to the mid-term review, Sharryn Davies Graham, an Indonesian gender specialist from Auckland University of Technology, has been engaged to facilitate gender training for GNS project team members and support UGM with the analysis of the women's focus group discussions (FGD) that took place in the first half of the Activity. The women's focus group report has been drafted and will be finalised in the next quarter. Recommendations on the changes to the Results Framework have not yet been implemented.

The Activity Toolkit has been developed and is available currently through the StIRRRD website. Preparations for the final seminar, now postponed to the last week in July 2019, are well in hand and Community projects (Output 10) are all but complete. Coaching and Mentoring (Output 3.1) has been ongoing.

Highlights during this reporting period include the school competition as the third phase of the "Seismometer in Schools" Community Project 1 in Palu, and the successful ICUDR conference in Palu, where StIRRRD was well represented. The Rawa Indah "Tsunami Awareness and Preparedness" (Community Project 2) report was completed, and the HEF-Funded Flooding Community Project in Sumbawa has started with the support of StIRRRD.

The focus for the next six months will be hosting a successful final seminar, the LG-SAT (Local Government – Self Assessment Survey) resurvey, presenting the Activity Toolkit, completing and reporting on community projects and preparing the final report. Sustainability initiatives have been identified and documented to ensure continuation of the approach and support from Government of Indonesia (GoI). BNPB have indicated that they wish to support UGM to continue to take the StIRRRD

approach to other districts. The Indonesian President has directed regions to make Disaster Mitigation a priority reinforced by a directive from MoHA - Reinforcement of Disaster Mitigation Implementation in Regions.

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 January – 30 June 2019

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) <u>Team leadership and management</u> 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.

 <u>New GNS leadership</u>. Phil Glassey moved into the position of Director of the StIRRRD project as Michele Daly has stood down as Director due to her new role as Department Manager, Society & Infrastructure at GNS Science. Michele remains as an advisor to StIRRRD and represents GNS on the Activity Governance Group. Richard Woods currently the GNS Science province coordinator for Central Sulawesi, has been appointed as the new Deputy Director of the project within the GNS Science team.

Several team meetings are held including:

• Separate GNS Science and UGM Project Team Meetings (approximately fortnightly).

Full UGM-GNS Project Team meetings were held by Skype on 14 February and 13 June 2019.

- Director's Meetings (involving Daly (then Woods), Glassey, Fathani, Wilopo, Ediningtyas and Riches) are held approximately monthly, and were held this reporting period on 7 February and 20 June 2019. As well as a series of meetings held with Faisal Fathani (UGM project Director) on 3 April in Auckland. Topics discussed included StIRRRD sustainability and what future projects might result from StIRRRD, the Final Seminar, the Activity Toolkit, Palu response and recovery projects.
- StIRRRD Province Coordinator skype meetings were held as follows:
  - Eastern province, 27 February, 10 & 16 April and 21 May 2019.
  - Western province coordinators meeting was held on 7 May.
- Weekly meetings of the final workshop sub-committee were set up effective 14 May and will be held until the workshop, scheduled for 23 July.
- A meeting was held between Olivia Philpott, Laura Holder (MFAT), Phil Glassey and Sylvia Riches (GNS Science). Several topics were discussed including proposals for technical responses to the Palu events and future reporting for StIRRRD.

(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. New risks added this reporting period include:

a. Threatening reaction to New Zealanders in Indonesian in wake of mosque attacks in Christchurch

b. National Elections April 2019 - Civil unrest and reviling of foreigners, depending on election result.

c. Changes in process at MFAT that could impact ongoing work.

#### (0.1) Letter of Variation (LoV) to the contract:

The LOV has been signed by GNS Science and a draft sub-contract agreement with UGM based on this variation is in place but not yet finalised.

#### (0.2) <u>AGG Meetings</u>:

No AGG meetings were held in this reporting period, the next one is scheduled for 22 July 2019 in Jakarta.

(0.4) Communications Plan: There was a lot of media activity during this reporting period, due to the two community projects currently underway. An overview of social media metrics can be found in Table 1. Several blogs were written and added to the StIRRRD website between January and July 2019; they covered a variety of topics:

- the RiskScape workshop held in Palu at the end of April was posted on the website <u>https://stirrrd.org/2019/05/07/new-zealand-risk-assessment-tool-</u> workshop-help-at-icudr-conference-in-palu/;
- the completion of the paving at Rawa Indah school was posted on the 8 January. <u>https://stirrrd.org/2019/01/08/rawa-indah-village-school/.</u>
- <u>Damage in Sigi</u> was posted by Michele Daly, on the 30 April.
- Several "WhatsApp" posts were made during the teams visit to Palu, Donggala and Morowali as part of the ICUDR conference, Seismometer in Schools (SIS) competition and additional coaching visit to Morowali in April.

Facebook impressions	Jan – June 2019: 2,860
from page posts	June – Dec 2018: 8,412
	This equates to a 66% decrease in total Facebook reach over
	the last period.
Facebook Page likes:	Jan – June 2019: 201
	June – Dec 2018: 202
	This equates to an 0.5% decrease in total Facebook likes
	over the last period.
Total number of Twitter	Jan – June 2019: 11,006
impressions from tweets:	June – Dec 2018: 30,931
	This equates to a 64% decrease in total Twitter reach over
	the last period.
Total number of Website	Jan – June 2019: 1,922 (NB: the site was accessed from the
visits:	following countries March to June)
	Indonesia 51%
	New Zealand 18%
	United States 10%
	Other 21%
	June – Dec 2018: 2,889
	This equates to a 33% decrease in total Website visits over
	the last period.
Nata Tha daamaa in Faadaa	k reach continues due to the way Eacobook are implementing

 Table 1
 StIRRRD Social Media Metrics January – June 2019

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.

#### Output 1: Activity Toolkit

It was agreed that in the immediate future, the Activity Toolkit would be hosted on the StIRRRD website and managed and maintained by UGM. Access to and training on adding content to the StIRRRD website was given to UGM. UGM have developed a prototype internet toolkit located on the StIRRRD website – see <a href="https://stirrrd.org/toolkit-home/">https://stirrrd.org/toolkit-home/</a>. The finalisation of this is still ongoing.



#### Output 2: Risk Reduction Network

The final workshop was moved from 24 June to 23 July due to concerns around the ability to be able to plan this meeting due to the closeness of Ramadan and the following Lebaran holidays (3-7 June). Planning for the workshop has started and regular meetings are being held between GNS and UGM staff in preparation. Confirmation of attendance by Peter Benfell, General Manager, Science, GNS has been received, Peter will be a keynote speaker at the opening ceremony.

#### Output 3: Coaching and Mentoring Support

Members of the UGM team visited the west Sumatra districts (Agam, Pesisir Selatan and Padang) late (29 -31) January 2019. This was a good chance to catch up with old friends, relatively new BPBD heads in Agam and Pesisir Selatan and to monitor DRR activities and Action Plan Implementation. An additional coaching and mentoring visit to Morowali took place in April 2019 along with the LG-SAT resurvey, on the back of the SIS in Schools (Output 10.1) community project visit and ICUDR conference in Palu.

Districts	January	February	March	April	Мау	June
Agam	23	6, 22, 26	1, 2, 8, 30	1, 2,3,4,	5, 21, 25	1, 9, 13, 27
Bengkulu	14	2, 11, 18	22	6, 27	20	10, 26
Donggala	17,24	25, 28	20, 28	18, 19, 23, 26	14	8, 15
Mataram	15	2, 11, 26	4, 11, 18, 20 25-29	1,2,3,4	24	21
Morowali	29	26	20, 28	12, 16, 22, 24	22	8
Pesisir Selatan	8	2, 13	6, 28, 30	1, 29	17, 23, 26	9, 10, 12, 21
Seluma	15, 25	2, 11	22	27	24, 25	6, 7, 26
Sumbawa	15	2,11, 26	4, 11, 18, 20, 22, 25- 29	1, 2, 3, 4, 5	24, 29	21, 26
Palu	9, 17, 20					
	Status of tents.	Update on Action Plan 2018.	District visit	Meetings	Staff updates	Final seminar
	Update on Action Plan 2018.	Work plan for 2019.	SIS competition.	Sumbawa HEF project	Drought conditions	BPBD Agam identifying spots prone to natural disasters
	Work plan for 2019.	SIS competition.	Construction updates	Gender participation	BPBD took or prepared for response action due to natural events	BPBD response to event.
	Update on BPBD activities.	Budgets 2018 & 2019	Preparation for Sumbawa community project.	SIS	Final seminar preparation.	BPBD disaster preparedness training
	Update on disaster occurrence.	Update on BPBD activities.	BPBD Sumbawa activities	Kalimango Village	Recovery post EQ	Food & agri. Agency construct a food security building, shows other agencys play an important role in resilience.

