

Strengthening Law and Disaster Risk Reduction (DRR) in Indonesia

CHECKLIST ASSESSMENT REPORT



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International Federation
of Red Cross and Red Crescent Societies

International Federation of Red Cross and Red Crescent Societies

P.O. Box 303
CH-1211 Geneva 19
Switzerland
Telephone: +41 22 730 42 22

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Partners

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This study uses the 'Checklist on Law and Disaster Risk Reduction' which was developed jointly by IFRC and United Nations Development Programme (UNDP)

Contributors

This report was prepared by Mr. Ewan Powrie, international consultant with technical assistance and support from:

- Ms. Lucia Cipullo, Regional Disaster Law Delegate for Southeast Asia, IFRC, Bangkok
- Mr. Pascal Bourcher, Community Safety and Resilience Coordinator, IFRC, Indonesia
- Mr. Giorgio Ferrario, Head of Country Cluster Support Team for Indonesia and Timor-Leste and Representative to ASEAN, IFRC
- Mr. Arifin Muhammad Hadi, Head of Disaster Management, PMI
- Ms. Tessa Kelly, Senior Disaster Law Officer, IFRC, Geneva
- Ms. Gabrielle Emery, Asia Pacific Disaster Law Coordinator, IFRC, Kuala Lumpur.

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Executive Summary

The tsunami that devastated the Indonesian province of Aceh on 26th December 2004 caused tremendous loss of life and enormous destruction of infrastructure and property. This tragic event and the subsequent handling of the response, was a catalyst for the Indonesian government to rethink its approach to managing the range of disasters that affect its islands on an almost weekly basis. The impact of the tsunami led to the development of Law Number 24 of 2007 concerning Disaster Management (the DM Law). This law regulates disaster relief and governs the entire disaster management system in Indonesia, from preparedness to response and recovery. As a result, Indonesia is now at the forefront of disaster-prone countries that have developed and are strengthening, comprehensive legal frameworks to support the entire disaster management spectrum.¹

This study analyses the laws related to disaster risks in Indonesia using the pilot version of the 'Checklist on Law and Disaster Risk Reduction',² which was developed jointly by IFRC and UNDP through a global consultation process. This report is the result of an integrated research process that combined desk-based legal research with stakeholder interviews in-country, followed by a multi-stakeholder consultation workshop held in February 2016 to verify the research findings and explore relevant issues with participants. It provides a 'legal mapping' of the laws and regulations that address disaster risk reduction (DRR) in Indonesia, analysing them against the questions contained in the Checklist and assessing their implementation based on stakeholder feedback and secondary sources. It is intended to provide law, policy and decision-makers with an analysis for consideration in future developments of the legal framework for DRR and its implementation.

Overall, Indonesia has a strong and comprehensive legal framework for disaster management. The DM Law of 2007 provides the foundation for disaster management and DRR in Indonesia. Together with a series of regulations issued in 2008, it lays out a comprehensive set of provisions outlining national and regional government responsibilities, community rights and obligations, the role of businesses and international institutions, the different disaster management stages as well as disaster aid financing and management. Ultimately, this legal framework provides a foundation upon which the necessary structures, rights and responsibilities are being developed to properly integrate DRR into Indonesia's disaster management sector.

These developments are linked to the key commitments on implementing DRR that have been made by the government of Indonesia through its adoption of the Hyogo Framework for Action (HFA)³ and the more recent Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR)⁴. Overall, Indonesia has made strong and positive steps towards integrating and implementing the key recommendations of the HFA and is planning for its implementation of the SFDRR that will take place over the next 15 years. The Sendai Framework calls upon states to review and promote national laws and regulatory frameworks for DRR, across all relevant sectors. This includes, among other things, assigning roles and responsibilities, promoting community-level engagement and ensuring compliance with safety-

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- 1 PMI and IFRC, *International Disaster Response Law in Indonesia*, 2014, available at <http://www.ifrc.org/Global/Publications/IDRL/country%20studies/Indonesia%20IDRL%20Report%20FINAL.pdf>
 - 2 A copy of the pilot version remains available at <http://www.ifrc.org/PageFiles/115542/The-checklist-on-law-and-drr.pdf>
 - 3 United Nations International Strategy for Disaster Reduction, *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters* (Extract from the Final Report of the World Conference on Disaster Reduction), World Conference on Disaster Reduction. 18-22 January 2005, Kobe, Hyogo, Japan, available at: <http://www.unisdr.org/2005/wcdr/intergover/official-doc/L-docs/Hyogo-framework-for-action-english.pdf>
 - 4 United Nations Office for Disaster Risk Reduction, *Sendai Framework for Disaster Risk Reduction 2015-2030*, 2015, available at: <http://www.unisdr.org/we/inform/publications/43291>
-

enhancing regulations. The legal framework in Indonesia already broadly addresses these priority issues and has a strong institutional structure for disaster management. Furthermore, the government of Indonesia and BNPB in particular, is actively engaged in reviewing, amending and promoting laws and regulations that contribute to DRR.

Most responses to the Checklist questions, however, revealed that further improvements in law and especially in implementation, are still needed to fully address the integration of DRR into the legal framework in Indonesia. Many sectors examined for this report possess a great deal of relevant legislation at the national, regional, district and even village levels. Yet analysing the national laws against the Checklist questions reveals several areas where legal provisions could be improved and better integrate important DRR considerations. The key to successfully promoting DRR lies in robust implementation of laws and policies on a whole-of-society basis.

The remainder of this section sets out some of the key findings of this report according to the Checklist questions, as well as some of the most important recommendations for future action.



1 Do you have a dedicated law for disaster risk management that prioritises risk reduction and is tailored to your country context?

- Indonesia possesses an extremely sophisticated legal framework for disaster management that also provides a solid foundation for DRR in Indonesia. Together with a series of regulations issued in 2008, it sets out a comprehensive set of provisions outlining national and regional government responsibilities, community rights and obligations, the roles of businesses and international institutions, the different disaster management stages and their requirements, as well as disaster aid finance and management.
- Multiple regional, district and local level disaster management plans and contingency plans have been and continue to be developed. Whilst there is a strong focus on emergency response they present a strong opportunity to integrate appropriate DRR priorities.
- Links with other sectors and institutions, in particular climate change, could also be clarified and strengthened in law and practice. There is also a need to try and extend the application of the DM Law and Regulations beyond the authority of BNPB and better integrate other Ministries into the framework.
- The framework would also benefit from more detailed provisions on the measurement of success and implementation.



2 Do your laws establish clear roles and responsibilities related to risk reduction for all relevant institutions from national to local level?

- Roles and responsibilities for DRR in Indonesia are relatively well assigned under the legal framework but they could benefit from further clarification.
- Regional, district and village governments all technically maintain responsibility for DRR under the general transfer of powers to the local level. Their exact responsibilities, as well as how to effectively

coordinate with regional and district Disaster Management Agencies (Badan Penanggulangan Bencana Daerah (BPBD)), would also benefit from further clarification.

- Effective coordination between the various agencies and sectors involved in DRR could also be improved and was highlighted by most interviewees as an issue, including from government.
- Although strong civil society-based networks for DRR exist (notably PLANAS, which maintains coordination at civil society level) there is no clear multi-ministerial/sectoral coordination mechanism at government level that meets consistently and ensures information is shared between different bodies.

3

Do your relevant sectoral laws include provisions to increase safety and reduce vulnerability?

Key findings according to the Checklist questions:

- **Environment:** the legislation for this sector is comprehensive and contains important provisions relating to Environmental Protection and Management Plans, the Strategic Environmental Assessment Process and an Environmental Impact Assessment regime (EIA). It also links environmental protection and planning to development and spatial planning processes.
- The DM Law provides that disaster risk analysis should be incorporated into EIAs although no details on implementation are provided. A clear mechanism on how the analysis should be incorporated would be of great benefit.
- **Forests:** a detailed and sophisticated legal regime governing access to and exploitation of forests has been developed over many years and the risk of forest fires is considered and incorporated into forest planning.
- The framework law on forest management, number 41 of 1999, is supported by a number of important regulations issued not only by the Ministry of Environment and Forestry but also by the national, regional and district governments. The legal framework could however benefit from more explicit linkages between the forest sector and the DM 'sector' and more detailed regulations and guidelines on reduction of risks from forest fires.
- **Water:** the repeal of Law 7/2004 on Water Resources due to the potential for excessive privatisation and monopolisation of water resources halts the progressive content of law 7/2004, concerning disaster risk mitigation and community engagement and management of resources.
- However, other positive legislation and practices remain in place, as the water sector benefits from an extensive amount of regulation issued at national, regional and district level.
- **Land use planning:** coordination with the land use/spatial-planning sector is noted in Indonesia's legal framework for disaster management, which refers to the implementation and enforcement of the spatial structure plan as a component of the pre-disaster stage as well as its place in prevention and mitigation activities.
- The ambitions of the DM Law and the activities of BNPB and BPBD agencies need to be aligned with those of the main actors in spatial planning in order for disaster risks to be considered appropriately within the planning system.
- **Building and construction:** a comprehensive construction regulation and permitting system is established under law 28/2002 on Buildings, secondary regulations and a long list of detailed standards and codes, most of which are adapted from international best practice and standards. A relatively strong sanctions regime also exists under law for non-compliance.

- Considerations relevant to DRR are included, both at a high level in law 28/2002 as well as through detailed standards (which include, among others, earthquake resistance, dam safety, general hazard prevention, rescue access, wind resistance). However, many of these standards would benefit from being updated (except for seismic risks) and levels of implementation are variable.
- **Climate Change:** a National Action Plan contains the country's strategy and is well aligned with DRR considerations. However there is a need for further collaboration between the two 'sectors' of climate change and DRR and consideration should be given to implementing a coordinated approach on how they are to be developed as cross-cutting (and inter-linked) themes in other sectors.

4

Do your laws ensure that sufficient resources are budgeted for disaster risk reduction?

- Overall Indonesia's laws provide mechanisms to budget for DRR, although the emphasis is on funds for disaster response and DRR is not mentioned specifically under the law.
- Stronger links and communications between the Ministry of Finance and BNPB may help clarify funding flows and procedures for DRR. The Ministry of Finance may also need to review its internal procedures regarding budget lines for DRR.
- The legal framework does not contain any provisions to reduce implementation challenges for DRR financing, nor do laws promote disaster insurance and/or other risk finance mechanisms.

5

Do your laws establish clear procedures and responsibilities for risk assessments and ensure risk information is considered in development processes?

- Although provisions under law are limited, in practice a significant amount of mapping of risks and vulnerabilities has taken place in Indonesia, led by a number of actors. In particular, the production of a detailed and comprehensive Risk Index provides a clear foundation for the integration of risk information into planning processes.
- The legal framework would benefit from including more comprehensive provisions on the nature and frequency of risk assessments, as well as mechanisms to ensure that at-risk communities are involved in any mapping and assessment processes.
- Stronger links between risk assessments and vulnerability maps and the development planning and construction sectors should also be encouraged.

6

Do your laws establish clear procedures and responsibilities for early warning?

- A robust and sophisticated EWS for major hydro-meteorological hazards has been developed in Indonesia. The legal framework for EWS, however, is limited and only high-level responsibilities are assigned under national law.

- Importantly, the role of various important actors, including technical ministries, communities, local authorities, scientific institutions, private media companies and civil society organizations could be strengthened both in law and practice.
- There is also a need to focus on the development of EWS for important recurring risks such as flooding, drought and landslides.
- Customary or 'traditional' EWS are relatively commonplace and demonstrate a high potential for useful integration into the 'formal' EWS. The legal framework would therefore benefit from provisions that seek to integrate customary EWS into government planning and implementation.

7**Do your laws require education, training and awareness-raising to promote a whole-of-society approach to DRR?**

- In practice, the integration of DRR into the education sector is very strong in Indonesia. Although not mentioned under the framework law on education, under the DM Law, education and training are key components of the 'pre-disaster' stage. The government is required to carry out and stipulate education, training and technical standard requirements for disaster management.
- The issue of mainstreaming DRR into educational policy and curriculums has been provided for in some detail in a 'Strategy for Mainstreaming DRR in Schools' issued by the Minister of National Education.
- Overall the legal framework could also benefit from stronger assignment of responsibilities related to DRR education and awareness-raising, with more detailed measures on implementation.

8**Do your laws ensure the engagement of all relevant stakeholders, including civil society, the private sector, scientific institutions and communities in risk reduction decisions and activities?**

- Legal provisions that explicitly ensure stakeholder engagement in risk reduction decision-making and activities are limited. The current legal framework encourages stakeholder participation although it could benefit from clearer mechanisms to ensure that this participation occurs.
- The DM Law and regulations as well as several other sectoral laws emphasises the importance of community participation and in some cases provide general frameworks to try to achieve this. Under the 'village law' of 2014 a number of mechanisms exist for community representatives to take decisions that are relevant to the village's exposure to risks, based on the principle that such matters are assigned to village authorities under law.
- A government regulation that deals specifically with the participation of international institutions and foreign NGOs in disaster management is a positive development that provides a basis for the inclusion of the UN and foreign NGOs in the disaster management system. However it would benefit from expanding the focus of their assistance beyond emergency response, to incorporate planning for and implement DRR activities.
- Overall the legal framework would also benefit from provisions that mandate the representation of civil society organisations and PMI as well as private sector actors in decision-making bodies and DRR activities.

9

Do your laws adequately address gender considerations and the special needs of particularly vulnerable categories of persons?

- Indonesia has a well-developed legislative framework that enshrines and respects the rights of women, the disabled and other vulnerable groups. A Ministry for Women's Empowerment exists that is responsible for gender mainstreaming at the national level.
- A number of positive practices exist: for example, villages that have developed their own local-level regulations on the participation of women and vulnerable groups in local disaster management. The challenge is to replicate these successes in other areas where local conditions, capacities and concerns may differ.
- The integration of gender considerations and the special needs of particularly vulnerable categories of persons could be strengthened under the current legal framework. Laws do not currently provide for analysis as to which categories of persons may be most vulnerable or exposed to disaster risks and specific responsibilities for integration into DRR decision-making are unclear.

10

Do you have adequate mechanisms to ensure that responsibilities are fulfilled and rights are protected?

- Institutional reporting lines and monitoring and evaluation provisions are included in the DM Law as well as Regulation 21/2008 and Presidential Regulation 8/2008, which ensures that BNPB reports to the President at least once a month and should combine forces with BAPPENAS and BAPPEDA to monitor and evaluate the implementation of disaster management activities. Accounting for disaster management funds receives a more detailed treatment under Regulation 22/2008.
- Penal provisions are also included under the DM Law, although they concentrate mainly on sanctions for high-risk development without disaster analysis. The law does not refer to wider issues of accountability and liability for DRR.
- Although administrative laws may require, for example, regional and district heads to submit accountability reports to their relevant administrations, there is no indication as to whether this would include information on DRR, whether they would report on a regular basis, or whether such reports are easily available to the public.
- The legal framework would benefit from clarifying how the public may access information. There are also presently no incentives for compliance with laws and regulations for DRR.

Summary of main recommendations

Based on the responses to the Checklist questions and the priority areas identified above, this report puts forward some key recommendations and suggested ways forward to build upon the identified strengths in Indonesia's legal framework for DRR, as well as addressing some of the major gaps. The intention is that stakeholders reflect on the contents and integrate any relevant recommendations suggested here into their own thinking and plans. The recommendations will also form the basis for ongoing development of a 'roadmap' or 'plan of action' for law and DRR in Indonesia that will be jointly developed between PMI, BNPB and IFRC, with stakeholder input as appropriate. An initial version of this plan of action is included at Annex A.

In terms of implementing the recommendations listed below, several of the recommendations could be reflected in national level legislation or, failing that, secondary guidelines or policy documents. For more detailed recommendations and suggested ways forward, please see the full 'Recommendations' section at the end of this report.

1. Leverage any future amendment process for the DM Law to propose the following amendments:

- A clearer and more direct allocation of institutional responsibility for DRR from national to village level.
- Creation of clear legal institutional links with other sectors, importantly environment and climate change but also including land-use planning and education sectors.
- More detailed and transparent reporting mechanisms.
- Harmonising and promoting the means for public participation in DRR planning and decision-making especially at village level. This should also include the prioritisation of women and vulnerable groups in planning and decision-making.
- Mandating clear and transparent funding procedures and allocations for DRR within sectoral budgets.

2. Consider the following strategic amendments to other sectoral legislation:

- Environment: clear prioritisation of DRR and inclusion of relevant disaster risks as a key consideration in any EIA process should be included in any future revisions of environmental legislation.
- Land use planning: incorporate provisions that link land use planning agencies with BNPB and BPBD and link to the DM Law's emphasis on spatial structure plans as key prevention tools.
- Building and construction: ensure that standards and codes that are relevant to risk reduction are updated to the latest internationally agreed standards (with appropriate amendments for the Indonesian context).
- Climate change: any future amendments to legislation should seek to promote coordination and integration with BNPB, BPBDs and other institutions involved in DRR activities.
- Education: the positive integration of disaster risk and awareness elements in the educational system would benefit from recognition under the national education law, to make this a clear requirement for the national curriculum.

3. Strengthen the DRR mandate of the current BNPB Steering Committee

4. Ensure integration of DRR into the proposed National Response Framework

5. Increase focus on capacity, enforcement and implementation across all sectors relevant to DRR

6. Pilot DRR 'champions' and/or technical advisors within line Ministries and agencies

7. Improve public participation in risk assessment processes, planning for DRR and disaster management in general

8. Investigate the potential use of local/village-level rules and regulations that could be used for DRR purposes

9. Undertake further research among local communities

Concluding remarks: looking forward

It is clear that there are many strengths to the current system for disaster management in Indonesia and the sophistication of the legal framework and the level of understanding and integration of DRR are all very positive. Since the 2004 tsunami, Indonesia has used the Hyogo Framework for Action as a reference point to make significant progress in integrating and mainstreaming disaster risk reduction into its legislation and national development plans. This is especially relevant given the scale of natural hazards faced by Indonesia on a regular basis.

The government of Indonesia has recognised the need for long-term efforts and partnerships in order to build the country's capacity to ensure that communities are resilient to disasters.⁵ The conclusions and recommendations of this study are therefore presented in the hope of continued development, collaboration and partnership between the Indonesian government (including BNPB as well as other sectoral stakeholders), PMI, IFRC and other actors in order to achieve this objective.

Indonesia ultimately has an extremely strong foundation upon which to further strengthen its institutions, laws and practices to reduce the risks faced from disasters. The priority areas and recommendations developed in this study are offered as tools to further develop and strengthen the legal framework for DRR in Indonesia, in line with national commitments and a capacity which is continually growing and improving.

5 See the statement by H.E. Mr. M. Jusuf Kalla, Vice-President of The Republic Of Indonesia and Chairman of the Indonesian Red Cross Society, Third World Conference on Disaster Risk Reduction, Sendai, Japan, 14 March 2015

List of Abbreviation

BAPPEDA	Ministry of National Development Planning (Badan Perencanaan Pembangunan Nasional)
BAPPENAS	Regional Development Planning Agency (Badan Perencana Pembangunan Daerah)
BMKG	National Agency for the Meteorology, Climatology and Geophysics (Badan Meteorologi, Klimatologi dan Geofisika)
BNPB	National Agency for Disaster Management (Badan Nasional Penanggulangan Bencana)
BPBD	Regional Disaster Management Agency (Badan Penanggulangan Bencana Daerah)
Checklist	The checklist on law and disaster risk reduction (Pilot version, March 2015)
DM Law	Law Number 24 of 2007 concerning Disaster Management
DRM	Disaster Risk Management
DPD	Regional Representatives Council (Dewan Perwakilan Daerah)
DPR	People's Representatives Council (Dewan Perwakilan Rakyat)
DRR	Disaster Risk Reduction
EIA	Environmental Impact Assessment
EOC	Emergency Operations Centre
IFRC	International Federation of Red Cross and Red Crescent Societies
MOEF	Ministry of Environment and Forestry (Kementerian Lingkungan Hidup dan Kehutanan)
MOHA	Ministry of Home Affairs (Kementerian Dalam Negeri)
MPR	People's Consultative Assembly (Majelis Permusyawaratan Rakyat)
NGO	Non-Governmental Organisation
PMI	Indonesian Red Cross Society (Palang Merah Indonesia)
RAN-API	National Action Plan for Climate Change Adaptation
UN	United Nations
UNDP	United Nations Development Programmes
UNISDR	United Nations Office for Disaster Risk Reduction
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs

Introduction

“It was the 2004 tsunami which brought the issue of human rights and natural disaster response to the fore of the international agenda. Aceh was the worst affected area, with death toll estimates at around 200,000. From Indonesia’s experience, after the earthquake and tsunami hit in 2014, we began to redouble our efforts to improve our disaster management by shifting the paradigm from emergency response and recovery, to a more comprehensive approach. It has not only enabled Indonesia to implement the concept of ‘build back better’ in disaster-affected areas in Aceh in a relatively short period of 4 years, but also to strengthen our capacities for building a community resilient to disaster.”⁶ ”

The Republic of Indonesia is a sovereign nation located along the equator in Southeast Asia, between the Indian Ocean to the west and the Pacific Ocean to the east. The country is comprised of more than 17,000 islands, approximately 6,000 of which are inhabited. The large number of islands gives Indonesia one of the longest coastlines in the world and makes it highly vulnerable to coastal hazards such as tsunamis. It is the fourth most populous country in the world, with most recent estimates placing its population at around 256 million⁷, made up of over 500 distinct ethnic groups. In the latest Human Development Index published by UNDP, Indonesia ranked 108th out of 187 listed states, falling under the category of ‘medium human development’⁸.

Indonesia is also one of the most disaster-affected countries in the world, at risk from an extensive list of different disasters each year. These range from floods, landslides and earthquakes, to volcanic eruptions, tsunami and tropical storms. Due to the massive impact that disasters have had in Indonesia, the development and reform of laws and regulations have typically focused on disaster management and response. However, in line with key international commitments such as the Sendai Framework for Disaster Risk Reduction 2015-2030⁹ and the Sustainable Development Goals¹⁰ increasing focus is being placed on strengthening legal frameworks for disaster risk reduction (DRR). The Sendai Framework calls upon states to review and promote national laws and regulatory frameworks for DRR, across all relevant sectors. This includes, among other things, assigning roles and responsibilities, promoting community-level engagement and ensuring compliance with safety-enhancing regulations. The Sustainable Development Goals include a number of highly relevant objectives for DRR, including making cities and human settlements inclusive, safe, resilient and sustainable (goal 11) and promoting peaceful and inclusive societies for sustainable development, providing access to justice for all and building effective, accountable and inclusive institutions at all levels (goal 16). The timing is therefore right for Indonesia to consider how well its national legal framework addresses DRR.

Since 2012, the International Federation of Red Cross and Red Crescent Societies (IFRC) and the United Nations Development Programme (UNDP) have been working on a collaborative project aimed at supporting the strengthening of domestic legislation for DRR. Upon finalisation of a Multi-Country Study in June 2014,¹¹ the project developed a “Checklist on Law and Disaster Risk Reduction” (the Checklist),¹² and accompanying “Handbook on Law and Disaster Risk Reduction” which provides a

6 Statement by H.E. Mr. M. Jusuf Kalla, Vice-President of The Republic Of Indonesia and Chairman of the Indonesian Red Cross Society, Third World Conference on Disaster Risk Reduction, Sendai, Japan, 14 March 2015

7 Central Intelligence Agency, The World Factbook, Indonesia, available at <https://www.cia.gov/library/publications/resources/the-world-factbook/geos/id.html> (accessed 9 November 2015)

8 UNDP, Human Development Report 2014, 2014

9 United Nations Office for Disaster Risk Reduction, Sendai Framework for Disaster Risk Reduction 2015-2030, 2015

10 Sustainable Development Goals, available at <https://sustainabledevelopment.un.org/?menu=1300>

11 IFRC and UNDP, Effective law and regulation for disaster risk reduction: a multi-country report, 2014, available at: <http://www.drr-law.org>

12 IFRC and UNDP, The checklist on law and disaster risk reduction, October 2015, available at: <http://www.drr-law.org>

prioritized and succinct list of ten key questions that lawmakers, implementing officials and those supporting them should consider in order to ensure that their laws provide the best support for DRR. This study made use of the pilot version of the Checklist. The final version of the Checklist incorporated changes recommended through the pilot process and was welcomed by the 32nd International Conference of the International Red Cross and Red Crescent Societies.¹³

Given the recent disaster law developments in Indonesia and its prominence in Southeast Asia as a leader in disaster law and management, this report has been commissioned under a joint initiative between the Indonesian Red Cross (Palang Merah Indonesia (PMI)), IFRC and Indonesia's National Disaster Management Authority (Badan Nasional Penanggulangan Bencana (BNPB)) in order to provide a broad assessment and 'legal mapping' of the content and implementation of laws and regulations that address DRR in Indonesia, based on the questions contained in the Checklist. This report is, however, simply the beginning of the initiative's wider objective, which is to bring together key Indonesian and international stakeholders to identify strengths and opportunities for further long-term improvement in the development and implementation of the legal framework for DRR in Indonesia.

13 IFRC and UNDP, *The Checklist on Law and Disaster Risk Reduction (Pilot Version)*, March 2015, available at <http://www.ifrc.org/PageFiles/115542/The-checklist-on-law-and-drr.pdf>

Methodology

This report uses the Checklist on Law and DRR to explore and analyse the legal framework for DRR in Indonesia, focusing specifically on the content and implementation of national laws and regulations. It is intended to provide law, policy and decision-makers with an analysis for consideration for any future developments regarding the legal framework for DRR and its implementation. Given the timeframe for this report, it does not attempt to be an exhaustive study of all the legal and institutional frameworks of relevance to DRR in Indonesia. It is an initial mapping and a snapshot of an evolving framework and an identification of recommendations for further work. As this study was part of the piloting process for the use of the Checklist on Law and DRR and due to the timing of the research for this study, the pilot version of the Checklist (originally issued in March 2015) was used as the research framework.¹⁴ In October 2015, a final version of the Checklist on Law and DRR was published by IFRC. The updates made to the Checklist questions and guiding questions in the final version are relatively minor. However in order to maintain research consistency this report refers to the pilot version.

Desk-based legal research was undertaken in advance of a research mission to Jakarta between 12 to 28 October 2015. For reasons of practicality and timing, legal research for this study has focused on the English translations of Indonesian laws available. This study represents a fairly complete picture of relevant laws that are available in English and some basic translations of key provisions in Bahasa Indonesia laws were undertaken to benefit the analysis.

During the research mission, a wide range of stakeholders were interviewed, as listed in Annex B. These included government officials from national and regional levels, as well as the IFRC and other Red Cross Movement representatives, stakeholders from intergovernmental organisations (particularly UN agencies and international partners such as the World Bank), non-governmental organisations and some community representatives. The objective of these interviews was to build upon the desk research already undertaken and to gather an understanding of national laws and the key challenges in implementation. Given the time-frame and the large amount of development and humanitarian activity in Indonesia it was not possible to meet with all major government, national and international actors and the absence of an organisation from the list in Annex B may simply mean that their representative was not available in Jakarta at the relevant time. It is important to note that the interviewees for this study consist largely of national-level stakeholders based in Jakarta. The researcher was also able to interview a limited number of regional officials (mainly from the Local Disaster Management Agencies (Badan Penanggulangan Bencana Daerah (BPBD)) as well as Red Cross community volunteers from around the country, in Surakarta (Solo). However, the scope and timing for this study meant that it was not possible to plan and undertake community-level focus groups and interviews. This means that analysis of the implementation and impact of laws at community level, as well as community-level practices and priorities, is limited.

Interviews were held as structured discussions, based on the Checklist's guiding questions as well as a more extensive secondary question list developed on the basis of the terms of reference. The interviews therefore focused on legal issues surrounding DRR in Indonesia, the legal framework and its implementation and current disaster risks and DRR practices, with special consideration of any good practices and gaps in the legal framework and its implementation. The majority of the interviews were held in Jakarta in order to meet with the relevant government officials, intergovernmental agencies, national, international and foreign NGOs and other stakeholders whose headquarters are based there.

14 A copy of the pilot version remains available at <http://www.ifrc.org/PageFiles/115542/The-checklist-on-law-and-drr.pdf>

During the research mission, the researcher and IFRC team also participated in a three-day conference in Surakarta, as part of Indonesia's International Day for Disaster Risk Reduction events, from 16 to 18 October 2015. During this time, they had access to a wide range of meetings and workshops on relevant topics, as well as national and regional/local stakeholders in DRR. For example, meetings were held with representatives from national line Ministries as well as BPBD officials from around the country and community representatives from Java and Sika.

The findings of this report have been further supplemented by the feedback and results of a consultation workshop held in Jakarta on 29 February 2016, in collaboration with PMI and BNPB. The workshop brought together key stakeholders from government, humanitarian and development sectors and civil society to identify strengths and opportunities for further improvement in the development and implementation of the legal framework for DRR in Indonesia. Participants at the workshop were given the opportunity to discuss the ten questions contained in the DRR law checklist and to identify priority areas for improvement in Indonesia, based on a voting exercise.

Summary of main natural hazards and risks in Indonesia

Indonesia is one of the most disaster-affected countries in the world, at risk from a range of different disasters each year. Its geographical position, as well as the fact that it is the largest archipelago nation in the world, means that it is at risk of hazards including floods, landslides and earthquakes, to volcanic eruptions, tsunamis, tropical storms and forest fires. In terms of fatalities, earthquakes are the most dangerous hazard, followed by epidemics and drought. The risk of high numbers of fatalities from volcanic activity has decreased in recent years thanks to better monitoring and evacuation practices.

Indonesia's vulnerability is compounded by its position in the 'Ring of Fire' and at the boundaries of three tectonic plates. For most commentators there remains little doubt that climate change is and will continue to exacerbate the nature and impact of the natural hazards faced by Indonesia. Generally, the global climate change model predicts that this will manifest in an increase in temperature and intensity of rainfall (thereby increasing the risk of floods and droughts) and extended dry seasons, all of which have the potential to greatly affect community health and sources of living, degrade Indonesia's biodiversity and destabilise its economy.¹⁵ The impact of natural disasters is explained in the table and figures below.

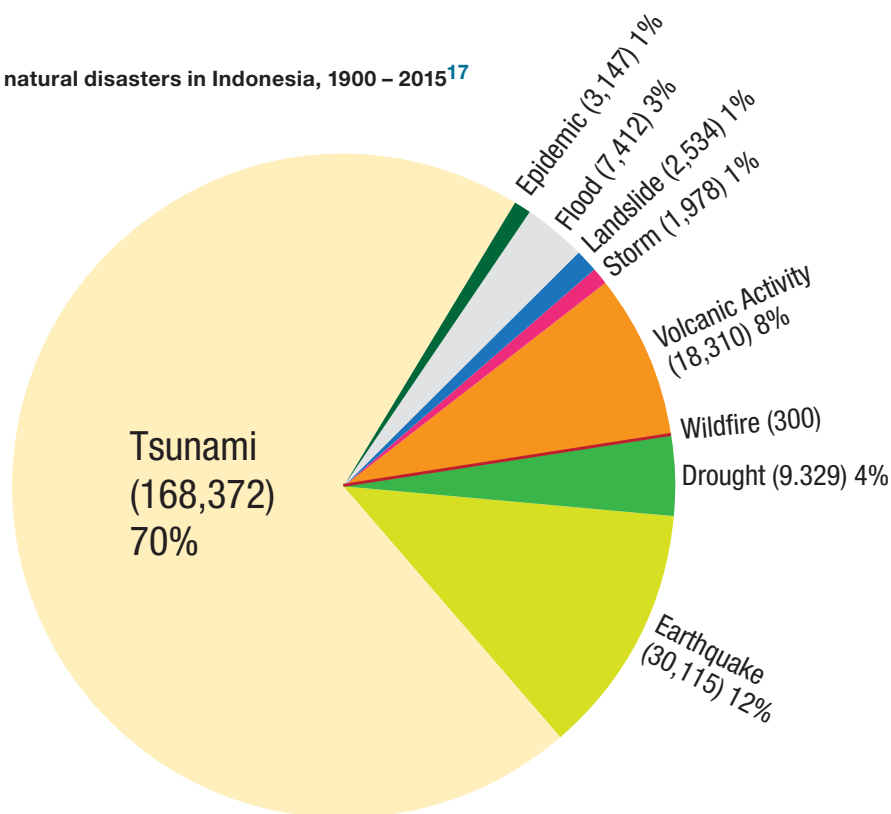
Table 1: Impact of natural disasters in Indonesia, 1900 – 2015¹⁶

Disaster type	Disaster subtype	Events count	Total deaths	Total affected	Total damage (USD)
Drought	Drought	9	9,329	4,804,220	160,200,000
Earthquake	Tsunami	9	168,372	580,520	4,506,600,000
	Ground movement	105	30,115	8,536,402	718,932,000
Epidemic	Bacterial disease	15	744	38,030	0
	Viral disease	13	2,178	137,015	0
	Parasitic disease	3	225	504,000	0
Flood	Flash flood	32	2,037	1,236,455	247,500,000
	Riverine flood	85	2,708	6,054,476	6,318,909,000
	–	58	2,656	2,571,584	90,638,000
	Coastal flood	1	11	2,000	0
Landslide	Rockfall	1	12	55	0
	Landslide	52	2,522	397,792	121,745,000
Storm	Tropical cyclone	6	1,953	5,298	0
	Convective storm	3	25	1,2950	1000
Volcanic activity	Ash fall	57	18,310	1,333,828	53,0390,000
Wildfire	Forest fire	9	300	3,034,478	9,329,000,000

¹⁵ Republic of Indonesia, *National Action Plan for Climate Change Adaptation (RAN-API) – Synthesis Report*, 2013, p. 1

¹⁶ Source: EM-DAT: The OFDA/CRED International Disaster Database, accessed 9 November 2015, www.emdat.be

Figure 1: Total fatalities from natural disasters in Indonesia, 1900 – 2015¹⁷



Earthquakes: Indonesia experiences regular severe earthquakes due to its position along the boundaries of three tectonic plates, placing the provinces of Java, Bali, Nusa Tenggara, Maluku, Sulawesi and Papua at high risk. In January 2015 alone, the Indonesian Meteorology, Climatology and Geophysics Agency (BMKG) reported 18 earthquakes exceeding a magnitude of 5.0.¹⁸ Since the Indian Ocean earthquake and tsunami of 2004, there have been multiple devastating earthquakes in Indonesia, including Yogyakarta in 2006 (5,780 deaths), Java in 2006 (730 deaths) and Sumatra in 2009 (1,117 deaths) and in 2010 (435 deaths).¹⁹

Tsunamis: the 2004 Indian Ocean tsunami needs no introduction but the extent of the threat faced by Indonesia from this hazard can be seen in the fact that since 2004, Indonesia has experienced a further three major tsunamis, resulting in 1,333 deaths and affecting 47,502 people in total.²⁰ Indonesia's position at the boundaries of three tectonic plates and the position of the boundaries on the sea floor, means that earthquake epicenters are likely located where they can generate tsunamis. The impact of tsunamis is compounded by Indonesia's geography, as the most at risk are communities situated on the southern and western coastlines, which tend to be poor, isolated and dependent on fishing for livelihoods. This means that a large amount of people reside adjacent to the water without adequate access to timely risk information.²¹

Volcanic eruption: much of Indonesia is in close proximity to active volcanoes. The country has a total of 129 active volcanoes, 70 of which are considered potentially dangerous and 23 have erupted in the

17 Source: EM-DAT: The OFDA/CRED International Disaster Database, www.emdat.be (accessed 9 November 2015)
 18 Center for Excellence in Disaster Management & Humanitarian Assistance (CEDMHA), *Indonesia: Disaster Management Reference Handbook*, 2015, p. 28
 19 Statistics available at https://en.wikipedia.org/wiki/List_of_earthquakes_in_Indonesia (accessed 9 November 2015)
 20 EM-DAT: The OFDA/CRED International Disaster Database, www.emdat.be (accessed 9 November 2015)
 21 CEDMHA, *Indonesia: Disaster Management Reference Handbook*, 2015, p. 30

last 20 years. Nowadays, fatalities due to volcanic eruptions are relatively rare, with the exception of the eruption of Mount Merapi in 2010, which caused several hundred deaths.²² However, the economic impact of volcanic eruptions can be enormous. Estimates for Merapi vary widely but damage and loss assessments conducted by BNPB in December 2010 put the total value of loss at USD 36.2 billion.²³

Floods: This type of disaster is actually the most common hazard facing Indonesia, with practically every region sustaining annual damages due to floods. Between 1995 and 2015, floods accounted for 43 per cent of disaster occurrences. To put this in perspective, this is double that of earthquakes, the next most prevalent disaster.²⁴ The main driver behind floods in Indonesia is the annual monsoon rains (broadly running from November to March), however, the impact of upstream deforestation and either further deforestation and/or paving of catchment areas has a huge impact on the severity of flooding. Floods also create the risk of secondary hazards, such as landslides, which can be even more devastating when combined with insufficient building practices and deforestation.

Drought: Indonesia is extremely vulnerable to drought. Its vulnerability is exacerbated by the impacts of the El Niño phenomenon,²⁵ which delays the onset of the rainy season. At the time of writing this report, Indonesia was suffering from severe drought across 20 provinces,²⁶ with El Niño conditions delaying the start of the rainy season into 2016.²⁷ Droughts can cause a large number of deaths (as witnessed during the drought of 1997, which led to 672 deaths) but a great deal more Indonesians face severe food insecurity as a result of drought, often as a result of the impact on domestic rice production and resulting price increases affecting the most vulnerable populations.

Forest fires: although these are generally man-made hazards in Indonesia, they are a major threat to life and livelihoods. Fires often start when farmers (often large-scale industrial farmers owning vast areas of land) burn areas to clear for planting and become particularly hazardous when winds drive them into unplanned areas. Due to the nature of the land being cleared, which contains large deposits of peat, fires can smolder under the surface for months. Often they are only properly extinguished with the help of downpours during the rainy season. Between 1995 and 2015, statistics suggest that forest fires caused greater economic damage than any other type of disaster, creating USD 9.3 billion in direct costs.²⁸ The extensive annual forest fires, usually concentrated in the provinces of Sumatra, Kalimantan, Sulawesi and Java, create huge swathes of haze that not only affect local populations but also spread to neighbouring countries. During the research mission for this report (October 2015), Indonesian news was dominated with reports of the extensive haze caused by land-clearing fires in Sumatra and Kalimantan, exacerbated by an extended dry season and El Niño, which resulted in one of the most severe events on record.²⁹

22 IFRC, *Indonesia: Java eruption, Sumatra earthquake and tsunami, Emergency appeal no MDRID006 Operations update no. 4*, 23 May 2011

23 World Bank Global Facility for Disaster Reduction and Recovery, UNDP, European Union, *Institutionalizing Post-Disaster Recovery: Learning from Mentawai Tsunami and Merapi Eruption – Recovery Framework Case Study (Conference version)*, September 2014, p. 9

24 EM-DAT: The OFDA/CRED International Disaster Database, www.emdat.be (accessed 9 November 2015)

25 El Niño is a phenomenon in which sea surface temperatures rise significantly around the equator in the Pacific Ocean, causing a significant reduction in rainfall in Indonesia.

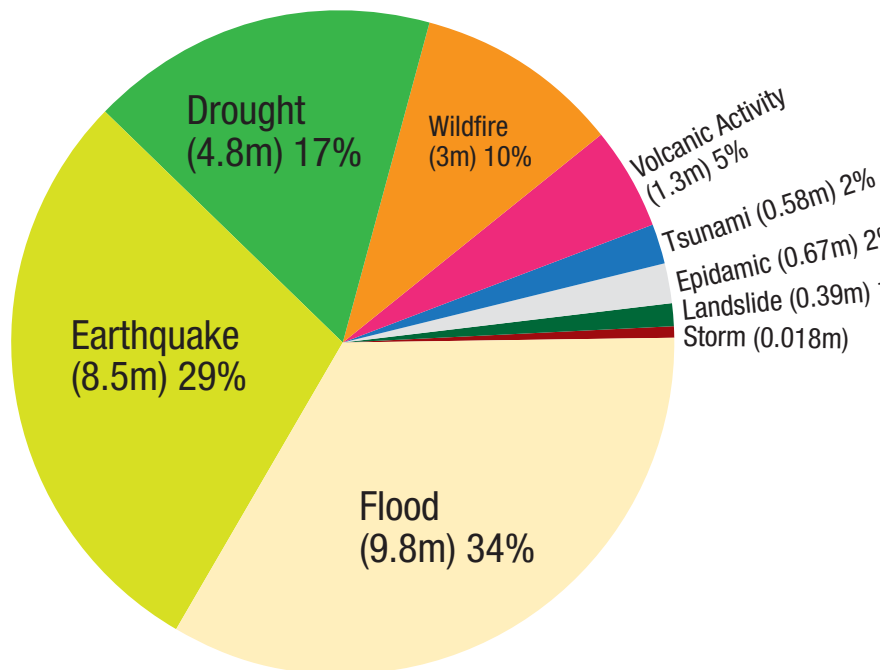
26 Reuters, *Beyond haze, El Niño drought poses poverty challenge for Indonesia*, 29 October 2015, <http://www.reuters.com/article/2015/10/29/us-indonesia-elnino-idUSKCN0SM2SK20151029> (accessed 2 November 2015)

27 Integrated Regional Information Networks Asia, *El Niño brings drought, hunger to Indonesia and South Pacific*, 22 October 2015, <http://www.irinnews.org/report/102140/el-nino-brings-drought-hunger-to-indonesia-and-south-pacific> (accessed 26 October 2015)

28 EM-DAT: The OFDA/CRED International Disaster Database, www.emdat.be (accessed 9 November 2015)

29 NASA Earth Observatory, *El Niño Brought Drought and Fire to Indonesia*, 14 January 2016, <http://www.nasa.gov/feature/goddard/2016/el-nino-brought-drought-and-fire-to-indonesia>, (accessed 28 March 2016)

Figure 2: Total population affected by natural disasters in Indonesia, 1900 – 2015 ³⁰



³⁰ Source: EM-DAT: The OFDA/CRED International Disaster Database, www.emdat.be (accessed 9 November 2015)

Government and law-making structure

Indonesia's current government structure was established under the Constitution of Indonesia, originally passed in 1945 but subject to an extensive reform process from 1999 to 2002. For the purposes of this section, the term 'government structure' means the three traditional branches of government: the executive, legislative and judicial.

Executive: Indonesia is a presidential system, with the president elected for a five-year term by popular vote. The president is assisted by a vice-president and a cabinet of state ministers (who do not have to be elected members of the legislature), but is also supported by the Supreme Advisory Council, a 45-member group mandated to advise on any presidential question regarding affairs of state.

Legislative: since 2004, legislative power in Indonesia has been vested in a bicameral parliamentary system under the People's Consultative Assembly (Majelis Permusyawaratan Rakyat (MPR)), which consists of two houses: the People's Representative Council (Dewan Perwakilan Rakyat (DPR), sometimes referred to as the House of Representatives) comprised of 550 representatives of political parties and the Regional Representatives Council (Dewan Perwakilan Daerah (DPD)), comprised of 128 representatives from the provinces in Indonesia. Members of both houses are elected every five years.

Judicial: the judicial branch of government consists of the Supreme Court and the Constitutional Court. The former is the highest judicial institution and the final court of appeal in Indonesia, with oversight of the court of appeals and the courts of first instance. The courts of appeal consist of the High Court, the Religious High Court, the Administrative High Court and the Military High Court. The District Courts handle the bulk of Indonesia's day-to-day legal caseload and there are approximately 250 District Courts in Indonesia. Specialist courts also fall under the general jurisdiction of the District Courts and include the Commercial Court, Labour Court and Children's Court. District and city-level Religious Courts and Administrative Courts also exist, although the jurisdiction of a Religious Court is limited to family law, inheritance, wakaf (religious foundation) and shadaqah (religious donation or tithe).

Local government and decentralisation: Indonesia's territory is divided into 34 provinces and the capital of Jakarta, each with its own governor and provincial government. Provinces are also commonly referred to as 'regions'. Terminology for the next level of government varies between the use of the term 'district' and the term 'regency' and English translations of Indonesian laws vary in which term they use. In this report, the term 'district' will be used, as that was the term most used by interviewees. In any event, each province is further subdivided into districts and municipalities, headed by a governor (for a district) or a mayor (for a municipality) and with their own local governments. Since 2005, the heads of all local governments (governors, regents and mayors) have been directly elected by popular vote. Districts are divided into sub-districts, each headed by a 'camat', who is a civil servant responsible to the regent. Sub-districts are divided into villages; at this lowest level of government, most villages have some form of administration which is headed by a 'Kepala Desa', best translated as the head or chief of the village, who is elected by popular vote.

Legal system: Indonesia's legal system is based on a civil law system, but is notable for the manner in which this co-exists with customary law and the legacy of Roman-Dutch law (still in evidence, for example, in Indonesia's Civil Code). Prior to Dutch colonization in the sixteenth century, the archipelago's kingdoms applied different customary laws, known as 'adat', which continue to exist

to this day in various forms and to varying extents.³¹ For example, Aceh in Sumatra observes its own sharia law, whilst the Toraja ethnic group in Sulawesi still applies animistic customary law.

The enactment procedure and hierarchy of written laws in Indonesia is detailed in Law No. 12 of 2011 on Enactment of Laws. A basic overview of the hierarchy is as follows:

- **The Constitution of 1945** (Undang-Undang Dasar 1945), as amended
- **Laws** (Undang-Undang)/**Government Regulations in lieu of Law** (Peraturan Pemerintah Pengganti Undang-Undang or 'Perpu')
- **Government Regulation** (Peraturan Pemerintah or 'PP') – enacted by the president to implement detailed provisions of Laws
- **Presidential Decree** (Peraturan Presiden or 'Perpres')
- **Regional Regulation** (Peraturan Daerah or 'Perda')
- **Ministerial Regulation** (Peraturan Menteri or 'Permen')
- **Regulation of other (non-Ministerial) government body** (Peraturan Kepala or 'Perka')

31 See, for example, the Constitutional Court's ruling on the judicial review of the Forestry Law 1999 (No. 35/PUU-X/2012) which, in brief, overturned the state's claim on customary forests and held that the state's right 'to control' could not override the inherent rights of indigenous populations to control their own land according to customary practice and law.

Response to Checklist questions

Introduction

This section sets out the detailed findings of this research according to each of the ten questions contained in the pilot version of the Checklist on Law and DRR. The responses to the questions below include information gathered from analysis of national laws as well as from stakeholder interviews. Where relevant, the inputs received from participants at the consultation workshop held in Jakarta in February 2016 have also been integrated.

Each response provides an overview of the key laws and regulations applicable to that question, as well as the 'guiding questions' used for stakeholder interviews and to guide the written analysis. The responses provide an overview of the main provisions of the relevant laws and an analysis of their implementation, highlighting good practices and areas for improvement. Finally, based on this analysis, each response has been classified according to one of the following four categories:

No, this is currently a gap

To some extent, though further improvements are needed

Yes, but some aspects could be strengthened

Yes, this is a strength

1

Do you have a dedicated law for disaster risk management that prioritises risk reduction and is tailored to your country context?

a. Key laws and regulations:

- Law Number 24 of 2007 concerning Disaster Management
- Regulation Number 21 of 2008 concerning Disaster Management
- Regulation Number 22 of 2008 concerning Disaster Aid Financing and Management
- Regulation Number 23 of 2008 concerning Participation of International Institutions and Foreign NGOs in Disaster Management
- Presidential Regulation Number 8 of 2008 concerning National Agency Disaster Management
- Guideline Number 22 of 2010 on the Role of International Organizations and Foreign Non-Governmental Organizations during Emergency Response

b. Guiding questions:

- Does your DRM law set out key principles and priorities guiding the country's approach to disaster risk reduction? Are these principles reflected throughout the text of the act?
- Does your DRM law address the major disaster risks faced by your country?
- Does your DRM law create links with any legislation and institutions related to climate change adaptation?
- Does your DRM law establish links with any key sectoral laws?
- Does your DRM law include ways to measure success and implementation?

Law Number 24 of 2007 concerning Disaster Management (the DM Law) provides the foundation for the legal framework for disaster management and DRR in Indonesia. Together with a series of regulations issued under its authority in 2008, it lays out a comprehensive set of provisions delegating national and regional government responsibilities, outlining community rights and obligations, the roles of businesses and international institutions, the different disaster management stages and their requirements, as well as disaster aid finance and management.

Indonesia's approach to disaster management has, like many other countries in the region, historically focused on disaster response. However, due to the exposure of legal and institutional gaps after the tsunami of 2004,³² and the impact of these issues on the relief effort, the Indonesian government fundamentally changed its approach and acknowledged the need for a broader concept of disaster management.³³ The DM Law addresses the major disaster risks faced by the country by including a wide definition of 'disaster', incorporating natural, 'non-natural' and 'social' disasters. This reflects Indonesia's propensity to be subject to many types of natural disasters, as well as the potential for non-natural disasters and social unrest. Importantly, "natural disaster" is defined as a non-exhaustive list that includes the major threats to Indonesia such as earthquake, tsunami, volcanic eruption, flood, drought, typhoon and landslide.³⁴ Arguably the threat faced by Indonesia from (largely man-made) forest fires could fall under the definitions of "non-natural disaster" or "social disaster."

The DM Law separates the disaster management cycle into three main stages: pre-disaster, emergency response and post-disaster.³⁵ DRR is established as one component of "disaster management in a situation without disaster",³⁶ which itself is one half of the pre-disaster stage (the other half being "situation with potential disaster").³⁷ DRR is defined as the aim to "reduce potential negative impacts, particularly in a situation without disaster."³⁸ This is further broken down into a (seemingly non-exhaustive) list of key activities, which are:

- recognition and monitoring of disaster risk;
- participatory disaster management planning;
- promotion of disaster-awareness practices;
- greater commitment of disaster management team; and
- application of physical and non-physical efforts and instructions on disaster management.³⁹

Functions during the "disaster management without a disaster" phase are clearly relevant to DRR, as they include:

- disaster management planning;
- prevention;
- integration into development planning;
- disaster risk analysis requirements;

32 IFRC, *Legal issues from the international response to the tsunami in Indonesia: An international disaster response laws, rules and principles (IDRL) programme case study*, July 2006, p. 40

33 As acknowledged in Recital (c), DM Law

34 Article I, *Ibid*

35 Chapter VII, Part Two, *Ibid*

36 Article 35, *Ibid*

37 Article 34, *Ibid*

38 Article 37, DM Law

39 Article 38, *Ibid*

- spatial structure plan implementation and enforcement;
- education and training; and
- technical standard requirement for disaster management.

Taken together with a more detailed explanation of disaster management planning in Article 36 (which includes understanding of community vulnerabilities, analysis of impact, options for risk reduction measures and selection of mechanisms for alertness and disaster impact management), the DM Law contains a relatively holistic and inclusive vision of DRR, albeit spread across a number of different provisions and separate terms.