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

<sup>2</sup> UNAND (Andalas University), UNIB (Bengkulu University), UNRAM (Mataram University), UNTAD (Tadulako University)

Districts	January	February	March	April	Мау	June
	Community project 2 Tsunami awareness collateral.	Reconstruction phase post EQ	Sumbawa flood project	Update on DRR activities conducted by BPBD	Action plan progress	
	BPBD Agam held a simulation with primary school in preparation of April preparedness day.	Sumbawa flood project.	Seluma DRR activities Resilient villages, safe schools', dissemination of disaster risk information	BPBD collaborates with army forces re planting as part of tsunami and erosion mitigation.	District of Pessell collaborated with ASB towards resilience Nagari on inclusive disaster.	
		BPBD Sumbawa activities, resilient village, dissemination of hazard potential, sustainable DRR dissemination at schools. Staff rotation.	Bengkulu BPBD updates	Head of districts held discussion re diverse and alternative livelihoods.		
		BPBD Seluma, resilient villages, 3 disaster safe schools, activation of DRR forum, poster development.	BPBD Pesisir Selatan updates of DRR activities.	Prep for visit.		
		BPBD Pesisir Selatan issued alert warning due to earthquake and requested people not wait for siren but to evacuate if they felt long and strong.	BPBD Agam, activities update.	SIS including school competition		
		BPBD Agam, earthquake simulation,		Visit to Morowali LGSAT resurvey School visit.		

More details are in Appendix C and in previous monthly reports.

#### **Output 4: District Vulnerability Assessment and Profiles**

The GNS-StIRRRD team attended a 2-day gender socialisation training workshop in February facilitated by Sharryn Graham Davies of AUT. Gender Training for UGM staff was supposed to occur coincident with training for the CaRED programme but this did not happen.

A draft report entitled "Gender-Sensitive Disaster Risk Reduction in Indonesia" has been prepared based on focus group sessions held as part of the Action Plan workshops and is currently being reviewed.

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

The first of the repeat LG-SAT surveys were undertaken in Donggala and Morowali in April 2019. Additional resurveys will be scheduled around the final seminar activity in July.

#### **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) <u>Integrated Spatial Decision Support System</u> (ISDSS). This Output and subsequent report has been completed.

#### Output 10: Community Projects

#### (10.1) Seismometers in Schools Community Project

The Seismometers in Schools competition and final evaluation took place in April to coincide with and as part of the ICUDR conference. Due to difficulties associated with the earthquake of last year only two schools from Palu competed. However, the competition was intense and of a high standard and the program has been enthusiastically received in Palu. The SIS survey data collected during April's visit is currently being analysed. Results will be presented in the SIS project report presently being drafted.



#### (10.2) Rawa Indah Tsunami awareness and preparedness

Information boards were installed at the school, tsunami shelter, and market place. These have been put in place by the locals using the best of materials available, but they are not ideal. The report on the Rawa Indah tsunami awareness and preparedness project has been completed and submitted.



Tsunami Information board at the tsunami shelter (left), at the Market place (right) and at the school (below) in Rawa Indah.



(10.4) *HEF Community project – Flood Management in Alas village, Sumbawa.* All agreement documents have been completed. A project plan is being put in place. Communication with the Sumbawa BPBD and UNRAM regarding project implementation has been established. While this project isn't part of the StIRRRD contract some support over and above the HEF funding is being provide by StIRRRD.

#### 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 10.31) as agreed in the *Letter of Variation* signed in April 2019. The total contracted value remains unchanged (New Zealand \$7.266), however costs have been redistributed across different outputs.

The total actual spend to date is \$\$6.97 M against a planned budget of \$7.226 M. Overall the budget is 4% underspent to the end of June 2019. This compares to an underspend of 2% at the end of December 2018.

The Final Seminar has been postponed until the end of July 2019, along with the LG-SAT re-survey and presentation of the Activity Toolkit. The result framework review has yet to be completed and will take place August 2019. The delay of these activities is the prime reason for the underspend against budget.

#### Progress Against Delivery of Outputs

The six months to the end of June 2019 has been dominated by the Community projects and preparation for the Final Seminar to be held in July 2019. Appendix B shows the estimated percentage completed for each high-level output. Some tasks have been rescheduled as defined by LOV2. Some key programmed tasks were undertaken this reporting period and are now completed including:

- Coaching as scheduled with visits to Pesisir Selatan, Agam, Morowali, Donggala and Palu
- The first of the LG-SAT resurveys in Morowali and Donggala
- Community Project #1: Preparation & start of implementation including completion of the Seismometer in Schools competition
- Completion of Community Project #2: Tsunami Awareness, Rawa Indah.

Other activities have included:

- Attending and presenting at the ICUDR conference held in Palu April 2019.
- A Riskscape follow-up workshop attached to the ICUDR conference, which was funded from GNS research budget.

#### 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.

## Significant Highlights

Significant highlights this reporting period include the following:

- UGM Project Director, Faisal Fathani was appointed to a Bappenas expert panel, to review and comment on proposed plans for reconstruction in Palu. Gegar Prasetya, who has also been part of the StIRRRD team, is also on the panel. They have reviewed and commented on Japan International Cooperation Agency (JICAs) plans for hard coastal protection and tsunami walls, recommending more soft engineering approaches (e.g. Mangroves) along with appropriate land use planning. Softer approaches as part of a suite of mitigation options are promoted as part of StIRRRD and it is hoped that Indonesian experts involved in the Palu Recovery that have been involved with StIRRRD can help influence the direction of the recovery plan for Palu.
- Gender Socialisation Training was held at GNS Science Avalon, on 21 and 22 February. This training was run by Sharryn Graham Davies of AUT. The training was attended by all StIRRRD GNS project team members. An invitation to the introductory session "what is gender and why it is important for DRR?" was opened up to other GNS staff outside of the team, as well as others (e.g. NIWA) from organisations who are working in international development work. This invitation was well received, and several staff attended the open session. The training should enable strengthened project design around gender in the future.
- Faisal Fathani was an invited keynote speaker at the Pacific Conference on Earthquake Engineering held in Auckland from 4-6 April 2019. This conference is a prestigious event attended by approximately 1000 people. His keynote was on the Palu earthquake, landslides and tsunami as well as reconstruction and recovery. He profiled StIRRRD and the Indonesia – NZ relationship. While in NZ, he also met with Sharryn Graham Davies and Tonkin and Taylor, as well as GNS Science staff.
- The International Conference on Urban Disaster Resilience (ICUDR) was held in Palu 25-27 April 2019. The conference was postponed from November last year due to the September 2018 earthquake and tsunami. The StIRRRD team was well represented with 4 presentations including keynotes by Michele Daly and Faisal Fathani. A RiskScape workshop was held as part of the conference. The Conference dinner was attended by Chargé d'Affaires, Roy Ferguson who was also present at the conference during the time of the SIS School competition. The conference was important event as it drew an international audience to Palu and enabled the recent disaster events and subsequent management to be discussed and debated. This included the Recovery Plan for Palu and Donggala. The StIRRRD team encouraged conference participants to get involved in the development and implementation of the Recovery Plan.
- The Seismometer in Schools competition was held in conjunction with the ICUDR conference in Palu. The competition was rigorous but well received by the

students who competed enthusiastically and produced a high standard of work. There was good buy in by the collaboration partners, BMKG and Lipi.

- Chargé d'Affaires, Roy Ferguson spoke at the Padang Economic Conference, and while there he visited the Tsunami Blue Line initiative that was adopted by Padang City based on learnings from New Zealand. The Blue Line shows where the Tsunami safe space starts. This visit is giving effect to the relationship being developed through StIRRRD between Wellington and Padang.
- Lalu Budi Suryata, SP, a StIRRRD alumni from Sumbawa District Parliament, was elected to the Provincial Legislature (DPRD). He is committed to supporting DRR initiative to increase the capacity of Nusa Tenggara Barat community. It is encouraging to see StIRRRD alumni moving into different roles within local government and taking their DRR knowledge with them. This will contribute to an eventual 'whole of government' approach to DRR.

## Other Related Activities

#### o Palu Earthquake Recovery Proposal

Three proposals were first submitted to MFAT in December 2018 and revised in February 2019. These took considerable time to develop in terms of liaising with NZ and Indonesian collaborators as well as the GoI and MFAT. Refinement of the proposals is ongoing. Michele Daly met with Arum Sudiatma of Bappenas together with Fajar Anugerah from NZTE. Bappenas remain keen to have the ISDSS get underway and have provided a letter of support

• <u>GAR 2019</u>

The StIRRRD team submitted a paper for the UNISDR Global Assessment Report 2019 (GAR2019) on the StIRRRD Action Plan process. A link to the paper can be found here: <u>http://www.preventionweb.net/publications/view/66407</u>.

## Significant Issues or Risks

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

- It was identified by StIRRRD that Rawa Indah Vertical Evacuation Shelter (VES) built by BNPB and PU had some structural vulnerability to earthquake shaking. This was bought to the attention of the AGG in September 2018 and has resulted in PU undertaking a structural reassessment of the 16 VES constructed to date and remedial options as required.
- JICA was not fully aware of the extent to which StIRRRD had been operating in Central Sulawesi, despite Faisal Fathani being on the recovery plan review panel and intended to include the team in recovery initiatives. MFAT was going to schedule a DRM specific meeting with the JICA team in Jakarta to discuss.
- Palu local officials seemed to be unaware of the proposed recovery plan and had not been consulted. They were not pleased find out about it during the ICUDR conference. The StIRRRD team recommended that local officials, university staff and students and other conference participants get involved in the recovery plan implementation process.
- In Central Sulawesi, there are still many damaged buildings, and recovery seems slow, with many people in tents. The Palu government and Universities are keen to have support in relation to the building damage and build back better proposals currently being assessed by MFAT. Significant damage has occurred in Sigi and Donggala which have had little attention compared to Palu. Sigi District has approached UGM for assistance with recovery.