Regulation 21 of 2008 concerning Disaster Management provides further detail relevant to DRR. Although essentially repeating some of the key provisions from the DM Law, Regulation 21/2008 requires an action plan for DRR, together with some specific requirements as regards its development.⁴⁰ DRR action plans are required at both national and regional levels. The national plan is to be coordinated by BNPB together with the agency responsible for development planning and to benefit from “a comprehensive and integrated preparation in a forum that includes governmental, non-governmental, community and business institution elements.” The regional plan benefits from the same process, but with regional stakeholders from the same groups.

Although the disaster management legal framework does not contain any links to sectoral legislation, it does contain practical links to relevant sectors. For example, the action plans for DRR are meant to be coordinated with the agency or institution responsible for development planning (these are the Ministry of National Development Planning (Badan Perencanaan Pembangunan Nasional (BAPPENAS)) at national level and the Regional Development Planning Agency (Badan Perencana Pembangunan Daerah (BAPPEDA)), at regional level. This raises a wider question of coordination of DRR efforts with other sectors under law, which appears limited.

There are several references relevant to how disaster management should be integrated into tasks and roles that fall to other sectors. For example, disaster management (in a situation without disaster) is to include “spatial structure plan and enforcement” and “education and training.”⁴¹ Regulation 21/2008 is more specific, stating that disaster mitigation measures shall require, as well as spatial structure planning, “regulation of development, infrastructure building and construction layout” and “education, training and counseling, using conventional and modern methods.”⁴² Both of these measures shall involve the application of “technical standard rule[s]...set by the authorized agencies/institutions.”⁴³ Article 42 refers to the “implementation and enforcement of [the] spatial structure plan” as well as the “application of regulations on spatial structure, safety standard and the imposition of sanction on violators” but no reference is made to the other institutions (for example, regional governments, the Ministry of Public Works, BAPPENAS and BAPPEDA) who hold legal responsibility for these areas under their own sectoral legislation, without whom achieving these aims would be extremely difficult.

There are no clear links between the DM legal framework and legislation and institutions related to climate change adaptation, nor are there explicit links with sectoral laws. The importance of respect for the environment and environmental management and conservation as components of a wider DM

40 Article 8, Regulation Number 21 of 2008 concerning Disaster Management

41 Article 35, *Ibid*

42 Article 20(2), Regulation Number 21 of 2008 concerning Disaster Management

43 Article 20(3) and (4), *Ibid*

framework, are considered⁴⁴ but no mechanisms or links with relevant sectoral laws or institutions are included. Ultimately, the DM Law and its regulations only hint at where the intersections between BNPB/BPBD and other sectors might lie for DRR and fall short of providing a robust foundation for multi-sectoral collaboration and coordination. The lack of any real mechanisms for coordination on DRR with other sectors means that the DM Law and its associated regulations remains, in the words of one interviewee, a “BNPB document”.

The legal framework for DM contains limited references to measuring success and implementation. Under Presidential Regulation 8 of 2008 concerning the National Agency for Disaster Management, the Deputy for Disaster Prevention and Preparedness (referred to as “Prevention and Alertness” under the Regulation, but BNPB has since changed the name), underneath which sits the Directorate for DRR, is responsible for “monitoring, evaluating and analyzing the reporting on the implementation of general policy on disaster management during the pre-disaster period and community empowerment.”⁴⁵ This would therefore appear to be an avenue for the Deputy to be able to measure the success and implementation of its activities.

c. Implementation

- How effectively implemented is your DRM law?
- What are the major challenges to implementation?

The stakeholders interviewed who were familiar with the DM Law and its ancillary Regulations were relatively unanimous in their praise for the framework insofar as it relates to emergency response. However almost all of the same interviewees acknowledged that DRR as a concept or indeed separate sector is reflected less well under the framework. Stakeholders commented that DRR is typically viewed as the responsibility of BNPB rather than a cross-cutting concept for other sectors. Also, although the DM Law and its associated regulations are well understood and implemented within BNPB and BPBDs, most other institutions and sectors have not been properly sensitized as to the relevant provisions. The Indonesian government has openly acknowledged that, for example, the distinct “lack of synchronization between disaster management regulations and rules that regulate other sectors,” and the difficulty in achieving a shared perception of DRR and a common understanding of how to mainstream it into development.⁴⁶ As such, much needs to be done to change this situation, not only in terms of the legal framework but also through more practical measures to improve the understanding and acceptance of DRR at all levels.

Officials responsible for DRR within BNPB referred to the adoption of the Sendai Framework for DRR as a potential tool for future integration of DRR into other sectors, by promoting it as a multi-sector concern that extends far beyond the mandate of BNPB alone. A much stronger emphasis on multi-sectoral DRR may be integrated into the forthcoming National Disaster Response Framework. This is being developed as part of a cooperation project between BNPB and New Zealand’s Ministry of Foreign Affairs and Trade. It is also designed to meet the requirement under the DM Law to prepare (and test) a national disaster response plan.⁴⁷ Because the framework is still under discussion, it was not possible to review a copy for this report. Stakeholders also noted that the new Mid-Term Development Plan for 2015-19 will also seek to define and implement DRR programs that are better integrated into the different sectors.

44 See, for example, Articles 31(b) and 71, DM Law

45 Article 21(d), Presidential Regulation 8 of 2008 concerning National Agency Disaster Management

46 BNPB, *National Progress Report on the implementation of the Hyogo Framework for Action (2013-2015)*, HFA Monitor update, Preventionweb, 23 April 2015, p. 39

In terms of measuring the success and implementation of DRR activities, interviews with Directorate staff revealed that internal monitoring and evaluation is undertaken for programs and activities, with the results of this process feeding into work planning and budgeting, but with the caveat that the rigour and timeliness of this process could be improved. There was also little clarity in terms of what indicators could be used to determine the success of implementation.

Interviewees noted that provisions related to planning in the DM Law have been relatively well implemented considering the scale of the task in Indonesia. BNPB developed disaster management plans for each region in 2012-2013 and facilitated 61 districts and cities to develop their own disaster management plans. As at April 2015, BNPB had piloted village-level disaster management plans in eight villages in the districts of West Pasaman, Pandeglang, Jember and Sukabumi.⁴⁸ Although limited in scope considering Indonesia has approximately 74,000 villages, it is hoped that these local-level plans will facilitate mainstreaming of DRR into regular development planning as well as provide useful best practices that can be replicated in other communities. Furthermore, incorporation of risk reduction approaches in the design and implementation of BNPB and BPBD's emergency preparedness, response and recovery programs has resulted in the development of multiple-hazard contingency plans in 122 districts and cities in the country.⁴⁹ However in practice it appears that most of these plans are concerned with responding to emergency situations versus longer-term risk reduction measures.

d. Assessment

Do you have a dedicated law for disaster risk management that prioritises risk reduction and is tailored to your country context?

Yes, but some aspects could be strengthened

- Overall, Indonesia possesses a very sophisticated legal framework for disaster management. It also provides a solid legal framework for DRR in Indonesia. Together with a series of regulations issued in 2008, it sets out a comprehensive set of provisions outlining national and regional government responsibilities, community rights and obligations, the roles of businesses and international institutions, the different disaster management stages and their requirements, as well as disaster aid finance and management.
- Multiple regional, district and local level disaster management plans and contingency plans have been and continue to be developed. Whilst there is a strong focus on emergency response they present a strong opportunity to integrate appropriate DRR priorities.
- In terms of the content of the legal framework, definitions around DRR and associated concepts could be clarified and strengthened and better correspond with the assignment of institutional roles and responsibilities.
- Links with other sectors and institutions, in particular climate change, could also be clarified and strengthened in law and practice. There is also a need to try and extend the application of the DM Law and Regulations beyond the authority of BNPB and better integrate other Ministries into the framework.
- The framework would also benefit from more detailed provisions on the measurement of success and implementation.

47 Article 45(2)(a), DM Law

48 BNPB, *National Progress Report on the implementation of the Hyogo Framework for Action (2013-2015)*, HFA Monitor update, Preventionweb, 23 April 2015, p. 2

49 *Ibid*

2

Do your laws establish clear roles and responsibilities related to risk reduction for all relevant institutions from national to local level?

a. Key laws and regulations:

- Constitution of the Republic of Indonesia, 1945 (as amended)
- Law Number 24 of 2007 concerning Disaster Management
- Presidential Regulation Number 8 of 2008 concerning National Agency Disaster Management
- Regulation Number 21 of 2008 concerning Disaster Management
- Minister of Home Affairs Decree Number 46 of 2008 concerning the establishment of Local Disaster Management Agencies
- Law Number 23 of 2014 on Local Government

b. Guiding questions on content:

- Do your laws mandate a national focal point agency for disaster risk reduction with sufficient institutional authority to exercise effective leadership?
- Do your laws ensure cooperation and information exchange between relevant ministries and levels of government with the national focal point agency?
- Do your laws appoint a national inter-ministerial/multi-sectoral committee with a clear mandate for disaster risk reduction and ensure that it meets frequently enough to be effective (i.e. not just in the aftermath of a disaster)?
- Are institutions from national to local level consistently assigned the necessary authority and resources to carry out their mandates and responsibilities?
- Is the division of responsibilities made sufficiently clear between different ministries and levels of government?

The DM Law created the National Disaster Management Agency (BNPB) that reports directly to the President of Indonesia.⁵⁰ Together with Presidential Regulation Number 8 of 2008 concerning National Disaster Management Agency, these two laws set out the institutional framework, at least insofar as it relates to BNPB and BPBD. BNPB is technically a “Non-departmental Government Institution on a level equal to ministries.”⁵¹ The law requires BNPB to coordinate all contingency, preparedness, mitigation, prevention, disaster management training and DRR activities (namely risk assessment and mapping) under the ‘pre-disaster’ phase. BNPB is divided into three elements: the Head, the steering committee and the executive committee (referred to as the managing executive body under the DM Law).⁵²

The Head of BNPB is, under Presidential Regulation 8 of 2008, is granted financial and administrative rights equal to that of a Minister.⁵³ The steering committee has an oversight role, responsible for formulating “the concept of policy” on disaster management as well as for monitoring and evaluation,⁵⁴ as well as “providing inputs and suggestions” to the Head of BNPB.⁵⁵ It is made up of “related government officials”

50 Article 10(1), DM Law

51 Article 10(2), *Ibid*

52 Note that under Article 11 of the DM Law, only two elements are mentioned (the steering committee and the managing executive body), whereas under Article 9 of Presidential Regulation 8/2008, these three elements are specified.

53 Article 52, Presidential Regulation 8 of 2008 concerning National Agency Disaster Management

54 Article 14(1), DM Law

55 Article 8, Presidential Regulation 8 of 2008 concerning National Agency Disaster Management

and “professional community members”,⁵⁶ with the latter category being appointed through “fit and proper” tests conducted by the House of Representatives.⁵⁷ The executive committee is essentially the structure around the day-to-day management of BNPB’s activities, comprising 8 sections (4 ‘Deputies’ together with a Chief Secretariat, Chief Inspectorate, a Center and a Technical Executing Unit.⁵⁸

The composition of the steering committee⁵⁹ makes it the highest-level coordination body for disaster management and therefore DRR, in Indonesia. While other functions of the BNPB’s executive committee are tasked with the overall “coordination” of almost all duties assigned to them, at no point does the DM Law or ancillary Regulations refer specifically to the means of coordination with other sectors and institutions regarding the pre-disaster stage and as far as DRR is concerned. As is the case for the Head of BNPB, the President of Indonesia has the right to appoint and dismiss its members.⁶⁰ It has 19 members, 10 of who are “Echelon I government officials” nominated by the heads of their respective departments or institutions and 9 of who are professional community members.⁶¹ The government officials are drawn from the following institutions:

- Coordinating Ministry for People’s Welfare;
- Department of Home Affairs;
- Department of Social Affairs;
- Department of Public Works;
- Department of Health;
- Department of Finance;
- Department of Transportation;
- Department of Energy and Mineral Resources;
- National Police; and
- National Army.⁶²

The professional members are drawn from a long-list of 18 selected by the Head of BNPB. The House of Representatives selects 9 from the list based on a “fit and proper test”.

BNPB’s Directorate for DRR is subordinate to the Deputy for Prevention and Preparedness (together with the Directorate for Community Empowerment and the Directorate for Preparedness). This Deputy is charged with coordinating and implementing general policy on disaster management during the pre-disaster period (as we have seen above, this includes DRR) and community empowerment.⁶³ The Deputy is also tasked with two other important functions: firstly, “maintaining employment relations of disaster management” during the pre-disaster period, which is not defined but according to interviewees relates, somewhat vaguely, to general staff management and coordination. Secondly, the Deputy is responsible for “monitoring, evaluating and analyzing the reporting on the implementation of general policy on disaster management during the pre-disaster period and community empowerment.”⁶⁴

56 Article 14(2), *Ibid*

57 Article 14(3), *Ibid*

58 Article 15, *Ibid*

59 Article 14(2), DM Law: the steering committee composition includes “related government officials” and “professional community members”.

60 Article 53, Presidential Regulation 8 of 2008 concerning National Agency Disaster Management

61 Article 11, *Ibid*

62 Article 11(2), *Ibid*

63 Article 20, *Ibid*

64 Article 21(c) and (d), *Ibid*

The Presidential Regulation 21 of 2008 also sets out some useful internal governance provisions for BNPB, its Deputies and Directorates. These include the following:

- All committees organised by BNPB are to apply the principles of coordination, integration and synchronization, within BNPB itself and in the relationship between governmental institutions at Central and regional levels.⁶⁵
- Each head of the executive committee's sections is to be responsible for:
 - providing guidelines and directives for implementation of their tasks;⁶⁶
 - submitting timely reports to their superior on a periodical basis;⁶⁷
- The executive committee's coordination function is to be exercised in coordination with governmental institutions at Central and regional levels, business institutions, international institutions and/or other parties considered necessary at pre-disaster and post-disaster stages.⁶⁸
- The executive committee's implementation function is to be exercised in coordination with governmental institutions at Central and regional levels, the Indonesian armed forces and National Police.⁶⁹

Under the DM Law, regional governments have been assigned with authority for DRR (and for its integration into their development programmes).⁷⁰ This builds on the basic position under Law Number 13 of 2014 on Local Government, which reserves a number of areas for the national government exclusively, leaving the remainder (which would include DRR and DM) to local governments. Their authority over disaster management also includes the power to decide on disaster management policy in line with regional development policy and development planning that includes elements of disaster management planning, cooperation with other provinces, regencies and cities on the implementation of policy and formulation of policy on preventing natural resource depletion.⁷¹ The crossover with other sectors here is obvious, not least in terms of preventing natural resource depletion, but nothing further is said about what these functions might involve and who to coordinate with.

Regional governments are able to establish Regional Disaster Management Agencies (BPBD), which comprise a provincial level agency (presided over by the governor's secretary) and regency/city level agencies (presided over by the regent or mayor). These are established under separate regional regulations,⁷² many of which have already been developed and passed by regional governments (although their contents were not considered within the scope for this report). BPBD's establishment and organisation is also regulated under two other pieces of legislation: the Minister for Home Affairs Regulation Number 46 of 2008 on the Organization Guideline and Work Management of National Disaster Management Agency and the Head of BNPB Regulation Number 3 of 2008 on the Establishment of Local Disaster Management. The duties and functions of BPBDs are very similar to those of BNPB, except with an obvious focus on the regional level. DRR is not mentioned as a specific part of the BPBD's mandate, but it can be inferred through other responsibilities, such as stipulating guidelines and directions that include disaster prevention, preparing and disseminating maps of disaster-prone areas and so on.⁷³ DRR is, on the other hand, referred to as a specific part of the regional government's mandate.⁷⁴

65 Article 42, *Ibid*

66 Article 44, *Ibid*

67 Article 45, *Ibid*

68 Article 47, *Ibid*

69 Article 49, *Ibid*

70 Article 8(c), DM Law

71 Article 9, *Ibid*

72 Article 63, Presidential Regulation 8 of 2008 concerning National Agency Disaster Management

73 Article 21, DM Law

74 Article 35 and 36, *Ibid*

Although it is clear that the legal framework assigns authority to relevant institutions, based on the analysis above it is arguable whether this results in a sufficiently clear division of responsibilities. Overlap between the mandates of BNPB and BPBD agencies is evident. Furthermore, the working relationship between BPBDs and their respective regional and district governments does not appear to be considered. In particular, the DM Law is relatively silent on the responsibilities of district governments (i.e. regencies and cities) for DRR. Although a National Platform for DRR exists (Platform Nasional Pengurangan Resiko Bencana Indonesia (PLANAS)), this is largely a civil society organisation and it is not created under law, nor is it an official means for the government to coordinate its approach to DRR. Although of high strategic importance, for example in its leadership of the ongoing revision process for the DM Law discussed below, this cannot be considered a substitute to a clearly mandated and transparent multi-sectoral coordination body at national level.

c. Implementation

- How effectively implemented are your laws setting out roles and responsibilities?
- What are the major challenges to implementation?

National level

There is no doubt that BNPB has been assigned the role of coordinating national efforts for DRR under law. The BNPB steering committee created under the DM law⁷⁵ should in theory bring together government officials and members of the professional community at the highest level to advise on the formulation of policy, as well as provide oversight of the monitoring and evaluation of BNPB's disaster management activities. However, the fact that it is headed by the Chief of BNPB (who is also in control of the executive body of BNPB) this essentially removes any real oversight power that the steering committee should have. Furthermore, there is little evidence to suggest that the steering committee is focused on improving intra-agency coordination for disaster management or DRR and interviewees, even those at relatively high levels of government, professed that its inner workings and responsibilities remain something of a mystery.

During the field research for this study a review of the DM Law was being led by PLANAS in coordination with other civil society organisations. The review working group was also coordinating with the Indonesian Parliament. The objective of the review process was to review and propose amendments to the DM Law, with a focus on several areas including institutional arrangements and links with other sectors. Ultimately, revision of the DM Law was not scheduled for the Indonesian Parliament's 2016 work plan, however it is hoped that it will be considered for inclusion in the 2017 work plan. At present, ongoing informal initiatives are ensuring momentum for the review process. Notably, civil society actors have established an informal 'alliance' to continue working on proposed revisions to the DM Law.

In practice, most stakeholders (including those from BNPB) made the point that the DM Law and its ancillary Regulations are generally viewed as "BNPB documents" and other sectors do not consider them relevant to their work. This is not the intention of the law but points out a need to address the 'mainstreaming' of DRR and to create specific links and coordination mechanisms with other sectors. The government acknowledges in its Hyogo Framework for Action (HFA) Progress Report that the key challenge for DRR is coordination among stakeholders and that efforts to mainstream DRR need to be further enhanced.⁷⁶

75 Article 14, DM Law

76 BNPB, *National Progress Report on the implementation of the Hyogo Framework for Action (2013-2015)*, HFA Monitor update, Preventionweb, 23 April 2015, p. 5

There is also something to be said for the prevailing sectoral culture in Indonesia, reflected on by almost all interviewees, which appears to favour working in governmental 'silos' rather than sharing and collaborating on initiatives. Whilst this is not an issue for emergency response, where BNPB and BPBD's roles as coordinators are well defined and other sectors and actors generally collaborate effectively, this is proving to be a challenge for DRR. Annual collaborative meetings such as the one held for International Day for DRR in Solo in October 2015 do bring together the main stakeholders in Indonesia but, as several observers pointed out, the momentum built by these events is not carried through to regular DRR coordination meetings.

Part of the issue is the sheer scale of activity that can be classified as DRR or related to DRR in Indonesia. The seemingly simple task of providing a coordination forum is complicated by the multiple work-streams and partners in each sector and the geographical range of programs. This is in contrast to the routine coordination meetings that are held for particular hazards and emergencies, which focus on response issues.

Interviewees at BNPB expressed optimism regarding the proposed new National Action Plan for Disaster Management, which would correspond with the National Mid-Term Development Plan's timeframe of 2015-19.⁷⁷ Although a National Action Plan for DRR was developed for the period 2010-12, it has now been suggested that DRR will be fully integrated into a new Disaster Management Action Plan. Stakeholders noted that the Plan should set out the role of each ministry and institution insofar as it relates to DRR and how these roles will coordinate for planning purposes. However the current draft leaves several gaps: one example is in reference to the 'build back better and safer' initiative, which lists 33 separate government institutions with responsibility and 15 others who will assume supporting roles. No detail is provided on how this will be coordinated, or who will do it, although the possible assumption is that this will be BNPB.⁷⁸ Without robust and transparent structures the sheer number of stakeholders presents difficulties in ensuring effective oversight and coordination of DRR.

Sub-national level: relationship with BPBD

One of the main pieces of feedback from stakeholders (both during interviews and as part of the consultation workshop) concerned the manner in which BNPB works and coordinates with BPBD. In order to have a functioning and effective coordination structure not only for DRR but also for disaster management in general, there should be clear lines of authority, funding and reporting between national and local levels. In Indonesia these lines are somewhat blurred due largely to the institutional structure: BNPB is established as an independent agency on the same level as a ministry, while BPBD offices are established under the authority of the Ministry of Home Affairs (Kementerian Dalam Negeri (MOHA)). BPBDs therefore report to MOHA rather than to BNPB. Although some coordination and information-sharing is possible through joint meetings held twice a year, BNPB has no legal or institutional authority over the BPBD agencies. That the key disaster management institutions at national and regional levels are functionally separated like this appears counter-intuitive. This would not necessarily need to be a problem if 'non-legal' or persuasive (for example, established under guidelines or standard operating practices) links were in place to ensure that BNPB and BPBD activities on key areas such as DRR were coordinated. In that respect removing the direct line of authority could provide BPBD agencies with better operational independence, adapted to their local context.

77 The previous Action Plan covered the period from 2010-14

78 This analysis is based on a national stakeholder's review of the draft as at October 2015. It has not been possible to verify any further developments of the draft and therefore the situation may have changed.

Another issue referred to by many stakeholders was the constant rotation of staff in district BPBDs, which means that investments in their training (whether made by BNPB, local NGOs or international organisations) on issues relevant to DRR are often lost when they are transferred to other districts or departments. Most stakeholders noted that this rotation was often politically motivated, as the governors' secretaries and mayors (who form the heads of BPBD agencies at regional and district levels respectively) occasionally used opportunities after local elections to move civil servants based on political allegiances. This does not, however, mean that all BPBDs face such difficulties.

According to representatives from BPBD in Bantul district (Yogyakarta), for example, the Head of BPBD ensures that the office takes a lead role in coordinating DRR efforts, rather than being involved in implementation, in the district. The view is taken that this should generally be left to the responsible sectors (e.g. agencies for public works, environment, education and so on). As such, BPBD in the Bantul district has established a multi-sector coordination mechanism for all sectors involved in DRR, by means of regular meetings where stakeholders can share information and ensure there is no duplication of efforts and importantly to collaborate on the annual development programming process. Bantul district has issued separate regulations that govern institutional arrangements for disaster management, including for preparedness and early warning that are adapted to the local context and promote multi-sector coordination.⁷⁹ Ultimately, the success of local-level DRR efforts often depends very heavily on local capacity and resources.

d. Assessment

Do your laws establish clear roles and responsibilities related to risk reduction for all relevant institutions from national to local level?

To some extent, though further improvements are needed

- Roles and responsibilities for DRR in Indonesia are relatively well assigned under the legal framework, but they could benefit from further clarification.
- Regional, district and village governments all technically maintain responsibility for DRR under the general transfer of powers to the local level but their exact responsibilities, as well as how to effectively coordinate with regional and district BPBD offices, would also benefit from further clarification.
- A lack of effective coordination between the various agencies and sectors involved in DRR is evident and was pointed out by most interviewees, including from government.
- Although strong civil society-based networks for DRR exist (notably PLANAS) there is no clear multi-ministerial/sectoral coordination mechanism at government level that meets consistently and ensures information is shared between different bodies.

79 District of Bantul Regulation Number 1 of 2013 on Preparedness and Early Warning; Regent of Bantul Regulation Number 6 of 2010 on the Establishment of the District BPBD; District of Bantul Regulation Number 5 of 2010 on Disaster Management. Note that due to time constraints it was not possible to review these regulations in detail.

3

Do your relevant sectoral laws include provisions to increase safety and reduce vulnerability?

a. Key laws and regulations:

- See individual sections below

b. Guiding questions:

- (See also individual sections below)
- Are there provisions that address DRR in relevant sectoral laws and regulations (see list below)?
- Is there any duplication or conflicting provisions between these laws?
- Are sufficient financial resources allocated for implementation of the DRR mandates of sectoral legislation?

c. Implementation

- How effectively implemented are the risk reduction provisions of your sectoral laws?
- What are the major challenges to implementation?

Environment

Key laws and regulations include:

- Law Number 32 of 2009 on Environmental Protection and Management
- Ministry of Environment Regulation Number 5 of 2012 regarding Types of Business Plan and/or Activities Requiring Environmental Impact Assessment
- Minister of Home Affairs Regulation Number 67 of 2012 concerning KLHS

Guiding questions:

- Do your laws related to the environment require environmental impact assessments for planned developments that include DRR criteria (taking into account a changing climate)?
- Do your environmental laws address natural hazards and the safety of people, their property and livelihoods?
- Do your environmental laws promote the use of eco-system approaches to disaster risk reduction?

Environmental sector framework

Indonesia's Constitution states that the organisation of the national economy shall be conducted on the basis of a number of principles, including the "environmental perspective." Furthermore,⁸⁰ "the land, the waters and the natural resources within shall be under the powers of the State and shall be used to the greatest benefit of the people."⁸¹ The Constitution also provides under its Chapter on Human Rights that every person has the right to "enjoy a good and healthy environment."⁸³

80 Article 33(4), Constitution of the Republic of Indonesia, 1945 (as amended)

81 Article 33(3), *Ibid*

82 Article 28H(2), *Ibid*

As observed by other commentators, there are literally thousands of laws and regulations related to or directly governing environmental management and protection in Indonesia.⁸³ This report will focus only on the most important ‘framework’ for environmental law, namely Law Number 32 of 2009 on Environmental Protection and Management. Among other things, the goals of Law 32/2009 include protecting the territory of Indonesia from environmental pollution and/or damage, assuring human safety, health and life, assuring the fulfillment and protection of rights to the environment as part of human rights and controlling the utilization of natural resources wisely.⁸⁴ In order to achieve these aims, environmental protection and management as a system should involve planning, utilization, control, preservation, supervision and law enforcement.⁸⁵

Links with natural hazards, DRR and Indonesia’s wider disaster management framework are not made explicit under law 32/2009. Although the term ‘DRR’ does not need to be used explicitly, laws such as 32/2009 would perhaps benefit from clearly drawing the links between environmental damage and increased exposure to disasters, as the bedrock to develop greater multi-sector collaboration. Although there is some ongoing collaboration between MOEF and BNPB, this is currently only focused on the issue of haze and forest fires and does not, according to interviewees, focus on longer term prevention or reduction of risks.

Research for this study did not find any environmental laws that promote the use of eco-system approaches to DRR, or that mentioned DRR. However the MOEF has established ‘Ecoregion Management Centers’ in several regions in Indonesia (previously known as ‘Environmental Management Centers’ and originally established in 2005).⁸⁶ These are coordinating bodies and also develop technical policy and engage in natural resources management planning. The Centers are under the overall authority of the MOEF, but also operate in line with regional legislation and priorities. Although legislation states that they have responsibility for coordinating eco-protection activities,⁸⁷ it appears that no formal subordination links with local authorities are established under law. However the potential for the Centers to act as coordinating and oversight bodies in the chain of environmental protection and management between local and national level remains high.

Law 32/2009 also creates the framework for a Strategic Environmental Assessment process (KLHS). This is defined as “a series of systematic, comprehensive and participatory analyses to ascertain that the principles of sustainable development have become a basis and been integrated into the development of a region and/or policy, plan and/or program.”⁸⁸ Both the national and regional governments are obliged to undertake the KLHS process in the formulation of spatial plans, development plans and any other policies, plans or programmes with the potential to cause environmental impacts or risks.⁸⁹ KLHS interventions come in the formulation of alternatives to and recommendations of improvements for, alternatives to draft policies, plans and programs.⁹⁰ The drafting of the KLHS provisions are extremely wide and whilst this may be intended to capture as wide a remit of sectors and activities as possible the risk is that the MOEF and regional administrations have no clear focus for their efforts. Issues for consideration in the KLHS process are set out in a non-exhaustive list, with several terms of relevance

83 USAID, *Environmental Compliance and Enforcement in Indonesia: Rapid Assessment*, November 2008, p. 7

84 Article 3, Law Number 32 of 2009 on Environmental Protection and Management

85 Article 4, *Ibid*

86 There are six Centers: 1) Sumatra, 2) Bali and NTT, 3) Sulawesi and Maluku, 4) Java, 5) Kalimantan and 6) Papua.

87 See for example an extract from Minister of Environment Regulation Number 18 of 2012, reproduced on the website of the Ecoregion Management Center for Sulawesi and Maluku at: <http://ppesuma.menlh.go.id/index.php/profil/tugas-dan-fungsi>. It has not been possible to acquire a complete copy of this law.

88 Article 1(10), Law Number 32 of 2009 on Environmental Protection and Management

89 Article 15(2), *Ibid*

90 Article 15(3), *Ibid*

to DRR (e.g. the capability of the environment to support and carry development and estimated environmental impacts and risks) but contains nothing specifically related to disasters.⁹¹

Similar to the DM Law and the way it links to other sectors without providing detail on implementation, law 32/2009, for example, requires that “every spatial plan shall be based on KLHS” without making it clear where the responsibilities lie or what the procedures might be. However these items have been further defined in secondary legislation, notably the Minister of Home Affairs Regulation Number 67 of 2012 concerning KLHS. This places the obligation to implement KLHS on the governor, mayor or regent as relevant. It also emphasises that the main goals are to ensure that sustainable development and an evaluation of environmental risks and impacts are integrated into long and medium-term development plans.⁹² It is understood that this regulation is issued by the Minister for Home Affairs rather than the Minister for Environment and Forests as the former has authority over the regional and district administrations, whereas the latter would only have authority over subordinate agencies.

Indonesia’s provinces and districts vary widely in terms of environment and capacity: this makes it difficult to analyse whether the law and rules are effectively implemented throughout the country. Taking one limited example, in the municipality of Jakarta the KLHS process has been integrated into both spatial and development planning. Jakarta’s Mid-Term Development Policy 2013-17 also takes into consideration major hazards and potential environmental impacts.⁹³ In general terms the division evident in the legal framework between the MOEF (who developed the law) and the Ministry of Home Affairs (who developed the legislation) is symptomatic of several stakeholders’ comments that institutional coordination needs to be improved to ensure that these types of processes are properly considered for spatial and development planning.

Environmental Impact Assessment

Environmental Impact Assessments (EIA) in Indonesia are mandated under Law 32/2009 and it is the key environmental prerequisite for the commencement of any major projects. The process is defined under the law as “a study on substantial impacts of a planned business and/or activity in the environment, which is needed for making the decision on the operation of business and/or activity.”⁹⁴ (Note that Law 32/2009 uses the acronym ‘AMDAL’ to refer to EIA, as this represents the full Bahasa term of Analisa Mengenai Dampak Lingkungan (AMDAL). In this report the term EIA will be retained for consistency).

Law 32/2009 establishes two tracks for EIA: the first (AMDAL) for projects with potentially substantial impacts on the environment, the second involves preparing ‘Environmental Management Efforts’ (Upaya Pengelolaan Lingkungan (UKL)) and ‘Environmental Monitoring Efforts’ (Upaya Pemantauan Lingkungan (UPL)) for all other projects that do not meet the requirements for AMDAL. Both tracks, if successful, ultimately lead towards the issuing of an environmental permit, issued at national, regional or district level depending on the nature of activity. This permit provides the basis for oversight and regulation of all businesses and activities that have environmental impacts, as well as the basis for sanctions and punitive measures in the event a permit-holder is found to be in breach of their permit’s terms.⁹⁵ Interviews with staff at the MOEF’s Law Enforcement Directorate revealed that following the merger between the Environment and Forest ministries, there have been increased institutional efforts

91 Article 16, *Ibid*

92 Articles 2 and 3, Minister of Home Affairs Regulation Number 67 of 2012 concerning KLHS

93 See also the *Jakarta DKI Province Spatial Planning, Local Rules Number 1 of 2012*

94 Article 1(11), Law Number 32 of 2009 on Environmental Protection and Management

95 See, for example, Article 76, *Ibid*

to sanction breaches based on environmental permits, particularly in the forestry sector, where strong enforcement of permit conditions is essential to combat the ongoing impact of forest fires and the resulting haze.

Under the DM Law, disaster risk analysis should be incorporated into the preparation of an EIA.⁹⁶ In practice an analysis of potential impacts on the environment, which takes into account the possible impact on natural hazards and whether risk will be increased, does have to be taken into account but no legislation appears to exist that clarified exactly what the ‘analysis’ of the DM Law should involve or, perhaps more importantly, how it is properly incorporated into the EIA process. It would seem sensible that disaster risk maps and hazard indexes prepared by BNPB should be considered explicitly by any EIA applicants but it is not clear to what extent this process is followed. Interviewees noted that many EIA applicants will undertake their own risk assessments as part of the process which may or may not draw on the knowledge of BNPB and BPBD.

Water

Key laws and regulations include:

- Law Number 11 of 1974 on Water Resources Development
- Law Number 7 of 2004 on Water Resources (revoked, see explanation below)
- Regulation of the Minister of Public Works Number 6 of 2011 on Utilization Guidelines of Water Resources
- Regulation of the Minister of Public Works Number 7 of 2013, on Guideline for granting permit for development of drinking water supply system to be conducted by business entity together with the community for fulfillment of own requirement

Guiding questions:

- Do your water resource management laws include provisions aiming to reduce the risk of floods and droughts?

Up until early 2015, Indonesia’s water sector was governed by Law Number 7 of 2004 on Water Resources. Although this law does not contain any specific provisions aiming to reduce the risk of floods and droughts, it establishes the institutional framework for the sector. It also sets out important provisions regarding water resources conservation and development, mitigation of risks from water-related disasters, sector planning, financing and community participation and management of water resources. However in February 2015 the Indonesian Constitutional Court revoked this law in its entirety on the basis that it contravened the Constitution, due to its ability to grant the private sector exclusive rights to certain water resources (essentially encouraging privatisation, commercialisation and monopolisation of water resources at the expense of the basic human right to water).⁹⁷ The same verdict reinstated the previous 1974 Water Law until a new measure is developed (it is not clear whether this will involve a new law or amendment of the 2004 law). It is hoped that any new law will build on the positive content established under the 2004 law and potentially expand on this to provide a greater emphasis on reducing risks from floods and droughts.

96 Article 11(3), DM Law

97 Jakarta Post, *Court bans monopoly on water resources*, 20 February 2015, <http://www.thejakartapost.com/news/2015/02/20/court-bans-monopoly-water-resources.html> (accessed 22 September 2015)

On the one hand the revocation of the 2004 law prevents the private sector establishing monopolies and potentially damaging water sources through over-extraction (based on exclusive rights). On the other it prevents the use of the more progressive elements of the 2004 law, such as the provisions requiring mitigation of disaster risks and community engagement and management of resources. Importantly it leaves the status of regulations issued under the authority of law 7/2004 unclear. However, the water sector benefits from an extensive amount of regulation issued at national, regional and district level, under different authorities. For example, the Ministry of Public Works has issued regulations on, among other things, the granting of permits for drinking water supply systems that are developed jointly by businesses and communities,⁹⁸ and guidelines on water resources that promote community involvement and conservation of water as a risk reduction mechanism.⁹⁹

Law Number 11 of 1974 on Water Resources Development does also include some important provisions. Firstly, water resource management includes flood control and river improvement.¹⁰⁰ Water regulation, management and development should also be based on specific plans that are developed to serve the community's interest.¹⁰¹ It also provides that state control of water and water resources are subject to the existing rights of local adat (i.e. 'traditional' communities with customary rules and laws) communities insofar as these rights are not contradictory to the national interest.¹⁰² However these provisions are extremely high-level and the water sector framework that has developed over recent years has been based on the more progressive 2004 legislation. Subsidiary regulations will have to be analysed in line with the recent court ruling and if necessary either revoked or amended.¹⁰³ There is also some evidence to suggest that local administrations are using the opportunity to revise their own bylaws from a risk reduction perspective: Jakarta, for example, plans to revise its bylaw Number 10 of 1998 on ground and surface water tax collection and utilisation on the basis that the reinstated law from 1974 could give rise to more groundwater extraction. As such the city administration is proposing measures under its revised bylaw to limit groundwater utilization and prevent land subsidence.¹⁰⁴

Forests

Key laws and regulations include:

- Law Number 41 of 1999 regarding Forestry
- Presidential Instruction Number 4 of 2005 on the Eradication of Illegal Logging in Forest Areas and Distribution throughout the Territory of the Republic of Indonesia
- Regulation Number 76 of 2008 on Forest Rehabilitation and Reclamation
- Regulation Number 3 of 2008 amending Government Regulation Number 6 of 2007 on Forest Arrangement and formulation of Forest Management Plan as well as Forest Exploitation
- Presidential Instruction Number 10 of 2011 regarding Moratorium on the Granting of New Licenses and the Improvement of Primary Natural Forest and Peat Lands Management

98 Regulation of the Minister of Public Works Number 7 of 2013, on Guideline for granting permit for development of drinking water supply system to be conducted by business entity together with the community for fulfillment of own requirement

99 Regulation of the Minister of Public Works Number 6 of 2011 on Utilization Guidelines of Water Resources

100 General Elucidation A(3)(c), Law Number 11 of 1974 on Water Resources Development

101 Article 8(1), *Ibid*

102 Article 3(3), *Ibid*

103 Jakarta Post, What next after the water law annulled, <http://www.thejakartapost.com/news/2015/03/03/what-next-after-water-law-annulled.html>, 3 March 2015 (accessed 22 September 2015)

104 Jakarta Post, Greater Jakarta: City to revise ground water bylaw, <http://www.thejakartapost.com/news/2015/05/30/greater-jakarta-city-revise-ground-water-bylaw.html> (accessed 22 September 2015)

Guiding questions:

- Do your forest or land management laws address risk of forest fires?

Indonesia has one of the highest rates of deforestation and degradation in the world, with approximately 80 per cent of all its greenhouse gas emissions resulting from this (and approximately half of this figure derives from carbon-rich peat lands). This helps explain why the forest sector is inextricably linked to the climate change agenda in Indonesia, as well as why the Indonesia government has issued such an enormous amount of legislation related to forest management. It should be noted at this point that the Indonesian government recently extended the country's national forest moratorium, which prohibits new licenses to clear key forest areas, originally introduced in 2011 under an agreement with the Norwegian government.¹⁰⁵

In terms of national legislation, Law Number 41 of 1999 continues to provide the guiding legal framework for forestry in Indonesia. Law 41/1999 establishes that forestry means an integrated management system pertaining to forests, forest areas and forest produce;¹⁰⁶ the forest management system is to be based on, among others, the principles of benefit and conservation, justice and transparency;¹⁰⁷ and that forest management should also be aimed at “increasing capability to develop community's capacity and capability on participation, justice and sustainability basis to create social and economic resilience.”¹⁰⁸ A specific section on forest protection and nature conservation ties the legislation in to DRR-relevant topics and to prevention of forest fires in particular, as forest area protection is designed to “prevent and minimize damage to forest area and forest produce due to human beings' act, animal, fire, natural power...”^{109s}

The framework law on forest management is supported by a huge number of regulations issued by the national, regional and district governments as well as the former Ministry of Forestry. The following regulations are included below due to their crossover with the theme of DRR and prevention of forest fires in particular:

- **Regulation Number 3 of 2008** (amending an earlier regulation on forest arrangement and formulation of the Forest Management Plan) sets out a large amount of detail that expands on the framework established under Law 41/1999. Of particular interest here is the fact that each holder of a business licence to utilize forest resources must “protect forest in working area thereof” and the elucidation of the regulations makes it clear that this involves, among other things, preventing or containing forest fires.¹¹⁰
- Prevention and control of forest fires is also emphasised under **Regulation 76 of 2008 on Forest Rehabilitation and Reclamation**: in order to support forest and land rehabilitation, activities including the prevention and control of forest and land fires are to be conducted.¹¹¹ The elucidation of the regulation further defines this as “activities in the prevention, fire fighting, control, evaluation of the fire consequence and preparation of rehabilitation of the forest land after they were hit by the fire.”

105 Presidential Instruction Number 10 of 2011 regarding Moratorium on the Granting of New Licenses and the Improvement of Primary Natural Forest and Peat Lands Management

106 Article 1(1), Law Number 41 of 1999 regarding Forestry

107 Article 2, *Ibid*

108 Article 3, *Ibid*

109 Article 47(a), *Ibid*

110 Article 71(1)(d), Regulation Number 3 of 2008 amending Government Regulation Number 6 of 2007 on Forest Arrangement and formulation of Forest Management Plan as well as Forest Exploitation

111 Article 34, Regulation 76 of 2008 on Forest Rehabilitation and Reclamation

A detailed and sophisticated legal regime governing access to and exploitation of forests has been established in Indonesia. The risk of forest fires is also considered and, to an extent, incorporated into forest planning. Any legal regime is only as effective as its implementation and the ongoing concern over recurring forest fires and haze in Indonesia indicates that the gap between the legal and policy framework and its enforcement remains significant. As noted above, the MOEF's recently invigorated Law Enforcement Directorate is one step towards combatting the risk posed by forest fires through administrative and legal sanctions, but this is only one part of the required framework, as businesses, communities and the authorities that oversee them need to be better incentivized to manage and reduce their exposure to risks.

Land use planning

Key laws and regulations include:

- Law Number 25 of 2004 on National Development Planning System
- Law Number 26 of 2007 on Spatial Planning
- Law Number 26 of 2008 on the National Spatial Plan

Guiding questions:

- Do your laws and regulations on development, planning and construction promote coordination with disaster risk management institutions and mechanisms?
- Do your building codes and land use planning regulations cover your entire territory and ensure that priority is given to schools, hospitals and other public buildings?
- Do your laws and regulations include legal sanctions, where appropriate, in cases of non-compliance leading to unsafe buildings or developments?
- Do you have laws related to land use planning or urban development provide improvements in the safety of people living in informal settlements, consistent with their human rights?

As has been identified above, coordination with the land use/spatial planning sector is implied through Indonesia's legal framework for disaster management. This refers to the implementation and enforcement of the spatial structure plan as a component of the pre-disaster stage, as well as its place in prevention and mitigation activities.¹¹² However, the ambitions of the DM Law and the activities of BNPB and BPBD agencies need to line up with those of the main actors in spatial planning in order for disaster risks to be considered appropriately within the system. Furthermore it is apparent that laws and regulations concerning development, planning and construction do not contain provisions that promote coordination with disaster management institutions and mechanisms.

Under Law Number 26 of 2007 on Spatial Planning, the mandate to draft spatial plans rests with the national, regional, or district/municipal governments as relevant, through their development planning boards (BAPPEDA). Responsibility for all zoning and spatial permits also lies with the relevant administration. The law also recognises of the importance of public participation in spatial planning. Two Minister of Public Works regulations issued in 2009 further clarify this requirement, by providing that the process of plan development must involve government agencies and civil society in at least two public workshops.¹¹³ Other means to facilitate public participation are mentioned but they are not compulsory.

¹¹² Articles 35(f), 38(d) and 47(2)(a), DM Law

¹¹³ Minister of Public Works Regulation Number 15 of 2009 and Number 16 of 2009

Law Number 26 of 2007 on Spatial Planning also includes relatively detailed provisions that enhance development control, which includes the permitting regime, implementation of accountability standards as well as setting some minimum standards for basic service provision. It also includes provisions on the implementation of incentives and disincentives, which include both administrative and criminal sanctions. These sanctions can then be adopted and enforced under regional and district spatial plans: charges can be brought against members of the public who develop projects in violation of the plan as well as to government officials who issue development permits that deviate from the plan.

Law 26/2007 also mandates that all urban areas must contain a minimum of 30% open space, with at least two-thirds of this being public open space. The extent to which this happens in practice however, is unclear. The link to DRR is clear here, even if not made explicit in the law: public open spaces can be used for evacuations during earthquakes and can enhance access for emergency services, for example.

A national spatial plan, that serves as the ‘foundation’ planning document for all others was developed in 2008 and should be reviewed every five years.¹¹⁴ This was drafted by a National Spatial Planning Coordination Board, which worked closely with BAPPENAS and was chaired by BAPPENAS’ director. Practical implementation of the plan and continuing overview of national spatial planning policy and decisions, remains with the Ministry of Public Works’ Directorate General of Spatial Planning.

Two practical examples illustrate neatly how the efficacy of the spatial planning system differs from region to region and district to district in Indonesia, especially in terms of public participation. A recent study in the city of Semarang (central Java region) found that regional regulations on public participation were followed, if not exceeded.¹¹⁵ The local BAPPEDA agency in Semarang held four seminars, eight public hearings, five workshops and 17 parliamentary hearings. Semarang’s spatial plan also integrated disaster risk areas as ‘protected areas’ as well as noting the sub-districts and villages declared vulnerable to these hazards. However in a recent study of the Central Maluku regency in the Maluku province,¹¹⁶ a number of inconsistencies were revealed between government institutions involved in the spatial planning process. Local spatial planning processes made little allowance for community participation and the regency government “sought almost no civil society participation, citing a lack of public funds” and did not run a public awareness campaign despite this being a legal requirement.

Stakeholders interviewed for this report noted the lack of incorporation of disaster risk and hazard profiles and data into the land use planning process. Most local administrations (and the specialist consultants that are often hired to prepare plans) often do not go beyond the level of detail found in BNPB’s national risk index, when local spatial plans clearly need detailed information that incorporates community perspectives. Also as was observed in Semarang, disaster risks may be downplayed to ensure that investment opportunities are not discouraged. Ultimately the legal framework would benefit from ensure greater consistency across implementing policies and regulations. This is important as local administrations can develop their own law that, although being more sensitive to local conditions, may not harmonise with more progressive elements of policy developed at national level. BNPB has also pointed out that “weak monitoring and evaluation and ineffective law enforcement”¹¹⁷ plays its part. Building and construction

114 Law Number 26 of 2008 on the National Spatial Plan

115 Heri Sutanta, Spatial Planning Support System for an Integrated Approach to Disaster Risk Reduction, December 2012, pp. 130-143

116 Luois Durey and Esther Mwangi, Land-use planning in the Moluccas: What of customary tenure security?, pp. 6-8

117 BNPB, National progress report on the implementation of the Hyogo Framework for Action (2013-2015), 20 December 2014, p. 25

Building and construction

Key laws and regulations include:

- Law Number 18 of 1999 on Construction Services
- Law Number 28 of 2002 on Buildings
- Government Regulation Number 36 of 2005 on Implementing Regulation of Law Number 28 of 2002 on Building

Guiding questions:

- Do your laws and regulations on development, planning and construction promote coordination with disaster risk management institutions and mechanisms?
- Do your building codes and land use planning regulations cover your entire territory and ensure that priority is given to schools, hospitals and other public buildings?
- Do your laws and regulations include legal sanctions, where appropriate, in cases of non-compliance leading to unsafe buildings or developments?
- Do you have laws related to land use planning or urban development provide improvements in the safety of people living in informal settlements, consistent with their human rights?

Law Number 28 of 2002 provides the framework legislation for building and construction regulation in Indonesia. It establishes the permitting and inspection regime, regulates building functions and requirements, the role of the community, the role of government and provides sanctions for non-compliance. It was further developed under its implementing regulations in 2005. Law Number 18 of 1999 on Construction Services is more concerned with regulating businesses and contractors involved in construction as well as the content of construction contracts. However, establishing a framework that requires the authorisation and licensing of contractors and the setting of certain minimum standards for their operations,¹¹⁸ also provides a means for DRR considerations to be factored into the authorisation and licensing process. This could be through, for example, ensuring construction workers receive training on hazard resistance standards.

One of the main objectives of Law 28/2002 is to ensure technical reliability of buildings in terms of safety, health, convenience and simplicity.¹¹⁹ It establishes that the function of any building must be based on the “allocated location” as specified in regional district and city plans.¹²⁰ The function must also to be approved by the regional government.¹²¹ Technically, almost every building in Indonesia should be subject to the requirement to have a valid building construction permit (as well as clear legal rights to the land),¹²² and should be built according to the planning, construction and supervision plans attached to the construction permit.¹²³ This is not generally the case in practice: regional variations in practice mean that local governments do not have to require permits for all types of buildings. As observed by stakeholders, many buildings simply ‘slip through the net’ due to the difficulty to monitor and enforce the enormous amount of construction throughout the country, especially in urban areas.