P.J. Slassey

Phil Glassey 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 Governance Group Action Log
- Appendix E: NZ Organisations involved in StIRRRD as at 31 December 2018
- Appendix F: Activity Risk Matrix
- Appendix G: Activity Governance Group Issue & Policy Recommendations Matrix
- Appendix H: Abbreviations

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

<b>Combined Financia</b>	Report								
Output	Description	Actual Expenditure Time	Disbursement	Planned Expenditure Time	Disbursement	Total Actual Expenditure	Total Planned Expenditure	Total Variance	
Output 0 Project Managem		1,356,882	177,339	1,062,260	-	1,534,222	1,218,650	-26%	
	0.1 Project Management	713,662	43,485	450,960		757,147	450,960	-68%	Expected due to add meetings, scoping F are for GNS staff at
	0.2 AGG Meeting	95,881	51,012	76,800	105,750	146,893	182,550	20%	Some disbursement Jakarta have been a
	0.3 Liaison Jakarta	116,271	30,173	243,100	41,230	146,444	284,330	48%	Not as many mtgs h Jakarta. Mtngs will some time. Also off
	0.4 Activity Communications Plan	68,961	13,721	28,500	6,050	82,682	34,550	-139%	piggybacked on oth More time spent tha StIRRRD brochures. StIRRRD is captured
	0.5 Reporting – Monthly, Quarterly, Task, Annual, Completion	192,753	5,937	167,550	735	198,690	168,285	-18%	Reporting requirem
	0.6 -0.14 Major milestone reporting	79,013	3,330	95,350	2,625	82,344	97,975	16%	Most reports have l
	0.15 Mid term Review 0.16 NZ visit March 2018	40,125 50,128	9,683 19,970			49,808 70,098			Unbudgeted task. Additional unbudge direct disbursemen
	Output 0. Project Management	89	26			115			(internal adjustmer
Output 1 Activity Toolkit	1.1 Prepare Draft Activity Template	123,576 28,844	17,795 11,763	266,250 29,250		141,371 40,607	317,150 29,250	55% -39%	Toolkit is being fina GNS are spending m part for underspend
	1.2 Annual reports learnings	13,661	1,422	48,000		15,082	48,000	69%	Work on this has b
	1.3 Activity Toolkit - Draft	62,025	1,434	72,700		63,460	72,700	13%	Underspent as time
	1.4 Activity Toolkit - Review	19,045	3,175	38,150		22,221	38,150	42%	Toolkit will be furth
	1.5 Activity Toolkit - Finalise			38,150			53,350	100%	Web version has no
	1.6 Activity Toolkit - Present			40,000			75,700	100%	Final workshop is d
Output 2 DRR Network	2.1 Devial and ant of University Mal Ve and Latters of	360,323	259,381	509,600		619,704	1,031,233	40%	
	2.1 Development of University MoU's and letters of support 2.2 MoU Finalisation and sign-off	19,200 12,000	2,100	19,200		19,200 14,100	19,200 14,100	0%	This was provided by
	2.3 2014 KPDT 70 District workshop - UGM	40,694	34,126	88,850		74,820		57%	This was previously The workshop was 2
	2.4 Bi annual DRR meetings	3,198		19,100		2,935		96%	NZ specialists parti Airfares budgeted h due to timing with t with the national D at that event.
	2.5 Mid term Workshop	145,221	146,020	151,350	149,915	291,241	301,265	3%	at that event.
	2.7 Other Activities - website, newsletters	5,418	2,400	30,000		7,818		74%	Included in part un WhatsApp and not
	2.8 Additional Liaison (Provinces National DRR Events)	42,859		49,750		75,053		39%	Time costs higher t
	2.6 Final Workshop 2.9 Awareness Week 2015 Output 2. DRR Network	16,292 58,935 16,507	16,906	139,350	161,915	42,190 75,841 16,507		86%	The workshop has b Unbudgted activity (internal adjustmer
Output 3 Coaching & Mento		461,673		409,470	107,291	627,952		-22%	(internal aujustine)
	3.1 Coaching & Mentoring All District Visit	218,248		202,270		319,118		-27%	Costs for this visit e
	3.2 Ongoing Support – Other	163,722		171,450		193,819		2%	
	3.3 July 17 West Sumatra coaching visit	52,506		9,000		73,723		-333%	Additional unbudge
	3.4 Aug17 Seluma_Morowali Coaching Visit	22,547	8,861	26,750	24,038	31,408		38%	Additional unbudge
	3.5 Lombok Post EQ visit (UGM Only)	4,650	5,234			9,884			Unbudgted task

#### Reason for Variance

dditional project management tasks including scoping LOV, additional project team g Palu proposals and managing an additional visit to New Zealand. Disbursements attending project team meetings in NZ.

ent costs (i.e. flights) have been recorded against other activities (i.e. meetings in arranged around other visits).

have been held as planned due to people not being available when we are in ill be programmed in for future visits. MFAT has not held a joint donor meeting for offset by meeting with Indonesians in NZ in March 2018. Some meetings also other scheduled visits.

than budgted on communications (website updates; blogs; videos etc) and printing s. Offset in part by underexpenditure in 2.7. Time spent presenting at conferences on ed here

ments are taking more time than budgeted.

e been completed under budget, two reports are still only partially complete.

lgeted task. Some costs picked up by MFAT, however GNS and UGM time and GNS ents that weren't covered by MFAT are captured here. nent)

inalised

g more effort here than budgetted. UGM have spent less time to date. Compensated in end in 1.3.

been captured elsewhere.

ne is being captured in 1.1.

rther reviewed now web version has been developed.

now been developed and toolkit will be presented at the final workshop in July 2019. deferred

ly accounted for in 2.1

s 1.5 days instead of 2 days as budgeted. Airfares were lower than expected. Fewer rticipated due to timing and changed format.

I have been associated with other outputs. The mtgs have been shorter than planned h the Hazards 101 training and the Mid-Term seminar. A meeting planned to coincide DRR event in Sorong in Oct17 did not take place due to the low number of attendees

under 0.4 Communications Plan. Communications with districts is mostly through ot via website or newsletters as originally envisaged. than budgetted, offset in part by reduced disbursements.

been deferred but preparations have started

ent)

t exceeded budget.

lgeted task. dgeted task.