118 See Part Two (Requirements of Business, Expertise and Skill), Law Number 18 of 1999 on Construction Services

119 Article 3, Law Number 28 of 2002 on Buildings

120 Article 6(1), *Ibid*

121 Article 6(3), *Ibid*

122 Article 8, *Ibid*

123 Article 35, *Ibid*

A relatively strong sanctions regime also exists under law. Depending on the seriousness of the infringement, this may be in the form of written warnings, limiting construction activities, temporary or permanent suspension of works, suspension or revocation of permit, or full demolition of the building.¹²⁴ Fines may also be imposed, up to a maximum of ten percent of the building's total value.¹²⁵ Imprisonment is also possible, in the event that financial loss, damage or loss of life is caused to other persons through non-compliance.¹²⁶

Law 28/2002 is a fairly technical regulation, with several important provisions for the purposes of DRR:

- Requirements on building location and intensity include consideration of “free distance” i.e. ensuring distance between the building, its parcel borders and other buildings for the purposes of (among other things) security and ensuring city functions can continue undisturbed.¹²⁷ This would include, for example, emergency vehicle access in a disaster setting.
- Building requirements are, under law at least, linked to environmental impact control. The provisions are limited in scope and simply refer to the requirement for an environmental impact control in the event a building will have a significant impact on the environment.¹²⁸ It is unclear whether this has been expanded under secondary regulations.
- Building safety requirements include fire prevention as well as resistance from earthquake and wind;¹²⁹ allowable types of building materials are also regulated.¹³⁰

In common with almost all other thematic areas reviewed for this report, decentralisation of government functions in Indonesia means that all construction permitting and code enforcement is done at the regional or district level. Many districts and municipalities have issued their own legislation on this front. In Jakarta, these matters are regulated under a Governor's Decree of 2000, two Governor's Regulations from 2006 and a Regulation of the Head of the Local Building Supervision and Control Office of 2009.¹³¹ Smaller municipalities appear to base their decisions on Mayoral Regulations, as in Makassar,¹³² Denpasar,¹³³ and Semarang.¹³⁴ However, almost all local regulations only address the calculation and payment of permit fees and do not address building construction standards, safety size, or siting.¹³⁵

An Indonesian Building Code was adopted in 2005 that imposes mandatory standards on the building and construction industry, regardless of local regulations. These are developed by the Standards Indonesia (SNI) organisation, with the majority being adopted from British, Singapore, Australian and the American international standards. Ministries and municipal governments may also develop other specific building regulations internally. Out of a list of 50 major standards and references used in the sector, the following are of most relevance for DRR:

124 Article 45(1), *Ibid*

125 Article 45(2), *Ibid*

126 Article 46, *Ibid* – prison terms range to a maximum of five years

127 Article 13, *Ibid*

128 Article 15, *Ibid*

129 Articles 17 and 18, *Ibid*

130 Article 25, *Ibid*

131 As detailed in World Bank Group, *Doing Business – Dealing with Construction Permits in Jakarta, Indonesia*, available at <http://www.doingbusiness.org/data/exploreeconomies/indonesia/sub/jakarta/topic/dealing-with-construction-permits>, accessed 5 November 2015

132 *Ibid*

133 *Ibid*

134 *Ibid*

135 USAID, *APEC Building Codes, Regulations and Standards – Minimum, Mandatory and Green*, 2013, p. 86

- SNI 1726-2012 – Earthquake Resistance Building Code
- SNI 03-1726-2002 – Earthquake Resilience Planning Procedures for Home and Building
- SNI 03-1731-1989 – Dam Safety Procedures
- SNI 03-1734-1989 – Planning Procedures and Structure Reinforced Concrete Walls for Home and Building
- SNI 03-1736-2000 – Planning Procedures for Building Structure Hazard Prevention on Houses and Buildings
- SNI 03-1746-2000 – Procedure for the planning and installation of roads out to rescue against fire in buildings
- SNI 03-1962-1990 – Avalanche Disaster Planning Procedures
- SNI 03-2397-1991 – Planning Procedures Simple House Hold Wind¹³⁶

That such a number of relevant standards are in place is to be commended. However, several interviewees noted that many of these standards are outdated and in need of revision. Although codes and regulations for seismic hazards benefit from relatively frequent detailed technical input,¹³⁷ this is not the case for other hazards and relevant standards. As part of their reporting on Hyogo Framework progress, BNPB have been particularly critical of the integration of disaster risk considerations in the building and construction sector. Their findings reveal that local governments have mostly prioritized investments brought by big development projects over the risks that they may pose. As such, permits have mostly been issued without due consideration of the potential risks that may be caused by development projects. They also note that there is currently no adequate methodology for analyzing the disaster risk impacts of major development infrastructure projects.^{138s}

Article 7(5) of Law 28/2002 states that the administrative and technical requirements for customary buildings (i.e. those built according to customary norms), semi-permanent buildings, emergency buildings and buildings constructed in disaster areas are to be determined by regional governments based on “local and social conditions.” Customary housing is extremely commonplace in Indonesia, consisting mainly of single-storey clay brick masonry housing found in many rural areas, which are extremely vulnerable to seismic hazards such as earthquakes. This is therefore an opportunity for local administrations to design and implement appropriate standards for traditional or customary buildings as well as buildings that are either used for, or are more vulnerable to, disasters. However the scope of this report’s research meant that it was not possible to assess what extent this opportunity is being used by regional governments.

In conclusion a good legal framework is in place for building and construction regulation in Indonesia. However gaps in capacity, implementation and enforcement and wide variations in regional and district practices and attitudes means that it is not consistently applied. One potential avenue for improvement may be with greater collaboration between the government and the private sector. This has been piloted through the Disaster Resource Partnership, a World Economic Forum initiative that provides technical input and capacity-building for government and other stakeholders. Training of contractors and engineers and masons, especially at district and village levels could be an effective means of incorporating relevant standards without resorting to regulation, although it would require

136 USAID, *APEC Building Codes, Regulations and Standards – Minimum, Mandatory and Green*, 2013, pp. 91-94

137 See, for example, Masyhur Irsyam et al, *Development of Seismic Hazard and Risk Maps for New Seismic Buildings and Infrastructure Codes in Indonesia*, 2013

138 Indonesia, National progress report on the implementation of the Hyogo Framework for Action (2013-2015), 20 December 2014, pp. 27-28

concerted efforts and some financial investment to succeed. This approach has also met with success through the efforts of the NGO Build Change, by collaborating with local education bureaus and BPBD to incorporate earthquake resistant design and construction into the curriculum for construction students in West Sumatra and Bengkulu.¹³⁹

Climate Change

Key laws and regulations include:

- Presidential Decree Number 61 2011 on the National Action Plan to reduce GHG Emissions
- Presidential Regulation Number 46 of 2008 on the National Council for Climate Change

Guiding questions:

- If you have legislation on climate change, does it promote coordination and integration with disaster risk management institutions and systems?

Indonesia created the independent National Council on Climate Change under Presidential Regulation in July 2008. With its composition of 17 Ministers under the chairmanship of the President, it presented a powerful tool for multi-sectoral coordination and policy-making at the highest level. However in early 2015 both the National Council together with the Indonesian REDD+ Agency¹⁴⁰ were merged into the Directorate General of Climate Change in MOEF. Interviewees were not aware of what was happening with these structures, as they have been more or less silent since they were dissolved.

Indonesia's National Action Plan for Climate Change Adaptation (RAN-API)¹⁴¹ provides the overall direction for CCA initiatives in Indonesia. Although it has no formal legal basis, it is accepted as an integral part of Indonesia's national development framework. It is also included as a cross-cutting thematic in the government's long and medium-term development plans. It recognises that systematic and integrated efforts with a reliable strategy, as well as the joint commitment and responsibility of various stakeholders, are needed to mainstream climate change into the national and local development agendas.¹⁴² Its strategic objectives are aligned with the DRR agenda and include building economic resilience, establishing social/livelihood resilience to climate change impacts, maintaining sustainability of environmental systems (i.e. ecosystem, resilience) and strengthening the resilience of special regions such as urban and coastal areas and small islands.¹⁴³ Although the Synthesis Report reviewed for this study does not mention BNPB (or disasters) specifically, sources from BAPPENAS show that it is included as one of the 'central agencies', i.e. the government stakeholders that should be involved in coordination of CCA efforts.¹⁴⁴

Feedback from stakeholders indicated that coordination between the MOEF and BNPB on DRR and climate change has in been limited in practice. Furthermore there has been very little dialogue between stakeholders on how CCA and DRR link and overlap and how best to address them without duplication on a multi-sectoral basis. Several interviewees pointed out an institutional perception that CCA is the

139 Build Change Indonesia, *Newsletter*, January 2013, p. 3

140 Indonesia's REDD+ Agency was established in 2013 under Presidential Regulation 62/2013 guiding the formation of the National REDD+ Agency, as part of the REDD+ partnership between Indonesia and Norway, designed to achieve emissions reduction from deforestation and forest degradation and peatland

141 The project team reviewed a Synthesis Report issued in November 2013

142 Government of the Republic of Indonesia, *National Action Plan for Climate Change Adaptation – Synthesis Report*, Section 3.1

143 *Ibid*

144 BAPPENAS, *Indonesia National Action Plan for Climate Change Adaptation*, presentation for the 22nd Asia-Pacific Seminar on Climate Change, 28 June 2013

‘domain’ of the MOEF, whereas DRR is ‘owned’ by a number of other actors including BNPB, BAPPENAS and the Ministry of Home Affairs and that these are often viewed as separate work-streams.

d. Assessment

Do your relevant sectoral laws include provisions to increase safety and reduce vulnerability?

	No, this is currently a gap	To some extent, though further improvements are needed	Yes, but some aspects could be strengthened	Yes, this is a strength
Environment			<ul style="list-style-type: none"> The legislation is comprehensive and contains important provisions relating to Environmental Protection and Management Plans, the Strategic Environmental Assessment Process and an Environmental Impact Assessment regime (EIA). It also links environmental protection and planning to development and spatial planning processes. The DM Law provides that disaster risk analysis should be incorporated into EIAs although no details on implementation are provided. A clear mechanism on how the analysis should be incorporated would be of great benefit. 	
Forests			<ul style="list-style-type: none"> A detailed and sophisticated legal regime governing access to and exploitation of forests has been developed over many years and the risk of forest fires is considered and incorporated into forest planning. The framework law on forest management, number 41 of 1999, is supported by a number of important regulations issued not only by the Ministry of Environment and Forestry but also by the national, regional and district governments. The framework could benefit from more explicit linkages between the forest sector and the DM ‘sector’ and more detailed regulations and guidelines on reduction of risks from forest fires. 	
Water		<ul style="list-style-type: none"> The repeal of Law 7/2004 on Water Resources due to the potential for excessive privatisation and monopolisation of water resources halts the progressive content of law 7/2004, concerning disaster risk mitigation and community engagement and management of resources. However, other positive legislation and practices remain in place, as the water sector benefits from an extensive amount of regulation issued at national, regional and district level. Overall, the water sector’s framework would benefit from more comprehensive provisions that explicitly aim to reduce the risks of droughts and floods. 		

	No, this is currently a gap	To some extent, though further improvements are needed	Yes, but some aspects could be strengthened	Yes, this is a strength
Land Use Planning		<ul style="list-style-type: none"> • Coordination with the land use/spatial planning sector is noted in Indonesia's legal framework for disaster management, which refers to the implementation and enforcement of the spatial structure plan as a component of the pre-disaster stage as well as its place in prevention and mitigation activities. • The ambitions of the DM Law and the activities of BNPB and BPBD agencies need to be aligned with those of the main actors in spatial planning in order for disaster risks to be considered appropriately within the planning system. <p>It does not appear that the framework for land use planning laws ensure that priority is given to schools, hospitals and other public buildings.</p>		
Building and Construction			<ul style="list-style-type: none"> • A comprehensive construction regulation and permitting system is established under law 28/2002 on Buildings, secondary regulations and a long list of detailed standards and codes, most of which are adapted from international best practice and standards. • Considerations relevant to DRR are included, both at a high level in law 28/2002 as well as through detailed standards (which include, among others, earthquake resistance, dam safety, general hazard prevention, rescue access, wind resistance). • However, many of these standards would benefit from being updated (except for seismic risks) and levels of implementation are variable. • A relatively strong sanctions regime also exists under law for non-compliance. 	
Climate Change		<ul style="list-style-type: none"> • A National Action Plan contains the country's strategy and is well aligned with DRR considerations. • However there appears to be little collaboration between the two 'sectors' of climate change and DRR, nor any cohesive approach on how they are to be developed as cross-cutting (and inter-linked) themes in the various other sectors. 		

4

Do your laws ensure that sufficient resources are budgeted for disaster risk reduction?

a. Key laws and regulations:

- Law Number 22 of 1999 on Regional Autonomy
- Law Number 17 of 2003 on State Finances
- Law Number 1 of 2004 on State Treasury
- Law Number 25 of 2004 on the National Development Planning System
- Law Number 32 of 2004 on Regional Government / Decentralisation
- Law Number 33 of 2004 on Fiscal Balance between the Central Government and the Regional Governments
- Law Number 24 of 2007 concerning Disaster Management
- Regulation Number 21 of 2008 concerning Disaster Management
- Regulation Number 22 of 2008 concerning Disaster Aid Financing and Management
- Law Number 6 of 2014 on Villages
- Law Number 23 of 2014 on Local Government

b. Guiding questions:

- Do your laws ensure sufficient resource allocation for DRR, through mechanisms such as:
 - Development plans?
 - Earmarking percentages in annual budgets?
 - Mandating budget line items?
 - Establishing dedicated funds?
- If your laws decentralise responsibilities to sub-national authorities, are there provisions that ensure a commensurate allocation or other means to generate resources for these authorities to fulfill their responsibilities (such as capacity building initiatives or national/local co-funding incentives)?
- Are there measures or provisions in place to reduce implementation challenges for DRR financing, such as ensuring a sustained resource base and reducing competition with response funds?
- Do your laws promote disaster insurance and/or other risk finance mechanisms?

The DM Law of 2007 is notable for its provisions relating to the funding of disaster management. It establishes that one of the key responsibilities for the government is to ensure “sufficient disaster management budget allocation in [the] National Budget.”¹⁴⁵ The same responsibility is placed on the regional government, who must ensure sufficient allocation in the Regional Budget. The budget references here are to the annual budgets, as approved by the House of Representatives and the Regional House of Representatives respectively.¹⁴⁶ The national government must also ensure sufficient budget allocation in the form of a “ready fund,”¹⁴⁷ although this is earmarked for use only during emergency response.¹⁴⁸

145 Article 6(e), DM Law

146 Article 1(2) and (3), *Ibid*

147 Article 6(f), *Ibid*

148 Article 62, *Ibid*

Further detail regarding the budgeting process for the entire disaster management cycle has been established under Regulation Number 22 of 2008 concerning Disaster Aid Financing and Management. The fact that a regulation exists for this specific topic already makes Indonesia very well advanced in comparison to many countries, in terms of its legislative provision for financing disaster management. The definition of “disaster management fund” (DM Fund) under the regulation means a fund for all stages of the disaster management cycle, i.e. pre-disaster (incorporating DRR), emergency response and post-disaster.¹⁴⁹ The DM Fund is a shared responsibility between the national and regional governments, with its financial sources coming from the national and regional state budgets and potentially from the “community.”¹⁵⁰ The national and regional governments are placed under an obligation to “sufficiently allocate a disaster management budget” as part of the national and regional budgets,¹⁵¹ with the national budget also providing a disaster contingency fund, a ready fund and “grant-patterned social assistance funds.”¹⁵²

It is not entirely clear from the wording of the law whether these funds are functionally separate from the ‘overall’ DM Fund. Although the disaster ready fund is for emergency response only, the disaster contingency fund is strongly linked to DRR as it is provided for pre-alertness measures.¹⁵³ Grant-patterned social assistance funds are provided for post-disaster activities.¹⁵⁴ Although there is potential for these to link to DRR (for example through links to sustainable livelihoods support or ‘build back better’ schemes) this is not made clear under the law.

Part Two of Regulation 22/2008 goes into more detail regarding the specific uses for the disaster management fund. As has been noted above, under Law 24/2007 DRR is technically included as a single component of the “situation without disaster” under the pre-disaster management stage. Article 13 lists the activities that the fund should be used for in this situation:

- “facilitation for disaster management planning;
- disaster risk mitigation program;¹⁵⁵
- disaster prevention program;
- integration of development planning into disaster management planning;
- preparation of disaster risk analysis;
- facilitation for implementation and enforcement of spatial structure plan;
- education and training in disaster management; and
- preparation of technical standard for disaster management.”

All of these items are elements of a functional DRR ‘system’. The use of the disaster management fund in a situation with “potential disaster” is also heavily linked to DRR as the functions include alertness activities, development of early warning systems and disaster mitigation activities.¹⁵⁶ There are also clear DRR elements included within the post-disaster stage: here the funds are to be used for rehabilitation and reconstruction, with activities under the latter category including the

149 Article 1(1), Regulation Number 22 of 2008 concerning Disaster Aid Financing and Management

150 Article 4, *Ibid*

151 Article 5(1), *Ibid*

152 Article 5(3), *Ibid*

153 Article 6(1), *Ibid*

154 Article 6(5), *Ibid*

155 Note that in one English translation of the law provided for this study, this term has been translated as “disaster risk reduction programming.”

156 Article 14, *Ibid*

“use of appropriate design with improved and disaster-resistant equipment,” for example.¹⁵⁷ BNPB Regulation Number 17 of 2010 provides further detail: one of its basic principles is that all post-disaster rehabilitation and reconstruction is to be done on the principle of ‘building back better’ that integrates DRR with a minimum budget of 10% of the rehabilitation and reconstruction total budget.¹⁵⁸ Although in practice these regulations are not well known outside BNPB, it at least demonstrates a clear starting-point to ensure that DRR considerations are taken into account during recovery.

Regional governments may access this type of funding in the form of grant-patterned social assistance funds (as explained above), which requires the regional governments to submit a written application to the national government via BNPB, following which BNPB shall conduct an evaluation. This evaluation may then form a recommendation from the Head of BNPB, who submits a request to the Minister of Finance. The Minister must then submit the request to the House of Representatives for final approval of the funds.¹⁵⁹ Regulation 22/2008 also advocates generally for public and community contributions to disaster management funding, although provides no detail on how this might be achieved.¹⁶⁰

Some high-level provisions regarding financial reporting are included in Law 24/2007: Article 12(f) provides that BNPB shall account for the use of the budget received from the (national) state budget and BPBDs are required to account for the use of regional budget money. No further details, responsibilities or reporting lines are included, however Regulation 22/2008 builds on the high-level provisions contained in the DM with a chapter on supervision and accountability. It is not particularly detailed but it represents an important framework for ensuring that funding is made transparent and decision-makers held accountable. National and regional governments, BNPB and BPBD are all required to make accountability reports on the administration of the disaster management fund.¹⁶¹ The national and regional governments are also required to supervise the administration of the fund at all stages.¹⁶² Accountability reporting on the financial condition as well as performance at pre- and post-disaster stages is to be produced “in accordance with the provisions of legislation.”¹⁶³ It is likely that this Article refers to other, more detailed legislation that may be developed in future. However no interviewees were able to confirm that such legislation existed, other than pointing out institutions’ own internal rules and protocols regarding transfers of funds. Regulation 22/2008 also requires that the accounting system used for reporting complies with Ministry of Finance guidelines and that all accountability reports are to be audited in line with legislation (again, no specific references are made to what legislation this is).

Regional, district and city governments are allocated their budgets through a budgeting process with the national government, regulated by Government Regulation Number 58 of 2005 on Local Financial Management and the Ministry of Home Affairs’ Regulation Number 37 of 2014 on Guidelines for Budget Drafting. In summary these require that the programs and activities of local governments must support the achievement of overall national development goals. The Ministry of Home Affairs assumes an important role in providing guidelines and direct guidance to local governments in the planning and budgeting process. The national-level Law Number 6 of 2014 on Villages, although only in the early stages of implementation, could also provide an avenue for village-level control over DRR financing. The law states that villages will share funds equal to 10 percent of the state budget earmarked for

157 Article 22, *Ibid*

158 Article 5(2), Head of BNPB Regulation Number 17 of 2010 on General Guidelines for the conduct of Post-Disaster Rehabilitation and Reconstruction

159 Article 23, Regulation Number 22 of 2008 concerning Disaster Aid Financing and Management

160 Articles 7 and 8, *Ibid*

161 Article 31(1), *Ibid*

162 Article 32, *Ibid*

163 Article 33, *Ibid*

regional administration, to be transferred on a yearly basis. However, due to concerns about state financial capacity, the amount will be incrementally increased, starting with three percent in the first year and reaching ten percent in 2017.¹⁶⁴ Although the law does not mention disaster management or DRR, these would be included in the scope of villages' financing powers.

No evidence was found of any laws that promoted disaster insurance or other relevant risk finance mechanisms. The Indonesian government has stated that "disaster risk insurance, catastrophe bonds and other risk transfer mechanisms have not been developed adequately in the country."¹⁶⁵ According to interviewees the government is currently investigating this matter but no concrete proposals have yet emerged. The Association of Southeast Asian Nations' Agreement on Disaster Management and Emergency Response (AADMER) prioritises the continuing development of the ASEAN Disaster Risk Insurance Program.¹⁶⁶ This aims to (among other things) support the development of disaster risk financing and insurance strategies at the national and sub-national levels. This could be one mechanism for the implementation of disaster risk insurance in Indonesia. A 2011 study undertaken by the World Bank noted that the Rehabilitation and Reconstruction Fund is the main budget instrument for the Indonesian government to finance public post-disaster expenditure, but it is under-capitalized and most public assets are not currently insured against natural disasters.¹⁶⁷

c. Implementation

- How effectively implemented are the budgetary provisions of your laws for risk reduction?
- What are the major challenges to implementation?

The analysis above has established that Indonesia possesses a sophisticated legal framework that sets out the principles necessary to ensure that DRR is factored into national and regional budgets, as part of the overall disaster management funding structure. The complexity of the system means that it is difficult to track and assess the budgeting and funding flows for DRR. One of the main comments from participants considering this question at the consultation workshop was that budgeting for DRR is not clear under current law. However a survey conducted in 2012 noted that, irrespective of any regulatory issues, total investment in DRR activities has been increasing significantly – from only IDR 2.6 trillion in 2006 to almost IDR 9 trillion in 2012.¹⁶⁸ This increase can be partly explained by the integration of disaster management (and DRR) into national development planning via the long and medium-term development plans. It is important to note that actual investments in DRR are probably higher as many activities are 'embedded' within other sectors and not identified as disaster management/DRR-related. For example, a water resource management program may contain a dam construction project, which although designed to conserve rainfall will also reduce the risk of flooding.

Overall, the ratio of DRR investment to total government budget in 2012 was about 0.7%.¹⁶⁹ Indonesia's recent Hyogo Framework progress report stated that the latest figure stood at 0.9%.¹⁷⁰ Breakdowns by institution were also reviewed for the survey, which revealed that there were 22 central government

164 Article 33, *Ibid*

165 The Asia Foundation, *Indonesia's Village Law: A Step Toward Inclusive Governance*, 17 February 2016, <http://asiafoundation.org/2016/02/17/indonesias-village-law-a-step-toward-inclusive-governance/> (accessed 28 April 2016)

166 Indonesia, *National progress report on the implementation of the Hyogo Framework for Action (2013-2015)*, 20 December 2014, p. 32

167 Association of Southeast Asian Nations' Agreement on Disaster Management and Emergency Response, *AADMER Work Programme 2016-20*, April 2016, pp. 47-50

168 Herry Darwanto, *Preliminary Examination of Existing Methodologies for allocating and tracking National Government Budget for Disaster Risk Reduction in Indonesia*, January 2012, p. 2

169 *Ibid*

170 Indonesia, *National progress report on the implementation of the Hyogo Framework for Action (2013-2015)*, 20 December 2014, p. 5

institutions undertaking DRR initiatives, with the Ministry of Public Works spending the largest amount on DRR activities (approximately half of the combined institutional spend in 2012), followed by the (former) Ministry of Forestry (26%), the Search and Rescue Agency (7%) and BNPB (6%). These statistics clearly point out the bulk of DRR spending falls to institutions involved in physical disaster mitigation measures and BNPB's portion represents a relatively modest amount.

Furthermore the fact that this kind of detailed information is available and could no doubt be reproduced for more recent years if there was sufficient backing for the research, indicates a relatively high degree of transparency in terms of spending for DRR. It also indicates that a sophisticated budget tracking and reporting system exists in order for these statistics to be available. This in itself is potential evidence that the complicated legal framework described above is relatively well implemented.

Within BNPB, interviewees noted that the Directorate for DRR is actually relatively well-funded and staffed, but that this is not the case for BPBD agencies at regional and district level. The fact that BPBDs are separated from BNPB by institutional structure (i.e. BPBD's reporting and financial line are to the Ministry of Home Affairs) means that the requirements for BNPB to provide financial support to BPBD are complicated. In reality this often translates into either the provision of capacity-building and technical assistance or, more commonly, the provision of goods and equipment on a (theoretically) temporary basis, as is done for vehicles.

A recent assessment by BNPB noted that although the national budget for DRR has been increasing, this has not been matched with an increase in local budgets, where many local governments allocate less than 0.1% of their local development budget for DRR. The reasons for this include lack of commitment on the part of the local governments and ineffective disaster management governance.¹⁷¹

Part of the reason is practical. Stakeholders within the government, as well as from international organisations and NGOs, pointed out two inter-related issues. First the Ministry of Finance can present a bureaucratic roadblock to funds requested for DRR (whether from BNPB or from individual ministries) and secondly that there is no specific budget code for DRR within the system. There also seems to be some institutional confusion over DRR in this sense: one interviewee raised the example of a budget application from the Ministry of Education that included DRR elements being rejected by the Ministry of Finance on the basis that only BNPB should be requesting funds for DRR. Although this is just one example there nonetheless appears to be a need for Ministry of Finance officials to engage more fully with the concept of DRR mainstreaming.

In terms of disaster risk insurance, micro-insurance schemes are currently being investigated and implemented by NGOs such as Mercy Corps in collaboration with reinsurers such as Swiss Re. At present these are limited in scope and in the early stages of development. One barrier to their success could be the current lack of an enabling legal framework for micro-finance and micro-insurance providers. As they are subject to the same regulation as 'conventional' financial institutions the costs and burden of operation is generally not economical. Some organisations are advocating to the Indonesian government to implement the necessary enabling legislation. This could have an extremely positive impact on the ability of Indonesian communities to cope with the risks they face from natural hazards.

171 BNPB, *National Assessment Report on Disaster Risk Reduction (Executive Summary)*, 2013, p. 16

d. Assessment

Do your laws ensure that sufficient resources are budgeted for disaster risk reduction?

To some extent, though further improvements are needed

- Overall Indonesia's laws provide mechanisms to budget for DRR, although the emphasis is on funds for disaster response and DRR is not mentioned specifically under the law.
- There is a discrepancy between national and local levels in terms of the spending on DRR.
- Stronger links and communications between the Ministry of Finance and BNPB may help clarify funding flows and procedures for DRR. The Ministry of Finance may also need to review its internal procedures regarding budget lines for DRR.
- The legal framework does not contain any provisions to reduce implementation challenges for DRR financing, nor do laws promote disaster insurance and/or other risk finance mechanisms.

5

Do your laws establish clear procedures and responsibilities for risk assessments and ensure risk information is considered in development processes?

a. Key laws and regulations:

- Law Number 24 of 2007 concerning Disaster Management
- Government Regulation Number 21 of 2008 concerning Disaster Management
- Law Number 32 of 2009 on Environmental Protection and Management

b. Guiding questions:

- Do your laws require the undertaking of regular hazard and vulnerability mapping and risk assessments, including both disaster and climate risks and clearly assign these tasks to appropriate authorities?
- Do your laws or policies provide for at-risk communities to be involved in the risk assessment process?
- Do your laws require risk information to be considered in development planning and construction?

The legal framework for risk assessment and mapping in Indonesia is relatively small, with only minimal references spread across the DM Law and Regulation 21/2008. Overall there is no requirement to undertake regular hazard and vulnerability mapping and risk assessments under law and no clear provisions that require or encourage the involvement of at-risk communities. The DM Law states that BPBDs are responsible for “preparing, deciding on and disseminating maps of disaster-prone areas.”¹⁷² Within the context of a “situation without a disaster” (under the pre-disaster stage), “disaster risk analysis requirements” are included and these form a key input for disaster management planning.¹⁷³ The analysis itself involves an evaluation of the risk level of a condition or activity with disaster risk.¹⁷⁴

The Head of BNPB is required to stipulate the requirements for the analysis by “involving related agencies/institutions”¹⁷⁵ and ultimately the risk analysis is supposed to govern the preparation of EIAs,

172 Article 21(c), DM Law

173 Article 35(e), *Ibid* and Article 6(2), Regulation 21 of 2008 concerning Disaster Management

174 Article 11(1), *Ibid*

175 Article 11(2), *Ibid*

spatial structuring as well as actions of disaster prevention and mitigation.¹⁷⁶ Arguably the reference to the inclusion of “recognition [also translated as ‘identification’] and monitoring of disaster risk” as a part of DRR also incorporates disaster risk assessment and mapping processes.¹⁷⁷ There are some references in Chapter V of the DM Law on the rights and obligations of the community that appear to establish an obligation for the government and/or BNPB and BPBD to involve the community in risk mapping. Article 26(1) states that “anybody shall have the rights to... participate in planning... [and] participate in decision-making on disaster management activities, particularly those related to him/her and his/her community.”

c. Implementation

- How effectively implemented are your laws related to risk assessment?
- What are the major challenges to implementation?

Although the legal framework governing risk mapping and assessment is relatively minimal, a huge amount of mapping of risks and vulnerabilities has taken place in Indonesia, led by a number of actors. BNPB first embarked on a comprehensive mapping of vulnerabilities in 2009, which was updated in 2011 and most recently in 2013, with a shift in the focus to ‘disaster risk’ rather than ‘vulnerability’. A new version of this is currently being drafted. The mapping involves ranking each region and each of Indonesia’s 497 districts according to a risk index calculated on the potential magnitude of impact, measured from the exposure of each hazard, as well as from the combination of multiple possible hazards.¹⁷⁸ A risk index by threat is also included, which covers nine different natural hazards.¹⁷⁹ It is intended that the Disaster Risk Index serves as a basic tool in developing institutional policies, funding proposals, planning and so on.¹⁸⁰

That such a tool has been developed, researched, coordinated and continues to be updated is commendable, especially as it has the potential to form the foundation for planning decisions across other sectors. At a recent meeting between 17 of the most disaster-prone countries in Asia to discuss implementation of the Sendai Framework, BNPB’s representative emphasised that Indonesia’s National Disaster Management Plan is currently being adjusted to align it with the Framework. There will be a strong emphasis over the next four years on making district/city level multi-hazard risk analysis available as well as damage and loss reports to ensure better understanding of disaster risk.¹⁸¹

Interviews revealed that underlying the risk index maps noted above there is a complex network of hazard and vulnerability assessment mapping practices that are often developed on a multi-sectoral basis. Countless examples exist where multiple Ministries have collaborated, sometimes with technical and financial support from foreign governments and organisations, on detailed hazard mapping, especially for seismic risks including earthquakes and tsunamis. Agencies such as BAKOSURTANAL (essentially responsible for all geospatial data and information services) and the Indonesian Agency for Meteorology, Climatology and Geophysics (Badan Meteorologi, Klimatologi dan Geofisika (BMKG)) are heavily engaged in researching and developing hazard and risk maps as well as the national early warning system. These systems and processes have developed without any unified legal framework mandating their coordination and output.

176 Article 11(3), *Ibid*

177 Article 37(2), DM Law

178 BNPB, *Disaster Risk Index of Indonesia*, 2013, p. 1

179 These are: flood, earthquake, tsunami, landslide, volcano, extreme waves and abrasion, land and forest fire, extreme weather and drought.

180 *Ibid*, p. 6

181 Dr. Raditya Jati, BNPB, quoted in UNISDR, Asia meets to implement Sendai Framework, 4 June 2015, <http://www.unisdr.org/archive/44674> (accessed 3 November 2015)

The Directorate for DRR within BNPB develops its own vulnerability maps and coordinates with other Ministries (for example, MOEF and the Ministry for Public Works) in the development of hazard maps. Both of these inputs then lead to development of the more general risk maps. However, some stakeholders did point out that although the system is professional, technical and benefits from multi-sectoral inputs, it is still very centrally-driven and thus far most BPBD agencies and local administrations have not engaged in using the centrally-produced risk maps (which by necessity cannot go beyond an overview of the district level) to develop more granular risk maps for sub-districts and villages. Where this has happened, this will often be due to the funding and/or technical input from an international donor or NGO and if this is the case then there is a risk that the risk maps produced, though of decent quality and often incorporating progressive community-focused approaches, may not be taken on as a basis for local development and spatial planning.

Several stakeholders also noted that communities are not generally considered within the 'formal' risk mapping process. Community representatives and PMI volunteers from Sika (who met with the researcher for this report during the International Day for Disaster Reduction meetings in Solo in October 2015) interviewed for this report were not aware of any mapping-related consultations that had taken place in their own communities. The lack of a legal basis to do this is certainly important, but more often than not stakeholders referred to the limited technical capacity of local administrations and BPBD agencies to undertake robust risk assessment exercises. The question was raised as to whether a highly technical mapping procedure is even required at the most granular levels. Both national and local agencies could perhaps focus on enabling communities to develop their own basic risk maps that can then be updated with more scientific methodologies as and when required and according to funding and capacity.

Risk mapping is undertaken in Indonesia not only to benefit the activities of the disaster management 'sector', but perhaps more importantly as the key foundation to the development of spatial and development plans from the village level up to national level. The DM Law makes this point indirectly and could therefore benefit from amendment to make this mechanism much clearer. Stakeholder feedback suggests that risk assessment information is on the whole factored into these two planning processes. However this is often without a consistent approach to what type of risk information is considered, the nature of the maps involved, whether communities have been consulted and so on. Indeed, many smaller administrations (e.g. at district, sub-district and village level) often have to base their decisions on risk maps that do not contain the required amount of detail for an effective overview of the risks faced.

Furthermore, the decentralised nature of local administration means that capacities and approaches vary from region to region and from district to district. Although it appears from a relatively recent case study in Semarang that local planners and officials interpreted the DM Law as placing an obligation on them to incorporate risk assessments into their spatial planning process, a lack of precedent on how to actually do this (and very limited hazard mapping undertaken by the local government) as well as political considerations regarding restrictions on future development meant that land subsidence was not included as a risk, despite being a major threat.¹⁸²

182 Heri Sutanta, *Spatial Planning Support System for an Integrated Approach to Disaster Risk Reduction*, December 2012, pp. 130-132

d. Assessment

Do your laws establish clear procedures and responsibilities for risk assessments and ensure risk information is considered in development processes?

Yes, but some aspects could be strengthened

- Although provisions under law are limited, in practice a significant amount of mapping of risks and vulnerabilities has taken place in Indonesia, led by a number of actors.
- In particular, the production of a detailed and comprehensive Risk Index provides a clear foundation for the integration of risk information into planning processes.
- The legal framework would benefit from including more comprehensive provisions on the nature and frequency of risk assessments, as well as mechanisms to ensure that at-risk communities are involved in any mapping and assessment processes.
- Stronger links between risk assessments and vulnerability maps and the development planning and construction sectors should also be encouraged.

6

Do your laws establish clear procedures and responsibilities for early warning?

a. Key laws and regulations:

- Law Number 24 of 2007 concerning Disaster Management
- Regulation Number 21 of 2008 concerning Disaster Management
- Head of BNPB Regulation Number 4 of 2008 on Guidelines for Preparing Disaster Management Plans
- Law Number 31 of 2009 on Meteorology, Climatology and Geophysics
- Minister of Communications Regulation Number 20 of 2006 on Early Warning for Tsunamis or Other Disasters Through Nationwide Broadcasting Services
- Coordinating Minister of Social Welfare Decree Number 21 of 2006 concerning Appointment of a Government Institution as Focal Point and Establishment of a Tsunami Early Warning System Development Team

b. Guiding questions:

- Do your laws clearly assign responsibilities for all steps of the early warning process from assessing the hazard to making decisions to issue warnings?
- Do your laws address the roles of technical ministries as well as communities, local authorities, scientific institutions, private media companies and civil society organizations in early warning systems?
- Do your laws require EWS for the most frequent and serious hazards?

The legal framework for Indonesia's early warning system (EWS) is established under the DM Law. "Early Warning" is defined as a series of activities of giving an urgent warning to the community about a potential disaster in a certain area by an authorized agency.¹⁸³ Early warning is established as one of the components (together with alertness and disaster mitigation) of disaster management in situations without potential disaster.¹⁸⁴ Regulation 21/2008 provides a little more detail on what

183 Article 1(8), DM Law

184 Article 44, Ibid

an EWS should achieve, namely a quick and appropriate action to reduce disaster risk and prepare actions of emergency response,¹⁸⁵ and that early warnings shall require:

- observation of disaster signs;
- analysis of data from observation;
- decision-making based on result of analysis;-
- dissemination of the result of decision; and
- community actions.¹⁸⁶

BNPB and BPBDs have are responsible for the EWS. BNPB is tasked with “communicating information on activities to community”¹⁸⁷ which is interpreted as an early warning-related responsibility.¹⁸⁸ BPBD is authorised as the local entity responsible for the EWS by virtue of its general obligations and responsibilities listed in the DM Law. For example this involves “carrying out disaster management procedures” and “disaster management in its territory” is considered to include this obligation.¹⁸⁹ The *observation* work that is required for a successful EWS is however assigned to authorized agencies or institutions that are required to “carry out observation of disaster signs... according to the type of threat, along with the community to obtain data on the signs of potential disaster, considering the local wisdom.”¹⁹⁰ The use of the community and their local wisdom clearly points out the promotion of a socially inclusive EWS rather than a ‘top-down’, strictly scientific approach to monitoring and warning for hazards. These authorized agencies or institutions are then required to submit their analysis to BNPB and/or BPBD according to the disaster location or level, as a basis for decision-making and early warning action.¹⁹¹ Early warning system information is also required to be included in all disaster management plans.¹⁹²

The legal foundation for EWS in Indonesia extends beyond the roles of BNPB and BPBD to place specific mandates on technical and scientific organisations as well as the private media. Firstly, Law 31 of 2009 places an obligation on the government to provide meteorology, climatology and geophysics services, including public information, early warning and special information.¹⁹³ This obligation is carried out by the Indonesian Meteorology, Climatology and Geophysical Agency (Badan Meteorologi, Klimatologi dan Geofisika (BMKG)). BMKG is a non-departmental government agency that is tasked to monitor, analyze and disseminate early warnings. It is part of the Regional Tsunami Watch Providers network together with India and Australia.

Local regulations have also been issued by regional, district and municipal governments that follow the legal framework established at national level and provide further detail on responsibilities and procedures at local level. Some examples are:

- Padang city government’s **Regional Regulation Number 3 of 2008 on disaster management**, which states that the local government is responsible for the EWS; Mayoral Regulation Number 14 of 2010 explains the EWS for Padang city.

185 Article 19(1), Regulation 21 of 2008 concerning Disaster Management

186 Article 19(2), *Ibid*

187 Article 12(c), DM Law

188 See BMKG, *Tsunami Early Warning Service Guidebook for INATEWS*, 2012, p. xi

189 Article 21(d) and (e), DM Law and see also BMKG, *Tsunami Early Warning Service Guidebook for INATEWS*, 2012, p. xi

190 Article 19(3), Regulation 21 of 2008 concerning Disaster Management

191 Article 19(4), *Ibid*

192 Chapter 5, Head of BNPB Regulation Number 4 of 2008 on Guidelines for Preparing Disaster Management Plans

193 Article 29(1), Law 31 of 2009 on Meteorology, Climatology and Geophysics

- Bali regional government issued **Governor Decrees in 2009** (Numbers 30 and 31) on the operations control centre that is responsible for issuing tsunami early warnings to the public, hazard maps, budget allocation and so on.
- Cilacap district government issued the **District Head Decree 360/298/14/2007** on the formation of working groups to manage the implementation of tsunami EWS at district level.

In terms of media involvement in the EWS, both government and local government-run public information agencies and mass media sources are required to allocate time or slots every day to disseminate public information pursuant to statutory provisions.¹⁹⁴ Law 31/2009 also provides a reminder to other stakeholders that meteorological, climatological and geophysical information must be used for policy-making in related sectors,¹⁹⁵ which in practice means this information must be factored into risk assessment and mapping. A regulation issued by the Minister of Communications and Information in 2006 governs the broadcasting of early warnings for all types of disasters. Although a full text of this regulation was not available for review, secondary sources confirm that this contains relatively detailed provisions regulating the broadcasting obligations of television and radio agencies for disseminating early warnings.¹⁹⁶ This essentially obliges them to disseminate warnings as and when required by the government.

c. Implementation

- How effectively implemented are the provisions related to early warning?
- What are the major challenges to implementation?

While the Indian Ocean tsunami in 2004 instigated a major change in Indonesia's disaster management legislation, it also triggered serious investment in an earthquake and tsunami EWS. Starting in 2005, the German-Indonesian EWS was created and began training personnel within Indonesian institutions to eventually take over responsibility for the system, which took place in 2011, when BKMKG assumed control of the system (named InaTEWS). InaTEWS draws data from around 300 measuring stations and can send a warning five minutes after an earthquake occurs (six tsunami warnings have been issued since 2011).¹⁹⁷ BMKG also oversees Indonesia's Tropical Cyclone Warning Centre, the main functions of which are to provide the public with forecasts and warnings for coastal and land areas as well as open seas. The Centre is also part of the World Meteorological Organization's Tropical Cyclone Programme. So on the basis of an outline legal framework that extends from national to district level, it is evident that BMKG sits at the top of a well-funded and resourced information network that benefits from a wide array of scientific data gathering techniques as well as collaboration with regional and international technical and scientific bodies. In contrast to many other nations Indonesia has been able to establish an effective and truly national EWS for major hydro-meteorological hazards.

Interviewees and the government in general have openly admitted that more could be done to speed up warning deliveries and ensure better warning provision for the many remote and isolated communities spread across the country.¹⁹⁸ An earthquake/tsunami tabletop exercise in 2013 showed

194 Article 34(1), *Ibid*

195 Article 44(1), *Ibid*

196 Articles 1 to 5, Minister of Communications and Information Regulation Number 20 of 2006 on Tsunami and Other Disaster Early Warning through Broadcast Agencies across Indonesia

197 German Research Centre for Geosciences, *Ten years after the disaster: Tsunami-Early Warning System for the Indian Ocean*, 19 December 2014 <http://www.gfz-potsdam.de/en/media-communication/press-releases/details/article/zehn-jahre-nach-der-katastrophe-tsunami-fruehwarnsystem-fuer-den-indischen-ozean/> (accessed 16 November 2015)

198 See, for example, BNPB, *National Assessment Report on Disaster Risk Reduction*, 2013, p. 19

that even the sophisticated tsunami EWS varied heavily in its implementation at sub-national level and that although the national system is very technical, standard operating procedures are not being properly socialized down to the sub-national level.¹⁹⁹ Also, as may become clear from an analysis of the relevant legislation, EWS in Indonesia are heavily focused on the risk from earthquakes and tsunamis. This is justifiable bearing in mind the risk profile and recent experience. However to some extent this has been at the cost of a lack of government investment in EWS for other important risks such as flooding, drought and landslides.

Regional initiatives and variations do exist. For example, Jakarta's BPBD is currently utilising a Disaster Information Management System application that collates damage and shelter information and can send messages to staff as well as other collaborating agencies, ultimately allowing BPBD to collect information quickly and make key decisions. Fujitsu Indonesia has developed a disaster information-sharing system allowing Jakarta residents to share disaster information via their smartphone. This system can also automatically push warnings to smartphones with the application installed. Non-governmental actors are also involved in developing EWS in collaboration with local stakeholders. In 2015 PMI combined forces with IFRC, Bandung Institute of Technology and private companies to develop a Flood Early Warning Early Action System (FEWEAS). This can be installed as an app on users' smartphones. Members of Community Action Teams (a PMI initiative) can then use information they receive from the app to inform their response when it comes to dealing with a flood situation. They can also upload photos, videos or any relevant information into the app, to be shared with others.²⁰⁰

The framework for EWS only sets out the high-level responsibilities for the system. However many regions in Indonesia, working together with BNPB and BMKG at central level, have developed sophisticated mechanisms based on locally-developed regulations, guidelines and standard operating procedures. One such example is Bali, which so far is the only region in Indonesia that has an agreement amongst all its constituent districts for one regional level Emergency Operations Centre to handle all aspects of the EWS. A proactive multi-sectoral approach, regular contact with local communities via village forums and regular simulations of the warning chain have been praised by external commentators and evaluations. Furthermore, the BPBD in Bali is actively engaging with the hotel sector to create a 'disaster-prepared' certification system, as well as working with other government agencies and private sector organisations on the 'disaster prepared Bali' initiative (which currently has over 190 members).

The limited interviews with community representatives undertaken for this study (who met with the researcher during the International Day for Disaster Reduction meetings in Solo in October 2015) highlighted that customary or 'traditional' EWS are relatively commonplace and demonstrate a high potential for useful integration into the 'formal' EWS. Typically these customary systems are (unwittingly) filling gaps in provision by government actors such as BPBD, namely for more regularly occurring risks such as flooding, drought and landslides. In Sewu (Java) the community benefits from a river measurement system whereby local dam operators are linked to water-gate operators for warning purposes, who can then inform community leaders of impending flooding. These leaders will then use a number of different communication methods to ensure the villages are warned, including cellular communications (call and SMS), village loudspeakers, knocking on doors and use of a traditional drum. The use of such a drum appears relatively widespread and is an extremely effective warning tool, albeit

199 Center for Excellence in Disaster Management & Humanitarian Assistance (CEDMHA), *Indonesia: Disaster Management Reference Handbook*, 2015, p. 60 and BNPB, *National Progress Report on the implementation of the Hyogo Framework for Action (2013-2015)*, HFA Monitor update, Preventionweb, 23 April 2015, p. 13

200 IFRC, *Red Cross helps flood-prone communities through traditional and modern approaches*, 29 April 2016, available at <http://www.ifrc.org/en/news-and-media/news-stories/asia-pacific/indonesia/red-cross-helps-flood-prone-communities-through-traditional-and-modern-approaches--72184/>

with a limited range: different rhythms are used to denote different levels of warning. Interviewees from elsewhere in Java (Semanggi and Sangkram) as well as multiple villages in Sika use this method.

Stakeholders from Sika pointed out the necessity of such methods as several villages have no access to electricity or cellular signals. Several interviewees also pointed out the importance of local wisdom or knowledge in predicting flooding patterns, whereby experience accumulated over generations and careful monitoring of water levels and the progress of certain crops can provide good warning indicators. The fact that national legislation explicitly promotes the incorporation of 'local wisdom' is important. It provides an entry point for the integration of these systems into a more cohesive whole where, properly managed, networks could extend beyond small groups of villages to benefit entire sub-districts and even further. However there is at present no evidence for any meaningful incorporation of customary EWS into government planning and implementation.

d. Assessment

Do your laws establish clear procedures and responsibilities for early warning?

To some extent, though further improvements are needed

- The legal framework for EWS is limited and only basic, high-level responsibilities are assigned under national law. However this has not prevented the development of a robust and sophisticated EWS for major hydro-meteorological hazards.
- Importantly, the role of various important actors, including technical ministries, communities, local authorities, scientific institutions, private media companies and civil society organizations could be strengthened both in law and practice.
- The development of a national EWS for major hydro-meteorological hazards has been prioritised over EWS for other important risks such as flooding, drought and landslides, although regional initiatives and variations do exist.
- Customary or 'traditional' EWS are relatively commonplace and demonstrate a high potential for useful integration into the 'formal' EWS. The legal framework would therefore benefit from provisions that seek to integrate customary EWS into government planning and implementation.

7

Do your laws require education, training and awareness-raising to promote a whole-of-society approach to DRR?

a. Key laws and regulations:

- Law Number 12 of 2002 on Higher Education
- Law Number 20 of 2003 on the National Education System
- Law Number 32 of 2004 on Regional Government / Decentralisation
- Law Number 24 of 2007 concerning Disaster Management
- Law Number 23 of 2014 on Local Government

b. Guiding questions:

- Do your laws or codes mandate training on disaster risk reduction in the school curricula?

- Do your laws establish or promote training for public officials and relevant professionals on DRR?
- Do your laws include provisions on promoting public awareness and understanding of DRR with specific guidance for implementation?

The integration of education and training into Indonesia's national disaster management system is dealt with specifically under the DM Law. Education and training are key components of disaster management in a situation without disaster²⁰¹ (i.e. the pre-disaster stage). The government is required to “carry out and stipulate education, training and technical standard requirements for disaster management” in line with this. Education is also considered in disaster management in situations with potential disasters, where the mitigation component should include “conventional and modern education, counseling and training.”²⁰²

One of the basic rights of the community under the DM Law is to “have education, training and skill in disaster management.”²⁰³ Regulation 21/2008 expands on this by specifying that education and training shall enhance the community's awareness, concern, capability and alertness in facing disaster. Ultimate responsibility for all these measures falls to the national and regional governments, who are required to organize formal, non-formal and informal education in the forms of basic, secondary, technical, simulation and rehearsal training programs.²⁰⁴ However, other agencies, institutions and organisations that are “related to disaster management” can organise training and education in accordance with their respective mandate and authority, based on guidelines set by the Head of BNPB.²⁰⁵

Although integration of DRR into the education sector is in fact extremely strong in Indonesia, the framework law on education (Number 20 of 2003 on Education) does not mention it and the only reference to disasters is in the context of ensuring special education services for learners who are victims of natural disasters.²⁰⁶ Interviewees confirmed that DRR and environmental themes are nonetheless included in the government regulations that determine the national curriculum as per Law 20/2003.²⁰⁷

Furthermore, the issue of mainstreaming DRR into educational policy and curriculums has been addressed in some detail in a ‘Strategy for Mainstreaming DRR in Schools’ issued by the Minister of National Education.²⁰⁸ This was produced in response to a Presidential Instruction directly requiring the Ministry of National Education and the Ministry of Home Affairs to mainstream DRR into school intra- and extra-curricular activities.²⁰⁹ This is designed to serve as a national reference document and includes information on policy, strategic framework, planning, institutional structure, facilities and infrastructures, implementation of learning on participants. It sets out three key objectives for mainstreaming DRR at primary and secondary level: 1) empowering institutional roles and the capacity of the school community; 2) DRR integration into school curricula; and 3) establishing partnerships with various stakeholders to support the implementation of both structural and non-structural DRR in schools.

201 Article 35(g), DM Law

202 Article 47(2)(c), *Ibid*

203 Article 26(1)(b), *Ibid*

204 Article 14, Regulation 21 of 2008 concerning Disaster Management

205 Article 14(3), *Ibid*

206 Article 32(2), Law Number 20 of 2003 on Education

207 Chapter X, *Ibid*

208 Ministerial Decree No. 70a/MPN/SE/2010

209 Fumiyo Kagawa and David Selby, *Disaster Risk Reduction In The School Curriculum, The Present And Potential Role Of Development Agencies And The Implications For The Hyogo Framework For Action 2005-2015 Successor*, 19 February 2014, p. 24

The Strategy emphasises the autonomy of schools, in line with the decentralisation of powers to local educational authorities, to “choose their own school subjects, learning activities and extra-curricular activities as a basis for integrating the DRR according to the local disaster characteristics.” As such, in theory each school is able to develop their own DRR curriculum by taking locally specific natural disaster challenges into consideration. Although a copy of the Strategy was not available in English to review, other researchers have noted that whilst establishing this useful ‘grand design’ for DRR in education, it lacks details on implementation or means to accomplish its objectives.²¹⁰

Provisions regarding education have also been included in some sectoral laws. For example, Law Number 32 of 2009 on Environmental Protection and Management states that everybody shall be entitled to “environmental education, information access, participation access and justice access in fulfilling the right to proper and healthy environment.”²¹¹ No details are provided as to how this will be implemented and enforced, or who is ultimately responsible, but the basic framework right is at least in place.

c. Implementation

- How effectively implemented are the provisions related to education and awareness-raising?
- What are the major challenges to implementation?

From interviews conducted for this report as well as secondary literature, a picture emerges of an educational system where the awareness of natural hazards and topics of high relevance to DRR is facilitated from an early age. Under the basic requirements established under the legal framework, there have been numerous DRR education programs (at national, regional and district levels, as well as individual programs or initiatives at village level) for schools including learning materials development, teacher training, advocacy and campaigning, as well as simulation drill activities. Actors from international organisations such as the UN and from NGOs often work closely with the government and Ministry of Education as well as local educational institutions on these programs. A Consortium for Disaster Education is also active.²¹² This was created following the 2004 tsunami and brings together 60 member organisations including UN agencies, governmental agencies, NGOs, civil society organisations and universities, all of whom are engaged in school-based DRR in Indonesia. It has developed two useful documents: a Framework of School-Based DRR in 2006 and a Framework of School-Based Disaster Preparedness in 2012. The Consortium and these publications significantly contributed to the development of DRR in the education sector in Indonesia and provide a good example and model of collaboration and coordination.