Output 4 District Vulnera	ability Assessment & Profiles - Donggala, Agam, Bengkulu	452,287	122,780	403,900	148,338	575,067	552,238	-4%	
output + District vullere	4.1 Vulnerability assessment - Donggala, Pessel,	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.
	Bengkulu, Mataram	,	,		,	,			
	4.2 Vunerability assessments – Bengkulu Seluma,	71,293	14,292	42,900	8,130	85,586	51,030	-68%	Time charged to other outputs (4.1). Savings made in airfares.
	Sumbawa	,	, -	,	-,		- ,		
	4.3 Vunerability assessments – Morowali, Agam	100,127	34,730	92,400	28,363	134,858	120,763	-12%	More time and travel costs needed for Morowali.
	4.4 National, Province, District Budget	12,900	0 1,7 00	31,450	20,000	12,900	31,450	59%	District budget data has been collected and analysis has now taken place. Data is difficult to inte
		12,500		51,450		12,500	51,450	3370	
	4.5 District Gender Vulnerability	7,112	14,233			21,345			Unbudgted activity - DRAFT report prepared
	Output 4 District Vulnerability Assessment & Profiles -	11,139	0			11,139			(internal adjustment)
	Donggala, Agam, Bengkulu					,			
Output 5 LG-SAT Adaptat		91,054	9,995	178,900	10,500	101,049	189,400	47%	
	5.1/5.2Review & Revise ISDR	20,498	2,865	18,800	1,680	23,362	20,480	-14%	Completed under budget.
	5.3/5.4 LG-SAT Palu & Padang	7,200	1,680	22,800	1,680	8,880	24,480	64%	Completed under budget. Co-funded by Kemendesa.
	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	39,158	0.0	61,000	3,150	39,158	64,150	39%	Time charged to other outputs (5.5).
	5.7 LG-SAT Final Survey and Analysis	3,291	4,610	61,000	3,150	7,901	64,150	88%	Survey started but not due for completion until next period
	Output 5. LG-SAT Adaptation & Application	-7,423	4,010	01,000	5,150	-7,423	04,130	0070	(internal adjustment)
			300,774	604,550	200 050	834,705	004 409	16%	COMPLETED
Output 6 DRR Action Plan	6.1 Action Plan template	533,931			389,858		994,408		Completed under budget.
		6,016	315	14,700	315	6,331	15,015	58%	
	6.2 Preliminary Action Plan Workshop 1 - Donggala,	205,412	144,153	270,800	158,283	349,565	429,083	19%	Airfares and simultaneous translation costs were less than budgeted.
	Pesisir Selatan, Bengkulu Kota, Mataram Kota								
	6.3 Preliminary Action Plan Workshop 2 - Seluma,	64,607	82,125	157,800	106,515	146,732	264,315	44%	Airfares and simultaneous translation costs were less than budgeted.
	Sumbawa								
	6.4 Preliminary Action Plan Workshop 3 - Morowali,	92,080	74,181	161,250	124,745	166,260	285,995	42%	Airfares and simultaneous translation costs were less than budgeted.
	Agam								
	Output 6 DRR Action Plan support provided	165,816	0			165,816			(internal adjustment)
Output 7 Finalising Action	n Plan	364,902	131,487	355,720	161,849	496,390	517,569	4%	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	171,349	73,104	170,670	78,445	244,453	249,115	2%	More time inputs required than budgeted.
	7.3 Analysis of training attendance records	6,350	534	19,000	2,100	6,884	21,100	67%	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		332,795	615,624	412,300	497,540	948,418	909,840	-4%	COMPLETED
	8.1 NZ Study Tour 1 Donggala (A2), Pesisir Selatan(B2),	240,241	282,161	201,800	245,790	522,402	447,590	-17%	Budget required was underestimated.
	Bengkulu Kota(C1), Mataram Kota (D1), Bengkulu, NTB	,	,	,	,	,	,		
	Universities								
	onversities								
	8.2 NZ Study Tour 2 Margurali (A2) Agam (B2) Bangkulu	287,406	333,462	210,500	251,750	620,869	462,250	-34%	A change to the scope (a move away from city to more rural locations) for this Visit resulted in his
	8.2 NZ Study Tour 2 Morowali(A3), Agam (B3), Bengkulu	287,400	555,402	210,500	251,750	020,809	402,250	-54%	costs.
	Seluma (C2), Sambawa (D2), Bengkulu, NTB Universities								
	Output 8 Study Tour	-194,852	0			-194,852			(internal adjustment)
Output 9 Expert Training	in Base isolation & Riskscape	257,152	331,512	288,500	371,673	588,664	660,173	11%	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 Training	18,946	59,250	23,650	72,630	78,195	96,280	19%	Completed under budget
	Output 9. Expert Training in Base isolation & Riskscape	48,489	0			48,489			(internal adjustment)
Output 10 Community Pro	ojects	308,857	196,280	221,350	98,050	505,138	319,400	-58%	
	10.0 Community Projects		0			0			
	10.1 Community Proj. 1 Seismometers in School	159,985	74,916	116,700	39,680	234,901	156,380	-50%	Project overspent - visits are complete and the report is currently being written.
	10.2 Community Proj. 2 Tsunami Preparedness	114,493	83,458	95,700	58,370	197,952	154,070	-28%	Project overspent
	10.3 Vision Matauranga	114,493	30,891	8,950	36,370	46,415	8,950	-419%	Under-budgeted and overspent
	10.4 Community Proj .4 HEF Funding - Sumbawa	15,524 18,855	7,015	6,950		46,415 25,870	0,950	-419%	Unbudgeted HEF project support funded by StIRRRD.
	10.4 Community Proj .4 net Funding - Sumbawa	4,643,432	2,329,247	4,712,800	2,514,021	6,972,680	7,226,821	4%	
Grand Total									

## 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 30 June 2019

		Yea	ar 1			Yea	ar 2		Year 3					Yea	ar 4		Year 5					
	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter																
Work plan by Output	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
(to highlight period output will be produced)	Jul to	Oct to	Jan to	Apr to	Jul to	Oct to	Jan to	Apr to	Jul to	Oct to	Jan to	Apr to	Jul to	Oct to	Jan to	Apr to	Jul to	Oct to	Jan to	Apr to	Jul to	Oct to
	Sep	Dec	Mar	Jun 2105		Dec	Mar	Jun 2016		Dec	Mar	Jun 2017		Dec	Mar	Jun 2018		Dec		Jun 2019	Sep	Dec
	2014	2014	2015		2015	2015	2016		2016	2016	2017		2017	2107	2018		2018	2018	2019		2019	2019
Project Administration																						
Activity Toolkit																						1
Risk Reduction Network support																						
Coaching and Mentoring Support																						
District Vulnerability assessments																						
																						<u> </u>
LG-SAT adaptation and application																						<u> </u>
																						<u> </u>
DRR Action Plan support provided																						<u> </u>
DRR Action Fian support provided																						<u> </u>
Finalising DRR Action Plan Workshop																						<u> </u>
Finalising DRR Action Plan Workshop																						┝───
																						<u> </u>
Study Tours	ļ	L									L		L	ļ	L				ļ			L
																						<b></b>
Expert Training in Base Isolation and Riskscape																						
	1																					
Community Projects																						

0	Project Administration	0.1	Project administration as scheduled
1	Activity Toolkit	1.5	Finalise activity Guideline
3	Coaching and Mentoring	3.1	Coaching as scheduled
		3.3 3.4	Additional visit Agam, Pessel Additional visit, Morowali

## Tasks 100% Completed in the six months to 30 June 2019

## Tasks 100% Completed to date

0       Project Management       0.1       Project administration as scheduled         0.2       AGG Meeting #1 – AGG meeting #9         0.3       Liaison-Jakarta as scheduled         0.4       Activity Communications Plan	
0.3 Liaison-Jakarta as scheduled	
	,
0.4 Activity Communications Dian	
0.4 Activity communications Flam	
0.5 Monthly reports as scheduled	
2 Quarterly Reports	
4 Annual Reports	
7 Six-monthly Reports	
0.6 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	
Community Project 2 Tsunami Ris	k Reduction
Community Plan Rawa Indah Vil	lage Report
completed	
<b>1</b> Activity Toolkit 1.1 Prepare Draft Template	
1.2 Learnings	
1.3 Prepare Draft Activity Toolkit	
1.4 Review and revise	
2 DRR Network Activities 2.1 MoU finalisation and sign-off	
2.3 KDPDTT (Kemendesa) DRR Worksho	qc
2.4 Two bi-annual DRR district meetings	s (ALGG)
2.5 Mid-Term Workshop	
2.7 Other Activities	
2.8 Additional Liaison	

6	<b></b> .		
3	Coaching and Mentoring	3.1 3.2	All Districts Visit On-going Support as scheduled
		3.2	Additional Visit Pessel Agam
		3.3	Additional Visit Pessel Agam Additional Visit Morowali
4	Vulnerability	4.1-4.3	Introductory visits and profiles:
	assessments		Donggala, Pesisir Selatan, Mataram, Bengkulu,
			Seluma, Sumbawa, Morowali, Agam
		4.4.1	Budget Baseline
5	LG-SAT	5.1	LG-SAT review and revision
		5.2	LG-SAT deployment (trial)
		5.3	Finalise LG-SAT tool
		5.4	Collect baseline data – all 8 districts
		5.5	LG-SAT survey analysis
6	DRR Action Plan Support	6.1	Finalise Action Plan template
		6.2-6.4	First Action Plan workshops; Bengkulu,
			Donggala, Pesisir Selatan, Mataram, Seluma,
			Sumbawa, Morowali, Agam
7	Finalising Action Plan	7.1	Pesisir Selatan, Bengkulu, Donggala, Mataram,
	Workshops	7.2	Sumbawa, Morowali, Seluma, Agam
8	New Zealand	8.1	First New Zealand Comparative Study Visit
	Comparative Study Visit	8.2	Second New Zealand Comparative Study Visit
9	Expert Training	9.1 9.2	Base Isolation Training Riskscape Training
		9.2 9.3	Hazard & Risk 101 – Yogyakarta
		9.4	ISDSS workshop - Bappenas
10	Community Projects	10.1.1	Concept Note
		10.1.2	Prepare and implement
			Community Project #1 Preparation & start of
			Implementation
		10.2.1	Concept Note
		10.2.1	Community Project #2 Preparation &
			Implementation
		10.2.3	Community project 2 - Final visit Tsunami
			Awareness, Rawa Indah.
		10.3.1	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.

-		-	-
0	Project Management	0.6	KDPDTT (Kemendesa) Workshop Report
1	Activity Toolkit	1.6	Present activity toolkit to provinces. Will now be presented at the programme final workshop in July 2019
2	Risk Reduction Network Support	2.6	Final Workshop – Deferred until July 2019
4	District Vulnerability Analysis	4.4.2	Budget reassessment – Deferred until after data is collected in district Visits associated with Final seminar
5	LG-SAT adaption and application	5.7	LG-SAT Final Survey and Analysis – deferred to coincide with Final Seminar in July 2019

#### Key Tasks Deferred to Next Reporting Period

#### Tasks Undertaken Additional to Scope in the period to 30 June 2019

0	Project Management	0.4	Communications – Several blogs and social media posts beyond original budget
2	Risk Reduction Network	2.8	Additional Liaison Keynote speakers and presentations at the ICUDR conference in Palu 2019 and the PCEE conference in Auckland April 2019.
3	Coaching and mentoring	3.2	Riskscape workshop – Palu April 2019
10	Sumbawa Flood project	10.4	StIRRRD is supporting the HEF funded project

## Appendix C: Activity Impacts per District and in Other Areas (NOT COMPLETE 19 AUGUST)

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

	Pesisir Selatan
30 June 2019	<ol> <li>New staff are trying to change the leadership of the currently inactive DRR Forum to reactivate it.</li> <li>A new Mayoral regulation, Perbup. No. 10/2018, was passed which requires up to 100 M Rupiah of village budget to be used for DRR activities. This will be a requirement from 2019.</li> <li>A tsunami simulation was held on 26 April 2019.</li> <li>BPBD participated in coastal planting exercise</li> <li>Public works and spatial planning agencies signed an MoU with a construction consultant to train builders in masonry construction</li> <li>BPBD consulted with Food and Agricultural agency to secure food supplies</li> </ol>
31 Dec 2018	<ol> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ol>

	<ul> <li>BPBD proposed to have river normalization to prevent floods to the government.</li> <li>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).</li> <li>DRR Activities in 2018 consisted of EWS maintenance and dissemination of DRR in collaboration with KSB for 3 nagaris.</li> </ul>
30 June 2018	. 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	<ul> <li>BPBD worked with Salido Saiyo village – a coastal community - on a tsunami simulation (received from Dally Usman) during October 2017.</li> <li>In September, KSB from Pesisir Selatan participated in the West Sumatra Jamboree where they gained further skills and knowledge on disaster preparedness and management.</li> <li>BPBD Pesisir Selatan were unable to participate in DRR activities in Sorong as part of DRR month.</li> <li>In November, staff from BPBD Pesisir Selatan held focus group meetings to share knowledge about DRR with women groups</li> </ul>
30 June 2017	<ul> <li>Some coastal villages have been supported by ASB (Arbeiter Samariter Bund         <ul> <li>a German aid and welfare organisation) to help increase their DRR capacity.</li> <li>This work complements other DRR activities planned by BPBD Pesisir Selatan,</li> <li>and they worked with ASB to coordinate this project.</li> </ul> </li> <li>On 26 April, BPBD Pesisir Selatan coordinated the 'Disaster Preparedness Day'.</li> </ul>
31 Dec 2016	<ul> <li>Capacity is being developed for a Disaster Preparedness Group, which involves local government, representatives from the sub-districts and BPBD. There is a stipulation that at least 30% of the participants be female. The first meeting was held on 22 October, 2016</li> </ul>
	. 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.
	<ul> <li>As part of the implementation stage of the action plan, BPBD Pessel proposed</li> <li>9 activities for preparedness funding to the parliament.</li> </ul>
	<ul> <li>Because of central government budget reductions, there is concern within the BPBD that their budget will be severely cut.</li> </ul>
	. BNPB have established a collaboration with UGM to install landslide early warning systems.

30 June 2016	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.
	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:
	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.
	BPBD Pesisir Selatan will facilitate these activities related to DRR.
31 Dec	
2015	1. BNPB look likely to fund a pilot in Pesisir Selatan based on the "Blue-Line" tsunami preparedness initiative in Wellington.
	The budget for Activities planned for the first year of the Action Plan, 2016, has been approved by the district parliament.
	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.
	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
30 June 2019	<ol> <li>BPBD Agam held an earthquake simulation with primary school SD Negeri 2 Surabayo, Lubukbasung sub-district;</li> <li>BPBD Agam held a self-evacuation simulation at Islamic Kindergarten, Primar school, junior high school of Youth Generation Foundation (Generas Muda/GEMA) Al Madani, Lubuk Basung sub-district;</li> <li>Regional and Development Planning board (Bappeda) Agam held a regula meeting with all government institutions to discuss Agam's strategic plans where improving environment and disaster mitigation is included in th discussion. This issue has been raised into Agam's medium term plan</li> <li>A simulation on disaster events was held at SMAN 1 Kecamatan Tanjun Mutiara lead by head of BPBD Agam;</li> <li>BPBD Agam trained 10 Nagari (village) secretaries in a workshop of Pos Disaster Rapid Assessment on 20 - 23 February and 27 Feb - 2 March 2019)</li> <li>BPBD Participated in coastal planting exercise</li> <li>BPBD Agam and the fire brigade conducted public socialisation on fir awareness due to early dry season, despite that the rain still occurs.</li> <li>There were two big events which involve BPBD Agam, namely the nationa election day 17th April and the preparedness day 26th April. To support saf and secure election day, BPBD Agam were on alert due to extreme weather since February 2019 with potential floods and landslide on some spots of location where the election post stood. This showed the role of BPBD of preparedness on various issues.</li> <li>BPBD Agam undertook Disaster Preparedness Day exercise 26th April 2019 The theme branding of the Preparedness day was "Women as preparedness teacher, home is the school (where to learn)". This theme correlate to Wes Sumatra culture, where women play crucial role and an attempt to honou women of their role, particularly in the preparedness issues.</li> <li>Kelompok Siaga Bencana (KSB) Nagari Kotorantang sub-district Palupua Agam supported by BPBD Agam held a disaster preparedness training for it 51 members.</li></ol>

30 Dec 2018	<ol> <li>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.</li> <li>BPBD conducted dissemination on disaster preparedness through school visit, strengthened KSB Nagari, i.e July dissemination of DRR for KSB Nagari Kotorantang Palupuah.</li> <li>BPBD Agam participated in the West Sumatra DRR Jamboree held by BPBD Kota Padang in 3-7 September 2018.</li> <li>In October 2018, BPBD Agam in collaboration with <i>BAZNAS Tanggap Bencana</i> (BTB) Agam held earthquake simulation at SD Negeri 32 Muaroputuih,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.</li> <li>BPBD Agma participated on the DRR Month held at Medan, North Sumatra 21-25 October 2018.</li> <li>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 incollaboration with Agam Red Cross developed KSB sub-district of Ampeknagari, Matua, Palembayan, Malalak and Palpuah to become quick response task force.</li> <li>Head of Agam district received a recognition reward from BPBD for DRR efforts.</li> <li>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</li> <li>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 f</li></ol>
30 June 2018	<ol> <li>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.</li> </ol>
31 Dec 2017	<ol> <li>Between September and October, the head of BPBD - Bambang Warsito – was rotated out. His replacement is M. Lufti.</li> <li>BPBD Agam hosted the West Sumatra Jamboree in October.</li> <li>BPBD Agam actively participated in DRR month and attended the meeting in Sorong.</li> </ol>
	4. Agam has a program to empower women for DRR, the link <u>https://kaba12.co.id/2017/02/23/peran-perempuan-penting-prb/</u>

30 June 2017	5.	On 26 April, BPBD Agam coordinated the 'Disaster Preparedness Day', which involved a wide range of sectors and agencies.
	6.	On 22 April, BPBD Agam signed an MoU with a local university from Bukittingi. This was followed by a joint workshop on 29-30 April, with a theme of 'DRR based on a spiritual perspective'.
	7.	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.
	8.	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.
	9.	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	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.

30 June 2016	<ol> <li>Good support from Head of District, including fronting a disaster preparedness music video.</li> </ol>
	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.
	<ol> <li>Regional act and regulations for Disaster Management were approved in May 2016 and are being "socialised"</li> </ol>
31 Dec 2015	<ol> <li>Following the Introductory Visit in August, Agam BPBD paid from their own budget, representatives to attend the DRR Week in Solo and to RiskScape Training in Palu.</li> </ol>

## Padang (Pilot District)



30 June 2019	1. No updates for this reporting period.
30 Dec 2018	<ol> <li>September, Padang BPBD hosted West Sumatra DRR Jamboree. This activity was carried out by representatives of the Kelompok Siaga Bencana in West Sumatra.</li> </ol>
	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
30 June 2018	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.
31 Dec 2017	<ol> <li>In July, the head of BPBD Padang hosted a mini-Jamboree, which gathered a range of agencies and stakeholders responsible for the implementation of DRR activities.</li> </ol>
	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	t F t	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.
	s r r	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.
	١	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	ł	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.
	       	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	١	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		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



June 2019	1. No updates for this reporting period.
30 Dec 2018	<ol> <li>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.</li> <li>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.</li> </ol>
30 June 2018	1. UNAND hosted 5 <sup>th</sup> 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	1. No updates for this reporting period
30 June 2017	<ol> <li>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.</li> </ol>
31 Dec 2016	<ol> <li>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: UNAND will establish a Master's programme in disaster management with the support from UGM and GNS Science. BPBD staff are willing to enrol in this Master's programme.</li> <li>Provincial BPBD staff will conduct a meeting with UNAND and if possible will visit UGM for further discussions.</li> </ol>



## Bengkulu Province

	Bengkulu City
30 June 2019	1. A flood hit several areas in Bengkulu in late April causing 10 deaths. BPBD of Bengkulu requested UGM to inform BNPB that they required support and assistance.
	<figure></figure>
30 Dec 2018	<ol> <li>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:</li> </ol>
	2. Coordination and communication remains a priority, with BPBD holding regular talks with other agencies (health, military, police, port).
	3. 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.
	4. A scheme where local businesses can sponsor and put their name on a tsunami evacuation sign has been started, and has been very successful.
	5. 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.