A process of DRR education strategy development was also supported through the Safer Communities through DRR in Development Project (SC-DRR), a government initiative led by BAPPENAS and supported by BNPB and UNDP. This support led to the development of the Strategy for Mainstreaming DRR in Schools. Also as part of the SC-DRR project the Ministry of National Education led the development of a series of DRR teaching modules on five hazards (tsunami, floods, earthquakes, landslides and fires). In total, 15 modules were developed, with separate volumes tailored for students in primary, junior and senior high school levels.²¹³ Teacher guide modules were also developed, in order to train teachers

210 See, for example, Emma Willmott, *DRR Education in Indonesia*, pp. 70-72

211 Article 65(1), Law Number 32 of 2009 on Environmental Protection and Management

212 Fumiyo Kagawa and David Selby, *Disaster Risk Reduction In The School Curriculum, The Present And Potential Role Of Development Agencies And The Implications For The Hyogo Framework For Action 2005-2015 Successor*, 19 February 2014, p. 24

213 Government of Indonesia and UNDP, *Safer Communities through Disaster Risk Reduction in Development: Evaluation Report*, 2011, p. 14

on integration of DRR into main school subjects and local content curriculums. The Ministry of National Education has also collaborated with Save the Children in the development of sample lesson plans for integrating DRR into elementary school subjects, addressing matters such as flood and earthquake hazards, clean and healthy environments, forest fires, landslides and human-induced hazards and their integration into existing school subjects.

Although the semi-decentralised education system allows schools to develop their own DRR curriculums based on local conditions and disaster risk profiles, in reality many schools lack the human, financial and technical capacities to take advantage of this opportunity.²¹⁴ Interviews with Ministry of National Education officials pointed out that one of the most pressing issues preventing more effective integration of DRR into education (as well as affecting other education activities) is the lack of coordination between the different levels of government. This corresponds to BNPB's own assessment of the sector, which noted that coordination among relevant agencies from national down to local level needs to be enhanced and that "the government needs to advocate further the integration of DRR and recovery concepts into school education and DM training and exercises, particularly at the district/city governments as the actual service providers."²¹⁵

d. Assessment

Do your laws require education, training and awareness-raising to promote a whole-of-society approach to DRR?

Yes, but some aspects could be strengthened

- In practice, the integration of DRR into the education sector is very strong in Indonesia. However, it is not provided for under the framework law on education
- Under the DM Law education and training are key components of the 'pre-disaster' stage and the government is required to carry out and stipulate education, training and technical standard requirements for disaster management.
- Interviewees confirmed that DRR and environmental themes are included in the government regulations that determine the national curriculum as per Law 20/2003.
- The issue of mainstreaming DRR into educational policy and curriculums has been provided for in some detail in a 'Strategy for Mainstreaming DRR in Schools' issued by the Minister of National Education.
- Overall the legal framework could benefit from stronger assignment of responsibilities related to DRR education and awareness-raising, with more detailed measures on implementation.

214 Fumiyo Kagawa and David Selby, *Disaster Risk Reduction In The School Curriculum, The Present And Potential Role Of Development Agencies And The Implications For The Hyogo Framework For Action 2005-2015 Successor*, 19 February 2014, p. 27

215 BNPB, *National Progress Report on the implementation of the Hyogo Framework for Action (2013-2015)*, HFA Monitor update, Preventionweb, 23 April 2015, pp. 17-18

8

Do your laws ensure the engagement of all relevant stakeholders, including civil society, the private sector, scientific institutions and communities in risk reduction decisions and activities?

a. Key laws and regulations:

- Law Number 41 of 1999 regarding Forestry
- Law Number 24 of 2007 concerning Disaster Management
- Regulation Number 22 of 2008 concerning Participation of International Institutions and Foreign NGOs in Disaster Management
- Law Number 32 of 2009 on Environmental Protection and Management
- Guideline Number 22 of 2010 on the Role of International Organizations and Foreign Non-Governmental Organizations during Emergency Response
- Law Number 6 of 2014 on Villages
- Head of BNPB Regulation Number 11 of 2014 on community participation in disaster management
- Head of BNPB Regulation Number 12 of 2014 on participation of the private sector in disaster management

b. Guiding questions:

- Do your laws require community representation in DRR decision-making bodies and processes?
- Do your laws require representation of civil society organisations and your National Red Cross/Red Crescent Society in decision-making institutions and processes?
- Are civil society organisations and National Red Cross/Red Crescent Societies given specific roles or duties within your DRR laws?
- Are there legal provisions that ensure meaningful engagement and representation of women, minorities, people with disabilities and older persons?
- Do your laws address the participation of private sector actors in both decision-making bodies as well as DRR activities?
- Do your laws ensure that the best available scientific resources and analysis inform development and DRR decisions?

The DM Law aims to ensure community participation in decision-making on disaster management activities, as it gives “anybody” the right to be involved, as well as to “exercise supervision in accordance with regulated mechanism for disaster management.”²¹⁶ Communities are also encouraged to participate (together with social institutions and organisations and the private sector) in reconstruction activities.²¹⁷ This provision is repeated in Regulation 21/2008, together with the requirement for greater participation of communities in DRR activity as part of the (reconstruction phase) “revival of community sociocultural life.”²¹⁸ The same regulation, in reference to the reconstruction phase, has the aim of encouraging their greater participation “to help reorganizing disaster-prone areas in a better direction and raise concern in disaster-prone areas.”²¹⁹ Their participation is to be undertaken by related agencies and institutions in coordination with BNPB,²²⁰ which would benefit from clarification and seems to place

216 Article 26(1)(e) and (f), DM Law

217 Article 59(e), *Ibid*

218 Article 85, Regulation 21 of 2008 concerning Disaster Management

219 Article 87(1), *Ibid*

220 Article 87(3), *Ibid*

the burden of ensuring participation on undefined entities. The DM Law also states that communities should participate on an equal footing with government, non-government and business entities in the development of both the national action plan for DRR as well as the regional plans.²²¹

The Indonesian government has also issued a regulation that deals specifically with the participation of international institutions and foreign NGOs in disaster management.²²² “International institutions” essentially refers to any United Nations entity and “foreign NGO” covers all other international actors (and this definition would technically include the IFRC). The overall aim of this legislation is for these entities to support disaster management and to contribute to reduce the risk from disaster threats, as well as to reduce suffering of victims and to accelerate community recovery.²²³ In order to do this their participation is encouraged at all stages of the disaster management life cycle (pre-disaster, emergency response and post-disaster).²²⁴ This is positive language that provides a basis for the inclusion of the UN and foreign NGOs in the disaster management system. However the majority of this regulation is actually concerned with regulating their assistance at the emergency response stage. There are no provisions that set out how, for example, these entities may be involved in the decision-making institutions and processes.

BNPB has issued its own regulations regarding the participation of communities and the private sector in the disaster management framework, that helpfully expand on the very general obligations and rights laid out in the DM Law and its ancillary regulations. Although it was not possible to review copies of these laws in English in time for this study, the fact that these regulations have been issued is an important step towards ensuring the voices of these groups are heard in the disaster management system.

The nature of decentralisation in Indonesia and in particular the recent Village law 6/2014, means that local administrations and communities have a potential avenue into DRR decision-making. Under law 6/2014 a number of mechanisms exist for community representatives to take decisions that are relevant to the village’s exposure to risks. This includes the Musyawarah Desa consultative forums and the Village Consultative Bodies.²²⁵ The members of the latter in particular should be “representative of the population of the village.”²²⁶ Community participation is also emphasised under the Law on Local Government (13/2014), for example via the village development forum that determines infrastructure development activities.²²⁷ According to officials at BNPB and BPBD, local BPBDs are now starting to work with village governments and community groups to leverage the funding available to villages under law and to plan DRR-related activities collaboratively.

Laws developed for the environment and forest sectors also contain important provisions regarding community participation. Although they do not specifically mandate community representation in DRR decision-making bodies and processes, they are relevant for DRR purposes. In the environment sector, Law 32/2009 on Environmental Protection and Management contains a general requirement for public participation, namely that communities are to have the equal and broad right and opportunity to participate actively in environmental protection and management.²²⁸ The overall framework for public participation developed in Law 32/2009 has also been backed with secondary regulations.

221 Article 8(3) and (4), *Ibid*

222 Regulation Number 23 of 2010 concerning the Participation of International Institutions and Foreign Non-Governmental Organisations in Disaster Management

223 Article 2, *Ibid*

224 Article 3, *Ibid*

225 Part Six, Law Number 6 of 2014 on Villages

226 Article 56, *Ibid*

227 Article 230, Law Number 13 of 2014 on Local Government

228 Article 70, Law 32 of 2009 on Environmental Protection and Management

Government Regulation Number 16 of 2012 concerning Guidelines for Compiling Environmental Document and Government Regulation Number 27 of 2012 concerning Environmental Permits both re-emphasise and strengthen the role of communities in the EIA process. Overall, the legislation that regulates public participation in the environment sector is clear and relatively comprehensive and provides an extremely valuable framework within which communities should be able to participate in decisions that can reduce their exposure to risks, albeit with some gaps in implementation (that are also explored in the response to question 5 above).

In the forest sector, Law 41/1999 regarding forestry requires that any state enterprise or private corporation engaged in exploitation of forest resources must cooperate with local cooperatives.²²⁹ The term ‘cooperative’ is not defined but it is generally taken to mean an organised local community group (whether registered as a business entity or not). The government is also able to determine ‘specially designated forest areas’ in the public interest, notably for indigenous law communities as well as social and religious institutions. Communities and/or individuals are also expected to play a role in forest supervision along with the government and local administrations.²³⁰ Of especial interest under the same law is Chapter X on community participation. This provides that the community may:

- “utilize forest and forest produce according to the prevailing legislation;
- know the forest designation plan, forest produce utilization and information on forestry;
- provide information, suggestion, as well as consideration in forestry development;
- supervise implementation of forestry development, both directly and indirectly.”²³¹

Law 41/1999 also provides a framework for community-based forest management (CBFM), in particular by recognising the rights of indigenous communities (Hutan Adat) to benefit from and manage forests in accordance with prevailing indigenous law, provided that this is not in contravention of government-issued legislation.²³²

c. Implementation

- How effectively implemented are provisions ensuring the engagement of different stakeholders?
- What are the major challenges to implementation?

From the analysis above, relatively few legal provisions that ensure stakeholder engagement in risk reduction decision-making and activities are in place. The current legal framework encourages stakeholder participation, but would benefit from clearer and more robust mechanisms to ensure that this participation actually takes place. Interviews with stakeholders did not reveal any practical structures that have been put in place to bridge the gap between the encouraging elements of the law and practical implementation. Interactions with local communities on the part of government actors and in some cases NGO actors were criticised for being ‘top-down’ and patriarchal in nature. Stakeholders were criticised for presenting communities with pre-determined DRR programs and not properly engaging the community in the development and design of activities.

Interviews with the community representatives met in Solo for this study revealed that, although community interaction with local BPBD agencies was limited and they were not aware of any ‘formal’

229 Article 30, Law 41 of 1999 regarding Forestry

230 Article 60, *Ibid*

231 Article 68(2), *Ibid*

232 Article 67, *Ibid*

means for them to be involved in DRR decision-making, they nonetheless had structures and systems in place to facilitate decision-making, including on matters relevant to DRR. Part of this is due to the largely PMI-backed 'Sibat' network (Society-based disaster preparedness team) and the other part due to both formal village government and customary community structures that are used as decision-making bodies. For example, local Sibat volunteers in and around Surakarta in Central Java received training on local risk mapping. They then worked together with local committees to undertake the necessary baseline survey and mapping for the villages to develop their own risk maps, which could then feed into their own development-planning (and budgeting) processes. Similar methodologies were used to develop community Action Plans.

Village representatives from a number of villages in Sika also explained how they have 'Team Elevens' that prepare the village's development plan and through this mechanism incorporate certain risk reduction activities, or at least are able to request funding for these activities. Each Team Eleven consists of a varying number of community leaders, village government representatives, religious leaders, youth leaders and local officials from the health and education sectors. Interviewees were not aware of any mandated quotas for women, the disabled or other disadvantaged groups.

Local stakeholders are therefore able to exert some degree of control over DRR decision-making and activities via legal mechanisms (in terms of the rights provided under village and local government law) and via community-driven committees and forums. A more detailed mechanism to ensure this could be included in the disaster management legal framework - but it may not be essential given the level of activity and initiative shown by communities and civil society in Indonesia. If framed incorrectly, it could just contribute to the ever-expanding number of local committees, organisations and forums. As BNPB has stated in its latest Hyogo Framework progress report, "the key challenge to decentralized disaster risk governance includes lack of resources to be given to the local level and limited human resources in the regions."²³³ A much greater focus needs to be placed on providing technical and financial capacity-building to local communities and this can only come about through concerted government action with the support of numerous partners. There are a number of schemes in place that seek to address this but given the size and complexity of Indonesia this is a difficult task. One such scheme, headed by BNPB, is the 'Disaster Resilient Village' program, which specifically seeks to promote the community's participation in DRR at the village level.

As for civil society organisations and the private sector, their involvement depends less on the legal framework than it does on practicalities. The Indonesian Red Cross society (PMI) has a particular status under law that means it is involved in some government forums as well as in multiple coordination forums within BNPB (a similar legal arrangement applies for UN agencies). PMI's wide network of local offices and volunteers means that it also works closely with BPBD in many areas and is actively involved in community-based DRR initiatives. In Surakarta, for example, PMI, together with IFRC and supported by the Zurich Insurance Group, is implementing a community flood resilience programme in the areas surrounding the rivers of Ciliwung, Citarum and Bengawan Solo.²³⁴ The programme aims to develop more effective solutions for reducing disaster risks and building community resilience. One of these solutions is the formation of Community Based Action Team members within each of the disaster-prone areas. The communities are also encouraged to plant palm and mangrove trees to strengthen the river-banks and prevent soil erosion.

233 BNPB, *National Progress Report on the implementation of the Hyogo Framework for Action (2013-2015)*, HFA Monitor update, Preventionweb, 23 April 2015, p. 7

234 IFRC, *Red Cross helps flood-prone communities through traditional and modern approaches*, 29 April 2016, available at <http://www.ifrc.org/en/news-and-media/news-stories/asia-pacific/indonesia/red-cross-helps-flood-prone-communities-through-traditional-and-modern-approaches--72184/>

Feedback from the consultation workshop pointed out that the role of the private sector in DRR needs to be further considered and improved and reflected appropriately under law. In the above example from PMI's programme in Surakarta, funding and experience from the private sector has been leveraged for the benefit of communities. Overall, especially in terms of disaster management and DRR, many initiatives are partly or wholly funded by international organisations, NGOs and/or civil society. Many of these organisations also provide technical assistance to a wide array of government Ministries. As such in practice it is rare for major policy or operational decisions not to include at least some element of input from this group, although their participation would certainly benefit from a mandated position that could clarify the timing and nature of any input.

In terms of the positive examples from environmental sector legislation mentioned above, evidence from interviewees suggests that implementation of the public participation aspects of the EIA process is mixed. It depends heavily on the size and profile of the applicant and the attitude of the local government. As most EIA decisions are delegated to regional or district administrations there is a risk that community involvement is limited or in some cases overridden in a desire to fast-track projects that provide much-needed income for the local budget. In doing this, not only the community is overruled, but potential risks to the environment that can increase exposure to natural hazards can also be ignored.

There is also evidence to suggest that public participation depends heavily on the level of economic development of a district or city. For example Jakarta is widely acknowledged to have a better formal mechanism than outlying provinces with less financial and capacity resources.²³⁵ Even in the event that local communities are involved, studies have also found that in practice, local people are frequently represented at the provincial and district commissions by the head of the village or district head. At central level, 'local interests' are generally represented by the head of the Environment Division or the Local Government Development Planning Board.²³⁶ This raises the question as to how representative these processes truly are. In summary, public participation is a firmly entrenched aspect of the EIA process under law but its implementation of the law needs to be reviewed in more detail.

d. Assessment

Do your laws ensure the engagement of all relevant stakeholders, including civil society, the private sector, scientific institutions and communities in risk reduction decisions and activities?

Yes, but some aspects could be strengthened

- Legal provisions that explicitly ensure stakeholder engagement in risk reduction decision-making and activities are limited. The current legal framework encourages stakeholder participation although it could benefit from clearer mechanisms to ensure that this participation occurs.
- The DM Law and regulations as well as several other sectoral laws emphasises the importance of community participation and in some cases provide general frameworks to try to achieve this. Under the 'village law' of 2014 a number of mechanisms exist for community representatives to take decisions that are relevant to the village's exposure to risks, based on the principle that such matters are assigned to village authorities under law.

235 Jin Chen, Utrecht University and Netherlands Commission for Environmental Assessment, *Public Participation provisions in Environmental Impact Assessment legal system: case studies in China, India and Indonesia*, November 2013, p. 105

236 United Nations Environment Programme, *EIA Training Resource Manual, Public Participation in Indonesian EIA*, undated, p. 78

- The government regulation that deals specifically with the participation of international institutions and foreign NGOs in disaster management is a positive development that provides a basis for the inclusion of the UN and foreign NGOs in the disaster management system. However it would benefit from expanding the focus of their assistance beyond emergency response, to incorporate planning for and implement DRR activities.
- Overall the legal framework would also benefit from provisions that mandate the representation of civil society organisations and PMI as well as private sector actors in decision-making bodies and DRR activities.
- There are no provisions under law that seek to ensure that the best available scientific resources and analysis inform development and DRR decisions.



Do your laws adequately address gender considerations and the special needs of particularly vulnerable categories of persons?

a. Key laws and regulations:

- Constitution of the Republic of Indonesia, 1945 (as amended)
- Law Number 4 of 1997 on Persons with Disabilities
- Law Number 39 of 1999 on Human Rights
- Law Number 40 of 2004 on the National Social Security System
- Law Number 24 of 2007 concerning Disaster Management
- Government Regulation Number 21 of 2008 concerning Disaster Management
- Law Number 11 of 2009 on Social Welfare
- Government Regulation Number 39 of 2012 on the Implementation of Social Welfare
- Head of BNPB Regulation Number 13 of 2014 on gender mainstreaming in disaster management
- Head of BNPB Regulation Number 14 of 2014 on handling, protection and participation of the disabled in disaster management

b. Guiding questions:

- Do your laws ensure a proper analysis as to which categories of persons may be most vulnerable or exposed to disaster risks (taking into account the global experience showing that groups such as women, older people, persons with disability and the very poor are especially likely candidates)?
- Are specific responsibilities assigned to institutions to take the needs of these groups into account?
- Do your laws ensure that gender specific needs or considerations are taken into account?
- Do your laws ensure that the specific needs of other groups with particular vulnerabilities are taken into account?

Under current Indonesian national law, there are no provisions that provide for analysis of which categories of persons may be most vulnerable or exposed to disaster risks. – This does not mean, however, that this matter is not considered in practice. Indonesia in fact possesses a relatively well-developed legislative framework that enshrines and respects the rights of women, the disabled and other vulnerable groups. The law on Human Rights (Number 39 of 1999), for example, expands on the

fundamental principles of the Constitution to provide further support for basic human rights. This also establishes the principle that the disabled, elderly and pregnant women have a right to “special facilities and treatment.”²³⁷ The law also has a full section on women’s rights, requiring among other things that they are “adequately represented” in the political system and civil service and asserting their equal rights to education.²³⁸ A section dedicated to children’s rights contains a long list of worthy provisions, including the right to education and protection from all forms of violence.²³⁹ Two key administrative laws contain brief provisions. Firstly, the Village Law 6/2014 requires the Village Consultative Body’s composition to pay “attention to the region, women, population and financial capacity of the village.”²⁴⁰ Secondly, the law on Local Government 13/2014 lists the “empowerment of women and protection of children” as mandatory government affairs (i.e. matters that the local government has authority over).²⁴¹

The rights of persons with disabilities have been established in the relatively brief Law Number 4 of 1997,²⁴² which seeks to ensure equal treatment of the disabled and to prevent discrimination. The law also places general obligations on “society” as a whole to improve the social welfare of the disabled.

Technically, gender mainstreaming has been a part of Indonesia’s policy and legal framework since 1984. Presidential Instruction Number 9 of 2000 and Law Number 25 of 2000 placed obligations on all government departments and agencies at national, regional and district level to adopt the principles of gender mainstreaming in planning, implementation and monitoring and evaluation of development policies and programs. A Ministry for Women’s Empowerment exists that is responsible for the roll-out of gender mainstreaming at the national level. This policy has also met with some success at regional levels: in South Sulawesi for example, a Bureau for the Empowerment of Women and Family Planning has been established in Makasar and was largely responsible for the development of the Governor’s Regulation Number 62 of 2011 on Integrating Gender Mainstreaming in Development Policies and Programs. This established gender mainstreaming working groups at regional and district levels.

The DM Law also recognises the need to protect “vulnerable groups” in emergency response.²⁴³ These groups are defined as infants, preschoolers and children, pregnant women or nursing mothers, the disabled and the elderly.²⁴⁴ This is repeated under Regulation Number 21 of 2008 concerning Disaster Management: this requires BNPB to coordinate related agencies and institutions towards “efforts of protection” for vulnerable groups. Part of this requirement appears to have been achieved via the issuing of a Head of BNPB regulation on the handling, protection and participation of the disabled in disaster management. BNPB has also issued a regulation on gender mainstreaming in disaster management. However it was not possible to review copies of these laws in English for this study.

c. Implementation

- How effectively implemented are the provisions related to gender and particularly vulnerable categories of persons?
- What are the major challenges to implementation?

237 Article 41(1), Law Number 39 of 1999 on Human Rights

238 Section 9, *Ibid*

239 Section 10, *Ibid*

240 Article 58, Law Number 6 of 2014 on Villages

241 Article 12(2)(b), Law Number 13 of 2014 on Local Government

242 Law Number 4 of 1997 concerning Disabled People

243 Article 48(e), *Ibid*

244 Article 55, DM Law

The rights of women and vulnerable groups are at least established at a high-level under law and a very general framework for their participation on an equal basis is provided. 'Mainstreaming' policies in particular present an avenue for better inclusion in decision-making, provided that such policies are followed with effective implementation, sensitisation and capacity-building. However in terms of relevant laws' specific applicability to DRR, the content and impact has so far been limited. The fact that BNPB has developed and issued its own regulations on gender and the disabled in disaster management is to be commended. However their status as 'Head of BNPB' Regulations means they have little practical applicability outside of BNPB. Also, as they were only approved very recently they have not yet been widely distributed or implemented.

As the scope of this study did not include community consultations (which would include women's groups and vulnerable groups) the analysis of implementation and challenges is limited. However a number of observations, based on stakeholder feedback and secondary research, can be made. Ultimately, gender concerns have only really just started to inform development policies and programs,²⁴⁵ and the contingency plans that have been developed so far have been criticised for not sufficiently addressing gender sensitivities.²⁴⁶ According to the World Economic Forum's gender gap index, Indonesia placed 97th out of 142 countries for gender equality,²⁴⁷ which indicates that much remains to be done to ensure women have an equal place in decision-making with men. A report from BAPPENAS highlighted some of the major challenges, including the disproportionate impact of poverty on women, unequal land tenure rights between men and women which are linked to access to water, irrigation and forest products, access to education for girls in remote areas and areas affected by natural disasters and gender-based violence.²⁴⁸

The limited number of community representatives interviewed for this project spoke of similar issues especially in their more rural and remote areas. However, community interviewees also noted that opportunities for the participation of women exist, with the caveat that prevailing social conditions can make these opportunities difficult to take. They were not aware of formal mechanisms or quotas that ensured women's participation or indeed that of any vulnerable groups. Examples of female mayors in Sika were pointed out, as well as leading roles that local women have taken on village councils and development planning bodies. Local-level regulations present one effective way that could ensure the participation of women and vulnerable groups in local decision-making. In the village of Noebesa (Timor Engah Selatan district) for example, the institutionalization of disability inclusion into disaster management took place through drafting an inclusive regulation at the village level, coordinated between the village DRM Forum, the village administrator and the Indonesian NGO Organization for Industrial Spiritual and Culture Advancement. This regulation now serves as the basis for the DRM structure and activities within the village, as well as for budget allocation and supports the empowerment of persons with disabilities.²⁴⁹

d. Assessment

Do your laws adequately address gender considerations and the special needs of particularly vulnerable categories of persons?

245 BNPB, National Progress Report on the implementation of the Hyogo Framework for Action (2013-2015), HFA Monitor update, Preventionweb, 23 April 2015, p. 36

246 Center for Excellence in Disaster Management & Humanitarian Assistance (CEDMHA), Indonesia: Disaster Management Reference Handbook, 2015, p. 53

247 World Economic Forum, Gender Gap Index 2014, 2014, <http://reports.weforum.org/global-gender-gap-report-2014/rankings/> (accessed 11 November 2015)

248 BAPPENAS, *Policy paper on Gender Mainstreaming in Climate Change Adaptation*, 2012, pp. 13-15

249 Handicap International, *Lessons Learned from the project Mainstreaming Disability into Disaster Risk Management Initiatives in Indonesia and Philippines*, 2011, p. 25

Yes, but some aspects could be strengthened

- Indonesia has a well-developed legislative framework that enshrines and respects the rights of women, the disabled and other vulnerable groups. A Ministry for Women's Empowerment exists that is responsible for gender mainstreaming at the national level.
- The DM Law also recognises the need to protect "vulnerable groups" in emergency response. These groups are defined as infants, preschoolers and children, pregnant women or nursing mothers, the disabled and the elderly. BNPB have also issued regulations on the handling, protection and participation of the disabled in disaster management and on gender mainstreaming in disaster management.
- A number of positive practices exist: for example, villages that have developed their own local-level regulations on the participation of women and vulnerable groups in local disaster management. The challenge is to replicate these successes in other areas where local conditions, capacities and concerns may differ.
- The integration of gender considerations and the special needs of particularly vulnerable categories of persons could be strengthened under the current legal framework. Laws do not currently provide for analysis as to which categories of persons may be most vulnerable or exposed to disaster risks and specific responsibilities for integration into DRR decision-making are unclear.