	<ul> <li>6. 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.</li> <li>7. Empowerment of DRM volunteer</li> <li>8. DRR socialization through mass media</li> <li>9. Marine school program during 2018</li> <li>10. Flood contingency plan designing.</li> <li>11. DRR forum at municipal level.</li> </ul>
30 June 2018	<ol> <li>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. Initives include:</li> </ol>
	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.
	<ul> <li>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 upadating tsunami hazard and evacuation maps.</li> </ul>
	c. They are working with University of Mohammadia in Identifying evacaution 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 negoatiating 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 invivting them to particpate in a Making Cities Resilient project.
	<ul> <li>It was noted that unfortunately there are political issues regarding the tsunami shelter at Teluk Sapang, and the shelter is not being well maintained.</li> </ul>

31 Dec. 2017       1. A major storm event in October resulted in flooding and damage to roading infrastructure. The image shows the loss of a bridge on the Bengulu - Lampung (westbound) road, on 15 October, due to exceptionally high flows.         2. Political support for DRR activities remains strong, with commitment expressed publicly by DPRD and the Mayor of Bengkulu.       Imagoral regulation on Disaster Management has been prepared, atthough still in a draft format. A Regional Disaster Regulation has also been developed, to improve institutional capacity.         4. Kota Bengkulu BPD continue to undertake a range of DRR-related activities. Some of these are related to specific activies identified in the Action Plan, while others have been informed by general StIRRRD-related activities. These activities include: <ul> <li>a. The gradual roll-out of the Blue Line project, which is intended to improve sunami awareness and help inform evacuation rough and different schools throughout the city.</li> <li>b. Regular discussions with related OPD and UNIB, to help coordinate DRR activities.</li> <li>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.</li> <li>d. Engagement with the private sector on DRR activities.</li> <li>e. Collaboration between BPBD and UNIB, to encourage students to undertake DRR-themed community service activities.</li> </ul> 30 Jume 1.     1. Pak Farid from UNIB, an alumni of the StIRRRD program, published reports on disaster mitigation and preparedness.         30 Jume 2017       1. Support for the StIRRRD programme from city politicians and parliament remains strong, and a competent BPBD bage, public Works and Health.	
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		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 asphalting 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.
	5.	UNIB are looking to facilitate the establishment of a Lifelines Group in Bengkulu and/or Seluma and undertake research around lifelines vulnerability.
31 Dec 2016	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	1. Kota Bengkulu Parliament endorsed Action Plan in principle.
	<ol> <li>There is support from city politicians for the programme and from parliament to support budget for DRR activity.</li> </ol>
	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 June 2019	<ol> <li>Several risk-reduction projects have been identified by district and provincial agencies in the village of Rawa Indah (where a tsunami community awareness and preparedness project commenced in February 2018). This includes a commitment by Seluma Public Works to progressively improve the road which links the main part of the village to the tsunami shelter – this will enable residents to evacuate more quickly and efficiently.</li> <li>BPBD and the Head of Rawa Indah village (Rubimanto) will develop a plan to use the knowledge gained through the community project to help neighbouring coastal villages understand and be better prepared for tsunami events.</li> <li>The Provincial Conservation Agency has developed a vegetation planting plan to help stabilise erosion-prone soils, and to enable villagers to grow more vegetables.</li> <li>Training and funding has been provided by PU to improve construction techniques, so that new buildings in Rawa Indah (and elsewhere?) can better withstand earthquakes and tsunami events. Remedial work to strengthen 55 houses in Rawa Indah with masonry experts working alongside villagers (home owners, plus others in the community) to do the work. A commitment by Seluma Public Works to progressively improve the road which links the main part of the village to the tsunami shelter – this will enable residents to evacuate more quickly and efficiently.</li> <li>BPBD Seluma received Flood EWS with water level sensor, rain gauge, humidity, and anemometer. This was funded by Kemendesa</li> <li>BPBD focus is on the establishment of 2 resilient villages, DRR Forum, 3 safe schools, and dissemination of disaster risk information; BPBD is included in the SEA (Strategic Environmental Assessment) Team to revise the spatial planning; for 2020, BPBD is directed by Bappeda to measure the Environmental Resilience Index, focuses on mangrove planting and watershed management.</li> <li>The BPBD budget in 2019 increases to around 5 billion rupiah, where 3 billion is allocat</li></ol>
30 Dec 2018	<ol> <li>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.</li> <li>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.</li> </ol>

- 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 Diel)

- 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.

	Bempkulu Orin Dempo O Pagar Alam Orin Dempo O Orin Dempo
	February 17, 2018 0 475 95 19 mi
	usulantitik 0 5 10 20 km Infrastruktur Mitigasi Kebencanaan madex.200
	Proposed Tsunami Early Warning System sites – Seluma District
	7. BPBD Seluma has conducted the following activities:
	<ul> <li>Village resilient program</li> </ul>
	<ul> <li>Training for Disaster response volunteers</li> </ul>
	<ul> <li>Safe schools initiatives</li> </ul>
	<ul> <li>Shelter officers training</li> </ul>
30 June 2018	<ul> <li>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:</li> <li>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.</li> <li>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.</li> <li>The 2019 program and budget for Seluma BPBD was presented to the Bupati</li> </ul>
	<ul> <li>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: <ul> <li>a. An early prevention and response program for natural disasters.</li> <li>b. Preparation of disaster-specific contingency plans - forest fire, flood, extreme weather.</li> <li>c. Procurement of radio communication equipment for the Rawa Indah Tsunami Shelter.</li> </ul> </li> </ul>
	d. Additional units for BPBD's Early Warning System.

	<ul> <li>e. Dissemination of disaster information to 14 sub-districts.</li> <li>f. Data collection and mapping of disaster-prone areas.</li> <li>g. A preparedness simulation for 200 people</li> <li>h. An increased budget for maintaining the Rawa Indah Tsunami Shelter.</li> <li>i. Resources (including 2 staff) to establish additional Disaster Resilient Villages.</li> <li>j. A requirement that the Disaster Risk Reduction Forum holds 3 meetings throughout the year.</li> <li>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).</li> </ul>
31 Dec 2017	There were 2 StIRRRD visits to the Seluma District in the 2 <sup>nd</sup> half of 2017 (July and August), and regular telephone / email communication to both UGM and GNS. Support and commitment from DPRD and the Mayor for DRR activities has also remained strong. As a result, there have also been some significant DRR improvements and impacts, as outlined below.
	<ol> <li>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.</li> </ol>
	<ol> <li>There has also been increased private sector involvement in DRR activities, particularly the palm oil industry.</li> </ol>
	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.
	<ol> <li>There have been improvements made to the district's hazard risk maps (particularly for tsunami), and vulnerability maps.</li> </ol>
	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.
	<ol> <li>A tsunami evacuation exercise, organised by Seluma BPBD, and involving Tagana (Social Welfare unit); PMI (Seluma Red Cross), Pramuka (Boy scout), Police, Army, etc.</li> </ol>
	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.
	<ol> <li>Two existing roads, identified as important evacuation routes, have been upgraded from gravel to macadam.</li> </ol>

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	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	1. There was a lanslide in Talo Sub-District, Seluma on May 19, 2007
2017	<ol> <li>http://penanggulangankrisis.kemkes.go.id/Tanah%20Longsor-di-SELUMA- BENGKULU-19-05-2017-28</li> </ol>
	3. UNIB are looking to facilitate the establishment of a Lifelines Group in Bengkulu and/or Seluma and undertake research around lifelines vulnerability.
	4. Responsibility for the tsunami vertical evacuation shelter at Rawa Indah was transferred to Seluma's Regional Government on 16 June. The District now needs to allocate a budget for it's maintenance and security. BPBD have submitted a plan to recruit 5 officers from the village, and if approved by regional government, this would comprise a mix of guards to ensure security of this asset, and coordinators to ensure that the shelter is utilised fully.
31 Dec 2016	<ol> <li>Recent rainfall events have caused significant flooding that has destroyed some bridges leaving some villages isolated and requiring assistance. Temporary bridges are being built in the interim.</li> </ol>
	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	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	1. Good engagement in Action Plan workshops.

# Nusa Tenggara Barat Province

	Mataram
30 June 2019	1. As a follow up to the Building Assesment training carried out post Earthquake by Prof. Iman Satyarno, several lecturers in the Faculty of Engineering under the coordination of Dr. Ni Nyoman Kencanawati are developing Building Assesment Training based on their experience in assessing damages post the Lombok Earthquake.
	2. BPBD of Mataram are assigned to supervise the construction of permanent dwelling/residences (HUNTAP) for the affected people in Mataram.
	The Centre for Disaster Risk Management Universitas Mataram carried out collaboration with various national institutions such as BNPB, Bappenas, and Bappeda of Nusa Tenggara Barat Province to promote DRR approach in Disaster Management.
30 Dec 2018	
	TOT for Building Assessment in UNRAM and Public Works Office
	<ol> <li>Social Assessment – Stakeholders Mapping was conducted ijn August 2018 to assess how the stakeholders in Mataram responded 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.</li> </ol>

	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	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	1. No update for this reporting period.
30 June 2017	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> <li>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.</li> </ol>

		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 mayorlal 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	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	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
30 June 2019	1. The HEF funded Sumbawa Community Project: Coping with Floods; community- based approaches to flood management in Alas Village started in April 2019. The Program will be carried out in 3 visits. The first visit was conducted in April 2019 in the form of a series of activities such as assessment of flood preparedness, FGD on Women Participation in Disaster Management, and Workshop on the Development of Flood Contingency Plan.
30 Dec 2018	<ol> <li>Sumbawa was also affected by the Lombok earthquake and reported IDR 582.72 B damage but no casualties.</li> <li>The Sumbawa community flood project was approved through the Ambassador's Fund.</li> <li>Action Plan implementation has focussed on establishing one more Resilient Village and further training for teachers within schools.</li> </ol>
	<ol> <li>Due to limited budget, other action plan activities are not progressing in full.</li> <li>In August 2018, BPBD Sumbawa established Resilient Village in Karang Dima Village, Labuan Badas sub District.</li> </ol>
30 June 2018	<ol> <li>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.</li> </ol>

31 Dec 2017	1.	The Regional Regulation No 5 Year 2016 on Disaster Management was approved in October. The regulation strengthens the policies related to the DRR efforts as the legal umbrella. The establishment of disaster resilient villages, hazard prone villages mapping is expected to bring positive investment in Sumbawa.
	2.	DRR training for three Resilient Villages (Baru Tahan, Songkar and Kukin vilages) was held on 10 to 18 July. The focus of the sessions was to increase the capacity of the members 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	1.	Severe flooding triggered by heavy rain occurred in the Sumbawa district (NTB) on the 12th December 2016. Thousands of homes were submerged but no casualties were reported. Discussions during a meeting held in January 2017 between BPBD, Government staff, Sumbawa Parliament and UGM-based StIRRRD team members concluded that the lack of casualties were a credit to the Resilient Village project and the general DRR effort in the region. A range of activities including community training and 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.
	2.	The DRR Action Plan (March 2017) workshop which invited all of Sumbawa's OPDs (Sumbawa district government agencies) inspired them to allocate budget for DRR. This is planned to be followed up with a Perbup (district regulation) to regulate all OPD to allocate budget for DRR activities.
	3.	Coastal safety has been built in Alas sun district and the Alas Timur subdistrict and coastal area. This is supported by the Public Works agency.
	4.	Jempol beach has had coastal protection works added (sea wall and resulting promenade) to protect the beach from erosion and also to turn the area into a tourism destination. The promenade provides for vehicle and foot traffic and offers coastal protection to restaurants and markets.

31 Dec 2016	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	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	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) partipated 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).

#### **Central Sulawesi Province**

	D	onggala
30 June 2019	1.	The head of Donggala DPRD, M. Yasin (Alumni of NZ Comparative Study in 2015), was inaugurated as the Vice Head of Donggala District in February 2019.
	2.	The seismometer in SMAN 1 Banawa Donggala was damaged during the September Earthquake, however, despite this; the students were very keen to participate in the SIS Competition 2018. To continue supporting the education process on earthquakes and to assist with improving the school preparedness, StIRRRD replaced the seismometer in April 2019.
	3.	The Ambassador of New Zealand for Indonesia visited the temporary residences ( <i>Huntara</i> ) for the evacuees built by BPBD Donggala. The evacuees are those living in the coastal area that experienced liquefaction due to Palu Earthquake.
30 Dec 2018	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 ( <u>https://reliefweb.int/report/indonesia/indonesia-earthquake-donggala-south-east-sulawesi-information-bulletin-n-1</u>
	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

30 June 2018	<ol> <li>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.</li> </ol>
	10. 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.
	11. BPBD Donggala continues to carry out Program Juru Bencana "Disaster Preparedness Officers Program" that has been implemented since 2016.
31 Dec 2017	<ol> <li>On 14 September, Donggala BPBD conducted post-disaster training sessions in collaboration with UNTAD.</li> </ol>
	<ol> <li>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.</li> </ol>
	<ol> <li>On 11 October, student and teacher disaster education sessions we held at SMP Negeri (Public Junior High School) 2, Sindue subdistrict and at SDN (Public Primary School) 2, Lero Village, Sindue subdistrict.</li> </ol>
	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'.
	<ol> <li>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.</li> </ol>

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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.
31 Dec 2016	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.
30 June 2016	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.

31 2015	Dec	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:
			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.



# 30 June 1. No DRR activity took place in Morowali between January and June 2019 due to 2019 budget constraints. 30 Dec 1. The SIS Morowali school is still committed to the programme. However, SMAN 2018 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.

Morowali

30 June 2018	<ol> <li>BPBD Morowali is committed to support the implementtaion of the Seismometers In Schools Program in SMAN 1 Bahudopi Morowali and will involve the school in their DRR Activity.</li> <li>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.</li> <li>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).</li> </ol>
31 Dec 2017	<ol> <li>From May to July, UNTAD have influenced land use plans regarding disaster prone areas, the management of the airport and the 'Integrated Industry Area'.</li> <li>Over the same period, UNTAD and public works have been consulting on earthquake resilient infrastructure construction.</li> <li>Between June and November, UNTAD and Public Works established an 'Advisory Team for Building Development (TABG)' (Tim Ahli Bangunan Gedung).</li> <li>In July, an MoU was developed between Morowali BPBD and BNPB regarding post-disaster grant assistance.</li> <li>Also in July, normalisation activities were undertaken on the Kontobamalanga River.</li> <li>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.</li> <li>Morowali BPBD has developed agreements with the army, head of subdistricts and head of villages regarding DRR activities.</li> <li>A river revetment was constructed on the Umbele River in August while breakwaters and river revetments were constructed in Keura Village in Septmeber.</li> </ol>
30 June 2017	<ol> <li>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: <u>https://stirrrd.org/2017/07/02/may-a-shaky-month-for-central-sulawesi/</u></li> <li>Morowali BPBD have partnered with Telkomsel and Indosat (national mobile providers) to develop better alerting systems e.g. emergency text messages.</li> <li>Staff from the Information Agency are working to establish clear information about mining impacts to clarify misunderstanding that mining is the sole cause of river flooding; this initiative has been inspired by discussions during StIRRRD visits.</li> <li>Morowali Parliament are reviewing the consideration of hazard and risk information in spatial planning which includes land use policies (RTRW).</li> </ol>

	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.
	<ul><li>7. A disaster management plan has been developed by a consultant on behalf of BPBD as a result of StIRRRD activities. BNPB are supporting the development of this plan.</li></ul>
	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> <li>A meeting was held with senior staff from Indonesia Morowali Industrial Park (IMIP) in Jakarta on 22 July. The meeting identified that flooding is a major problem for the mining company in Morowali. They recognise they play a role in broader DRR delivery for the community. As such, they invited us on site to meet at their nickel mine the following week.</li> </ol>
	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> <li>Advice was provided to local government members and Head of Parliament to reconsider physical stream works on a particular debris fan. Proposed works could initiate land movement and exacerbate flood and debris flooding for downstream communities. Alternative debris management methods were recommended to manage the impact of future debris flooding.</li> </ol>
	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 June 2019	1.	The 2019 SIS Competition received good feedback from a number of parties including the New Zealand Embassy, Local Governments (Central Sulawesi Province, Palu City, Donggala Regency and Morowali Regency), BMKG Palu Geophysics Office, and Tadulako University.
	2.	Michele Daly and Prof. Teuku Faisal Fathani were asked to be Keynote Speakers at the 2019 ICUDR Conference held by the Faculty of Engineering, Tadulako University in April 2019.
	3.	SMA N Madani were the winners of the 2019 SIS Competition and will be invited to the National Seminar on DRR organized by STIRRRD at Gadjah Mada University.
	4.	StIRRRD in collaboration with the Faculty of Engineering of the University of Tadulako has conducted an Indonesian Language RiskScape Training which was attended by lecturers from various Universities in Palu City, representatives of the local government and NGOs.
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.

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	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	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	1. Significant progress has been made in cementing relationhips and cooperation as a result of the coordination meeting concerning the <i>Seismometers in Schools</i> Community Project. Agencies incolved 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 haeld 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	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		<ul> <li>There has been significant staff rotation in Palu City this year.</li> <li>Pak Singgih has moved from the head of Spatial Planning to the Head of Public Works. He had this position back in the Pilot in 2012.</li> <li>Pak Rahmat has moved from the Head of Public Works to the Head of the licensing Agency. He was previously the head of BPBD in the Pilot in 2012.</li> <li>Pak Asri has moved from the Head of BPBD to the Mayor's Secretary.</li> <li>Pak Presely Tampubolon has moved from the Head of the Industry Agency to the Head of BPBD.</li> </ul>
	2.	BNPB have established a collaboration with UGM to install landslide early warning systems.
30 June 2016	-	
31 Dec 2015	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.

2.	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:
	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.



1. No updates for this reporting period	
<ol> <li>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</i>/The Role of Social Science in Disaster Risk Management" : <i>Pembelajaran dari Para Penyintas Triple Disasters Di Sulawesi Tengah</i>/Lesson Learned from the Survivors of Triple Disasters in the Central Sulawesi (3 December 2018) dan 2) Post Palu Disaster Research Workshop Palu, Central Sulawesi (19 December 2018).</li> <li>The Embassy of NZ has supported Sumbawa Community Project through HEF. The project will be implemented from 1 April 2019 to 31 October 2019.</li> </ol>	
<ol> <li>Kemendesa have finally published their book on DRR (DRR in Disadvantaged Regions: Disaster Management Guidelines based on Policy and Best Practice. Dec 2017). It includes a chapter on StIRRRD, and also a chapter on one of StIRRD' districts, Seluma.</li> <li>Image: Select and Stirres and Stirres.</li> <li>Kemendesa's DRR Book which features a chapter on StIRRD and a profile of one of StIRRD's districts.</li> <li>Esti Anantasari (UGM) was invited to be the resource person for Regular Discussion in the Department of Anthropology UGM. topic: "Anthropology and</li> </ol>	
Discussion in the Department of Anthropology UGM, topic: "Anthropology and Study on Disaster" on 25 April 2018.	

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31 Dec 2017	1.	A mini-StIRRRD Activity was held at Trenggalek District in the Province of East Java on 15 September 2017. StIRRRD Team members Faisal Fathani and Wahyu Wilopo presented on DRR and held a focus group discussion with 70 participants. UGM are increasingly in demand to help set-up such workshops in non-StIRRRD districts.
	2.	UGM invited Lilik Kurniawan (BNPB), Dr. Sumedi Mulyo (Bappenas) as well as colleagues from Basarnas and LAPAN to give a training session on Competency Improvements in DRM. This was held on 22-24 August 2017 at UGM. 50 participants with 10 trainers attended and the session was fully supported by UGM. A competency framework for DRM has been advocated by StIRRRD for some time (it appears on the AGG Policy Framework Matrix).
	3.	At the National DRR Awareness Week event in Sorong, Bappenas gave a presentation in which it was apparent that StIRRRD featured prominently in its work programme moving forward. This is a positive indicator for the sustainability of StIRRRD
30 June 2017	1.	UGM has established a Centre of Excellence (Gama-Inatek) which focuses on Technical Innovations in Disaster Mitigation. It will pull a number of UGM's disaster risk management programmes together under one umbrella (including StIRRRD and CaRED). The Centre will play a key role in the sustainability of StIRRRD into the future. This initiative positions UGM as a leading university in this field.
	2.	Member of the StIRRRD team, Avantio Pramaditya has been accepted for a 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	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 distrcts/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. (update: English requirements
were not met)

### Appendix D: Activity Governance Group Action Log

#### As at 30 June 2019

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		Progress interrupted by Palu earthquake and tsunami.	
	<ul> <li>At DRR Awareness Week in Medan (23-25 Oct 2018)</li> <li>Provide a summary and make available publicly</li> </ul>	Wasn't part of the Medan session	
	Undertake a soft launch of the toolbox at DRR Awareness Week in Medan (23-25 Oct 2018).		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.	retrofitting options for VES	
	Continue discussions on a StIRRRD Exit Strategy at subsequent AGG meetings.		
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.

AGG meeting	Actions by StIRRRD	Comment	Progress
	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.
	õ	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.
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.

AGG meeting	Actions by StIRRRD	Comment	Progress
	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		Completed.
	handing over of the vertical tsunami shelter in Bengkulu to local government, who are unable to use it until they do.		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.	-
	showing how it is contributing	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		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	AGG meeting, including the need for AGG members to be	Updates to AGG members have been provided outside of AGG meetings through regular meeting, phone calls and email between UGM staff with BNPB, Kemendesa and Bappenas. Most likely the AGG members have limited time to access to the StIRRRD blog and website.	Completed.
	Investigate the feasibility of an MOU between Kemendesa and GNS Science	This was investigated with Kemendesa and the decision was made not to pusue as an MoU would be too complicated and time-consuming. Cooperation between GNS and Kemendesa will be achieved via the UGM- Kemendesa MoU.	Completed.

AGG meeting	Actions by StIRRRD	Comment	Progress
		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.	
20 April 2015		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.
		MoHA were invited to attend the AGG meeting however they did not attend.	-
	confused over the relationship between the BNPB LG-SAT and the StIRRRD version. This will	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.	
17 Nov 2014	districts in meeting the recommendations from the	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.	against the recommendations needs to occur when all Action Plans have been

# Appendix E: New Zealand Organisations involved in StIRRRD as at 31 July 2019

Main Sub-Contractors				
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) 1 April 2019 – now known as GHC Consulting	Subject matter expert – local govt. hazard management. Province Coordinator role (temporary replacement for Phil Glassey)	Privately owned company		
Other sub-contractors and/or in-ki	nd participation (New Zealand Stud	y Visits)		
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
Sharryn Graham Davies	Subject matter expert – gender & social vulnerability.	Self employed

### Appendix F: Activity Risk Matrix – as at 31 July 2019

Author	Date Registered	Description	Impact severity	Probability of occurring	Overall Risk Rating	Risk Treatment	Risk Status	Risk Owner	Risk Actionee
Michele Daly	13/05/2015	If actions are not completed after meetings then project maybe delayed in part.	Minor	Likely	Medium	Allowing realistic time for actions to be completed. Actions Log for meetings. PM to follow up on actions as required.	Open	Michele	Sylvia
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.		Michele	Sylvia
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. Approriate action is being taken.	Open	Michele	Michele
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
Sylvia Riches	8/07/2015	Driving Conditions in Indonesia. If GNS staff, secondees or contractors are involved in a car accident this could have immediate and long term impacts on staff in the project.	Major	Unlikely	Medium	H&S guidelines provided to GNS & UGM staff listing expectations and appropriate behaviours. Use fit for purpose vehicles (e.g. 4WD to Morowali). Require experienced drivers. Require appropriate speed. Require adequate rest periods for drivers.		Sylvia	Sylvia
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
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
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
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
Michele Daly	9/09/2015	If UGM's capacity is not increased, some specific tasks may not get completed.	Moderate	Possible	Medium	Open and direct conversations with UGM programme directors. Buid more capacity into the project.	Open	Michele	Michele/ Faisal
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 Firli 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 meetngs going forward (Sept 2018).	Open	Michele	Michele
Michele Daly		If travelling to West Sumatra, there is the potential for rabies (also NTB)	Major	Unlikely	Medium		Open	Phil	Sylvia
Michele Daly	10/12/2015	If AGG meetings are not better run & organised, Gol 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 stustaninability of StIRRRD and the DRR network. Discussions will be held during Sept visit (Sept 2018).	Open	Michele	Michele/ Faisal

Author	Date Registered	Description	Impact severity	Probability of occurring	Overall Risk Rating	Risk Treatment	Risk Status	Risk Owner	Risk Actionee
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
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		Open	Michele	Michele/ Faisal
Michele Daly	18/03/2016	Reports getting behind schedule. Refer also #17	Moderate	possible	medium	Bring in aditional resources. Focus on catching up. Good communication with MFAT. Have completed two reports that were outstanding.	Open	Michele	Michele/ Phil
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
Michele Daly Michele Daly	26/05/2016 5/11/2015	Zika virus - may be more of a problem in Indonesia than previously thought. Volcanic eruptions and bush fires could disrupt air travel in and out of	Major Minor	Unlikely Possible	Medium	Check SOS and other sources (MFAT; WHO) for most up-to-date info before each visit. Keep on top of information relating to eruptions and bush fire	Open Open		Sylvia Sylvia
Withele Dary	5/11/2013	Indonesia as well as within, impacting on being able to undertake scheduled visits.	WIND		Wealdin	events. Note: one such event has occurred already.	Open	NICO	Gyima
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
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 ogoing 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
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
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
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
Michele Daly	23/01/2019	If MFAT reducing aid spend in Indonesia then this may have an impact on funding StIRRRD3	Moderate	Likley	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
Phil Glassey	12/04/2019	Threatening reaction to New Zealanders in Indonesian in wake of mosque attacks in Christchurch	Minor	Likley	Medium	Stay away from fundamentalist activities. Respond peacefully As- salamu alaykum is a useful phrase. Report Incidents	Open	Phil	Phil
Phil Glassey			Minor	Possible	Medium	Stay away from demonstrations. Be accompanied by Indonesian team members. Monitor election. UGM would be responsible for completing work	Open	Phil	Phil
Michele Daly	29/05/2019	Changes in process at MFAT could affect ongoing work	Moderate	Likely	High	Working with MFAT to ensure that we are following processes and have information required in advance and use correct templates.	open	Phil	Phil

### APPENDIX G – Abbreviations

AADMER	ASEAN Agreement for Disaster Management and Emergency Response					
AGG	Activity Governance Group					
АНА	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					
ІТВ	Bandung Institute of Technology					
JICA	Japan International Cooperation Agency					
Kemendagri	Ministry of Home Affairs (MOHA)					
Kemendesa	Ministry of Village Development, Disadvantaged Regions and Transmigration (formerly KPDT then KDPDTT)					
KPDT	Kementerian Pembangunan Daerah Tertinggal (Ministry of Disadvantaged Areas Development)					
МоНА	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)
тот	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 Nationals office for the Coordination of Humanitarian Aggairs
UNDP	United Nations Development Programme
UNRAM	Mataram University
UNTAD	Tadulako University
USAID	United States Agency for International Development