10

Do you have adequate mechanisms to ensure that responsibilities are fulfilled and rights are protected?

a. Check laws and regulations on:

- Constitution of the Republic of Indonesia, 1945 (as amended)
- Law Number 24 of 2007 concerning Disaster Management
- Regulation Number 21 of 2008 concerning Disaster Management
- Presidential Regulation Number 8 of 2008 concerning National Agency Disaster Management
- Law Number 32 of 2009 on Environmental Protection and Management

b. Guiding questions:

- Do your laws establish public reporting or parliamentary oversight mechanisms for government agencies tasked with DRR responsibilities? Is this information required to be publicly available in an accessible format, such as through open websites?
- Is there a mandated role of the judiciary in enhancing accountability for DRR?
- Do your laws include incentives for compliance with laws and regulations for DRR?
- Do your laws establish rights relevant to DRR, including the right to disaster information and include detail on how they will be enforced?
- Do your laws establish legal and/or administrative sanctions (as appropriate) for public officials, individuals and businesses for a gross failure to fulfill their duties?

BNPB reports to the President once a month under normal conditions and at any time during emergency conditions.²⁵⁰ BPBD agencies are required to report on disaster management to the head of their local government at the same frequency.²⁵¹ Any business institutions that are involved in disaster management must also submit a report to the relevant local government or BPBD, as well as “transparently inform the public thereof.”²⁵² The DM Law also establishes a high-level right for “anybody” to “obtain written and/or oral information on disaster management policy.”²⁵³ There appears to be no mandated role for the judiciary in enhancing accountability for DRR under Indonesian law.

Regulation 21/2008 devotes a chapter to monitoring and evaluation, which is acknowledged as “essential to continually monitor the implementation of disaster management.”²⁵⁴ BNPB (both the steering and executive committees are responsible for this and they may also involve national and regional development planning agencies (i.e. BAPPENAS and BAPPEDA).²⁵⁵ Specific reporting requirements are established under the same chapter, although the provisions are limited. Both the steering and executive committees of BNPB and/or BPBD must prepare reports on disaster management, which are to serve for “verification of BNPB and/or BPBD program planning.”²⁵⁶ Evaluation of activities is simply aimed at achieving minimum standards and contributing to improved performance and falls to the steering committees in both BNPB as well as BPBD agencies.²⁵⁷ Some more specific reporting obligations contained in the same Regulation. These provide that, in the context of the use of a ready fund for emergencies, BPBD must submit an accountability report to BNPB no later than three months after receipt.²⁵⁸ Under Regulation 22/2008 concerning disaster aid financing and management “accountability reports” must be produced for pre- and post-disaster stages in accordance with the provisions of legislation.

A framework for monitoring and reporting on the performance of BNPB is set out in Presidential Regulation Number 8 of 2008 concerning National Agency Disaster Management. Each Deputy²⁵⁹ (is required to monitor, evaluate and analyze “the reporting on the implementation of general policy on disaster management” relevant to their scope of work.²⁶⁰ The Chief Inspectorate of BNPB is heavily involved in supervision of these activities and ultimately prepares reports on the results of its supervision.²⁶¹

The DM Law also focuses on penal provisions, outlining that anyone (through negligence) undertaking “high-risk development without disaster analysis” that causes a disaster may be punished by a minimum term of imprisonment of three years or a maximum of six years and a fine of minimum INR 300 million or maximum INR 2 billion.²⁶² In the event this crime leads to loss of material possessions or goods, then the prison terms increase to six years minimum to eight years maximum and the fines from INR 600 million minimum to INR 3 billion maximum.²⁶³ In the event that fatalities are caused,

250 Article 12(d), DM Law

251 Article 21(f), *Ibid*

252 Article 29(3), *Ibid*

253 Article 26(1)(c), *Ibid*

254 Article 91, Regulation Number 21 of 2008 concerning Disaster Management

255 Article 92, *Ibid*

256 Article 93, *Ibid*

257 Article 94, *Ibid*

258 Article 44(2), *Ibid*

259 These are: Prevention and Alertness, Emergency Management, Rehabilitation and Reconstruction, Logistics and Equipment

260 Articles 21(d), 24(e), 27(d) and 30(c), Presidential Regulation Number 8 of 2008 concerning National Agency Disaster Management

261 Article 33, *Ibid*

262 Article 75, DM Law

263 Article 76, *Ibid*

the prison terms increase to eight years to ten years and the fines to INR 3 billion to INR 6 billion.²⁶⁴ The prison terms and fines increase further in the event that it is proven that the accused acted deliberately.²⁶⁵ If these crimes are committed by a corporation, it can be punished with an aggravated fine of up to three times the relevant amount set out in Articles 75 to 78 and/or revocation of business licence or legal entity status.²⁶⁶ It was not possible to establish whether these provisions had been used in practice.

The only other penal provisions contained in the DM Law relate to emergency response and disaster aid management. Specifically, deliberately hindering easy access to, for example, equipment, logistics, goods and services,²⁶⁷ or the deliberate misuse of disaster aid management²⁶⁸ can also result in prison terms as well as large fines. However no provisions have been included, for example, for the failure of officials to fulfill duties related to disaster management, whether caused by negligence or not.

Some interesting provisions exist in environmental legislation that could arguably give communities the right to hold officials to account if their actions caused losses attributable to environmental damage. For example, communities have a right to file class action lawsuits for either their own interest and/or public interest in the event that they suffer from losses attributable to environmental pollution and/or damage.²⁶⁹ This is only arguable as it would also depend on more general principles of Indonesian law relating to the performance of duties of officials, for example and duties of care.

In terms of other rights relevant to DRR, fundamental rights to life and environment are enshrined in the Indonesian constitution.²⁷⁰ Regarding the right to disaster information, Indonesian citizens possess rights to access information under a 2008 Freedom of Information act.²⁷¹ This obliges all public bodies and government institutions to provide citizens with information about almost every aspect of their operations. In the context of DRR, however, although this could provide the public with information on planning and spending it may not be helpful for access to timely disaster information. It could nonetheless be a useful tool to hold decision-makers to account for past decisions. While it cannot be ruled out that other rights relevant to DRR may be included under, for example, more general administrative law, research undertaken for this study of laws available in English has not revealed any specific links to disasters or DRR.

c. Implementation

- How effectively implemented are provisions related to accountability and compliance?
- What are the major challenges to implementation?

Although there are some legal provisions under Indonesian law that provides a loose framework for the regulation of responsibilities and rights relative to DRR, it is clear that some significant gaps remain. Feedback from the consultation workshop suggested that the current mechanisms in place are not adequate to ensure the full protection of rights and fulfillment of responsibilities. For example, most audits of government activities are only conducted on financial data, with no performance element. Furthermore although administrative laws may require, for example, regional and district heads to

264 Article 77, *Ibid*

265 Article 76, *Ibid*

266 Article 79, *Ibid*

267 Article 77, *Ibid*

268 Article 78, *Ibid*

269 Article 91, Law Number 32 of 2009 on Environmental Protection and Management

270 See, for example, Article 28A, Indonesian Constitution 1945 (as amended)

271 Act Number 14 of 2008, Public Information Disclosure Act

submit accountability reports to their relevant administrations, there is no indication as to whether this would include information relevant to DRR, nor whether such reports are easily available to the public. BNPB's 'Minimum Service Standard' project aims to develop a series of minimum standards for service provision in a number of areas, including DRR, which can then be used as a basis for transparent reporting. Although a potentially useful tool, it has been under development for several years and it is unclear whether it will be launched in 2016.

It is unclear whether there has been any enforcement action taken under the penal provisions of the DM Law. As the bulk of those provisions relate to crimes involving high-risk development without sufficient risk analysis, this is potentially cuts across the mandate of a number of other institutions such as the Ministry of Public Works and regional spatial planning boards. One government interviewee suggested that a lack of coordination with these institutions may be the reason for a lack of enforcement action. Interviews with BNPB officials demonstrated that internal procedures existed regarding failure to perform duties adequately, but no cases of negligence have ever been brought and in any event it was suggested that sanctions and punishments would only be dealt with internally unless criminal aspects were involved.

The issue of corruption is a strong focus for investigation and punitive actions, although only a relatively small number of cases have been brought to date. It is possible that stronger provisions on reporting and accountability may be proposed in future revisions to the DM Law but this is by no means guaranteed.

As has been noted above, there are provisions of the disaster management legal framework that establish a basic right for Indonesian citizens to information on disaster management policy. While there may be other relevant rights (for DRR) established under the wider Indonesian legal framework, the scale of the research necessary to establish what these are was beyond the scope of this study. In terms of the rights of citizens to request potentially DRR-relevant information under the 2008 Freedom of Information act mentioned above, there is a basic barrier in place. Namely, the local communities that could benefit the most from this type of access are generally those with the least awareness of the law and capacity to navigate the necessary bureaucratic landscape. A recent study in East Java suggests that even though the number of requests for information is relatively small, there is an institutional reluctance to release information in a timely manner, if at all.²⁷² NGOs such as the Asia Foundation are providing technical support to assist local governments to make information on land use and forestry policies available to the public, as well as facilitating its civil society partners to obtain and use information on spatial planning and permitting processes.²⁷³ However more coordinated and widespread efforts are required, especially on the part of government stakeholders, to initiate a culture of transparency.

d. Assessment

Do you have adequate mechanisms to ensure that responsibilities are fulfilled and rights are protected?

272 Widodo Putro and Ward Berenschot, Freedom of information, in Inside Indonesia 116 (April – June 2014), <http://www.insideindonesia.org/freedom-of-information> (accessed 11 November 2015)

273 The Asia Foundation, Environmental Governance in Indonesia, undated, p. 2

To some extent, though further improvements are needed

- Institutional reporting lines and monitoring and evaluation provisions are included in the DM Law as well as Regulation 21/2008 and Presidential Regulation 8/2008, which ensures that BNPB reports to the President at least once a month and should combine forces with BAPPENAS and BAPPEDA to monitor and evaluate the implementation of disaster management activities.
- The steering committees of BNPB and BPBDs must also prepare reports on their activities. Accounting for disaster management funds receives a more detailed treatment under Regulation 22/2008.
- Penal provisions are also included under the DM Law, although they concentrate mainly on sanctions for high-risk development without disaster analysis. The law does not refer to wider issues of accountability and liability for DRR.
- Although administrative laws may require, for example, regional and district heads to submit accountability reports to their relevant administrations, there is no indication as to whether this would include information on DRR, whether they would report on a regular basis, or whether such reports are easily available to the public.
- There are however provisions within the disaster management legal framework that establish a basic right for Indonesian citizens to access information on disaster management policy. Citizens also possess more fundamental rights to access information under a 2008 Freedom of Information act, which obliges all public bodies and government institutions to provide citizens with information about almost every aspect of their operations.
- Overall, the legal framework would benefit from stronger provisions regarding the public availability of information. There are presently no incentives for compliance with laws and regulations for DRR, nor are there any clearly established 'rights' that link specifically to DRR. Legal and administrative sanctions for public officials, individuals and businesses for a gross failure to fulfil their duties could also be further developed.

Identification of priority issues in the legal framework

This section provides an overview of responses to the Checklist questions and a foundation on which to identify and further explore which issues are priorities within the context of DRR in Indonesia. In determining the priority areas to address, this study has considered where improvement of the legal framework and its implementation is likely to make the biggest impact to reducing risks and saving lives.

It is important to note here the significant progress that has been made overall in Indonesia when it comes to developing a comprehensive legal framework on disaster risk management, that includes clear and robust provisions to promote DRR. This applies to the sophisticated legal and institutional framework developed under the DM Law and its ancillary Regulations, as well as a large body of legislation and practice which exists across multiple sectors and institutions. While the overview below focuses on areas that can be further strengthened, this is not done to undermine the progress and positive developments that have taken place. Despite the gaps and varying levels of implementation, this progress still places Indonesia at the forefront of this field.

Overview of priority areas to address:

Question	Assessment	Priority areas to address
1. Do you have a flagship disaster risk management law that prioritizes disaster risk reduction?	Yes, but some aspects could be strengthened.	<ul style="list-style-type: none"> Harmonisation of the various terms that refer to DRR and stronger emphasis on its importance under the DM Law. Links to climate change legislation and institutions could be clarified Links to other relevant sectoral laws could also be included. Consider more detailed mechanisms that provide for the measurement of success and implementation.
2. Do your laws establish effective institutions, from national to local level, with clear responsibilities for disaster risk reduction?	To some extent, though further improvements are needed	<ul style="list-style-type: none"> Consider strengthening of coordination and institutional links between BNPB and BPBD agencies, both under law and in practice. The legal framework could benefit from more clearly assigned responsibilities for DRR at regional, district and local levels. Local government responsibility for DRR could be defined in light of administrative law. Providing a clearer mandate for the coordination of DRR to BNPB's steering committee should be considered. This could then extend to developing clear institutional responsibilities and links for the many sectors involved.
3. Do your key sectoral laws at the national, provincial and local levels increase safety and reduce vulnerability?	Yes, but some aspects could be strengthened.	<ul style="list-style-type: none"> Environment: the incorporation of disaster risks and public participation in the EIA process should be reviewed.
	Yes, but some aspects could be strengthened.	<ul style="list-style-type: none"> Forests: although there is a strong legal framework, stakeholders may benefit from streamlining relevant provisions on the prevention of forest fires and reviewing mechanisms that promote community management in reducing risks.
	To some extent, though further improvements are needed.	<ul style="list-style-type: none"> Water: clarity is needed over what legislation will replace the 2004 Water Act. Any replacement laws should prioritise provisions aiming to reduce the risk of floods and droughts.
	To some extent, though further improvements are needed.	<ul style="list-style-type: none"> Land use planning: the incorporation of risk assessments should be prioritised and consideration should be given to establishing coordination links between planning agencies and BNPB/BOBDs..

Question	Assessment	Priority areas to address
	Yes, but some aspects could be strengthened.	<ul style="list-style-type: none"> • Building and construction: a strong legal framework is in place – therefore an increased focus on implementation is recommended, especially outside of urban centres. Any future review of the framework should take into account amended safety standards and the need to sensitise contractors.
	To some extent, though further improvements are needed.	<ul style="list-style-type: none"> • Climate change: collaboration between the DM/DRR sector (namely BNPB) and the climate change sector needs to be strengthened through practical measures. Clarity should be sought on the status of Indonesia’s national bodies responsible for climate change adaptation.
4. Do your laws ensure that sufficient resources are budgeted for disaster risk reduction?	To some extent, though further improvements are needed.	<ul style="list-style-type: none"> • DRR as a specific budget line could be incorporated into legislation or clarified under policy/guidelines, potentially with an earmarked minimum percentage, in order to create the basis for clear funding flows from central government.
5. Do your laws establish clear procedures and responsibilities for risk assessments and ensure risk information is considered in development processes?	Yes, but some aspects could be strengthened	<ul style="list-style-type: none"> • The exact roles and responsibilities for risk assessments could be clarified, either under amendments to the disaster management legal framework or through secondary guidelines or procedures. • As a general consideration, clarifying the mechanisms for integration of risk information into development processes should be considered. • Stronger links between risk assessments and vulnerability maps and the development planning and construction sectors should also be encouraged.
6. Do your laws establish clear procedures and responsibilities for early warning?	To some extent, though further improvements are needed.	<ul style="list-style-type: none"> • Indonesia has a strong EWS in place, although the legal framework could benefit from clarifying the exact roles and responsibilities. • EWS for recurrent hazards, especially floods and droughts, should be reviewed and prioritised in any future legal or practical developments. • Consider appropriate legal and practical measures to incorporate traditional/customary EWS and knowledge into the ‘formal’, technical systems.
7. Do your laws require education, training and awareness-raising to generate a whole of society approach to DRR?	Yes, but some aspects could be strengthened.	<ul style="list-style-type: none"> • The national law on education could benefit from a clearly assigned space for DRR in the national curriculum. • In order to build on the strong integration of disaster risks and management into the system, mechanisms to improve coordination between BNPB, BPBDs and the education sector should be considered. • A focus on capacity and resourcing of local schools and educational authorities and their coordination with national level, should be encouraged to ensure better integration of DRR into the curriculum.
8. Do your laws ensure the engagement of civil society, the private sector and communities in risk reduction decisions and activities?	Yes, but some aspects could be strengthened	<ul style="list-style-type: none"> • Civil society, the private sector and communities currently benefit from a number of mechanisms for inclusion. There is however still a need to better define their role in risk reduction decisions and activities. • Current laws focus more on their role in disaster response rather than, for example, prevention and mitigation activities. • Relevant BNPB regulations could be reviewed and effectively disseminated and ‘operationalised’.
9. Do your laws adequately address gender considerations and the special needs of particularly vulnerable categories of persons?	Yes, but some aspects could be strengthened.	<ul style="list-style-type: none"> • In terms of the legal framework for disaster management, the integration of gender considerations and the special needs of particularly vulnerable categories of persons could be strengthened. • Specifically, the high-level provisions respecting the needs of vulnerable groups in disaster response could be used as a strong basis for development. This could extend such groups’ input into DRR decisions and developing DRR programmes that prioritise their needs.

Question	Assessment	Priority areas to address
10. Do you have adequate mechanisms to ensure that responsibilities are fulfilled and rights are protected?	To some extent, though further improvements are needed	<ul style="list-style-type: none"> • In order to promote transparency and ensure clear lines of authority and reporting, consider clarifying the current institutional reporting lines for DRR and how the public may access reporting information, potentially under law or secondary guiding documentation. • Penal provisions and sanctions could also potentially extend to wider issues of accountability and liability for DRR, namely gross failure for officials, individuals and businesses to fulfill their duties. • In the long-term, suitable incentive mechanisms or schemes could be considered to reward compliance with laws and regulations for DRR. This could be extended to multiple sectors.

Recommendations

Since the changes brought about in law and practice following the 2004 tsunami, Indonesia has positioned itself at the forefront of a large group of states that have developed and are continuing to develop, comprehensive legal regimes to support the entire disaster management spectrum. It now faces the challenge of ensuring that DRR is also adequately reflected and implemented throughout that framework. DRR cannot be treated as a 'sector' in itself, as it is a cross-cutting theme that must be mainstreamed into the other sectors that have key roles to play in reducing communities' exposure to risks. That being said, there is still a need for effective coordination and oversight of DRR activities at all levels. This is not a simple task and a solution needs to be found that ensures coordination and reduces overlap between the various entities involved and which also guarantees that sufficient and clearly-defined authority, capacity and finances are available at all levels of government to implement risk reduction activities.

Based on the responses to the Checklist questions and the priority areas identified above, this section puts forward some key recommendations and suggested ways forward to build upon the identified strengths in Indonesia's legal framework for DRR, as well as addressing some of the major gaps. This section draws heavily on feedback from stakeholders at the consultation workshop and mainly focuses on recommendations that were endorsed by the participants. These recommendations are by no means intended as the final word. The intention of this section is that stakeholders reflect on the contents and integrate any relevant recommendations suggested here into their own thinking and plans. The recommendations will also form the basis for ongoing development of a 'roadmap' or 'plan of action' for law and DRR in Indonesia that will be jointly developed between PMI, BNPB and IFRC, with stakeholder input as appropriate. An initial version of this plan of action is included at Annex A.

In terms of implementing the recommendations listed below, several of the recommendations could be reflected in national level legislation or, failing that, secondary guidelines or policy documents. For example, Presidential Instructions in the forestry sector have been used to place responsibilities on multiple institutions and encourage their collaboration: this could be an appropriate mechanism for generating momentum and consensus around DRR.

Recommendation 1

Leverage any future amendment process for the DM Law to propose the following amendments:

- A clearer and more direct allocation of institutional responsibility for DRR from national to village level (i.e. naming relevant ministries and agencies and assigning specific responsibilities). This could include strengthening the steering committee's mandate to act as a coordination and information-sharing mechanism for DRR at national level.
 - Creation of clear legal institutional links with other sectors, importantly environment and climate change, but also including land-use planning and education sectors. This could involve the creation of a new multi-sectoral coordination body with a mandate to focus exclusively on DRR and the implementation of the Sendai framework, as suggested above.
 - More detailed and transparent reporting mechanisms, setting out clear reporting lines for activities and finance. The creation of a permanent and clearly defined monitoring and evaluation mechanism for DRR should be considered.
-

- Expanding sections on accountability and sanctions to include liability for acts such as gross negligence in the discharge of disaster management duties / gross failure to fulfill duties.
- Harmonising and promoting the means for public participation in DRR planning and decision-making especially at village level. This should also include the prioritisation of women and vulnerable groups in planning and decision-making.
- Mandating clear and transparent funding procedures and allocations for DRR within sectoral budgets.
- Providing for a clearer and more strategic role for the private sector in DRR decision-making and activities, potentially through exploring appropriate partnerships.

Recommendation 2

Consider the following strategic amendments to other sectoral legislation

- Although revising national legislation is a long-term aim that requires concerted and coordinated efforts from multiple stakeholders, this section recommends the main priority areas to focus any future legal revision on.
- Where possible, any future amendments to legislation that aim to strengthen provision for DRR should be integrated into wider plans for reform. As an example, future amendments to the building code and construction regulations that update relevant standards could also be used to ensure appropriate DRR-relevant standards are included.
- **Environment:** clear prioritisation of DRR and inclusion of relevant disaster risks as a key consideration in any EIA process should be included in any future revisions of environmental legislation. Specific links should be made to the DM Law and coordination with BNPB/BPBD.
- **Land use planning:** incorporate provisions that link land use planning agencies with BNPB and BPBD and link to the DM Law's emphasis on spatial structure plans as key prevention tools. Land use planning laws could also be amended to prioritise the safe development of schools, hospitals and other public buildings.
- **Building and construction:** any future amendments to building and construction laws should be used to ensure that standards and codes that are relevant to risk reduction are updated to the latest internationally agreed standards (with appropriate amendments for the Indonesian context). This could be combined with measures to improve the implementation of the sanctions regime for non-compliance.
- **Climate change:** there is a need to review national climate change legislation and the efforts of the national-level bodies that are mandated to oversee Indonesia's climate change adaptation efforts. In the context of DRR, any future amendments to legislation should seek to promote coordination and integration with BNPB, BPBDs and other institutions involved in DRR activities.
- **Education:** the positive integration of disaster risk and awareness elements in the educational system would benefit from recognition under the national education law, to make this a clear requirement for the national curriculum.

Recommendation 3

Strengthening the DRR mandate of the current BNPB Steering Committee

- Although it is possible that future amendments to the DM Law may propose alternative institutional structures, the current high-level coordination structure under law, namely BNPB's steering committee, could still be strengthened in order to improve multi-sector coordination.
- Any changes should also take into account parallel developments that are relevant for DRR. In particular, linking with the current activities around establishing a baseline and plans for implementation of the Sendai Framework for DRR.
- Stronger links and regular coordination with the civil society-led coordinating platform for DRR, PLANAS, is recommended. For example, a PLANAS representative could be included in steering committee meetings, if appropriate.
- The mandate of the steering committee should also include addressing the topics raised by this report and follow-up in the implementation of its recommendations.
- In the long-term, the steering committee, or an informal working group, should also consider the development of a sectoral action plan that considers the most appropriate legal interventions for DRR purposes – this may involve amendments to existing law or development of new laws.

Recommendation 4

Ensure integration of DRR into the proposed National Response Framework

- The development of a National Response Framework, which has been under discussion for a few years now, should be used as an opportunity to integrate DRR considerations into a strategic national-level policy document.
- Current drafts of the Framework's executive summary indicate that cross-cutting themes will be integrated into it. Currently these themes include environment, gender and human rights. It is recommended that, at a minimum, DRR is included on this list.

Recommendation 5

Increase focus on capacity, enforcement and implementation across all sectors relevant to DRR

- This is a long-term change that requires committed efforts from all levels and sectors.
- Particular focus should be paid to improving the capacity at district and village levels to plan, budget, implement and report on DRR-related programmes.
- Investigating means to improve capacity and enforcement in sectors such as land use planning and construction should also be prioritised.

Recommendation 6

Use of DRR 'champions' and/or technical advisors within line Ministries and agencies

- To ensure effective DRR mainstreaming, each relevant government ministry could assign a directorate or team as 'DRR champions.'
- Representatives could meet at regular multi-sectoral meetings to ensure coordination of activities and best practices are shared and would also be responsible for overseeing DRR integration within their own ministries and agencies.
- This model could be rolled out at regional and district levels.

Recommendation 7

Improve public participation in risk assessment processes, planning for DRR and disaster management in general

- It is recommended that the government consider appropriate amendments to legislation that clarify and ensure public participation in important processes including development planning, risk assessments, early warning systems, environmental impact assessments, spatial planning and natural resource management.
- A starting point for this could be the development of a series of guidelines for all sectors. Special consideration for women, the disabled and other specific groups should be prioritised.

Recommendation 8

Investigate the potential use of local/village-level rules and regulations that could be used for DRR purposes

- Importantly, development of such rules and regulations should incorporate the technical input of local civil society, NGOs and community organisations. The content of any rules and regulations could cover:
 - Participatory mapping of the community's own risks.
 - Use of local authority structures and funding for DRR purposes.
 - Establishment of local committees for DRR.
 - Integration of women, the disabled and other vulnerable groups into decision-making.
- Taking a supportive approach to important government and civil society efforts that are already underway to build local capacity, awareness-raising activities could be conducted with communities to build awareness and capacity to develop and use rules and regulations for these purposes.
- Particular attention should be paid to incorporating any relevant traditional and customary norms. Several good examples have been identified during research for this report and could serve as models for other communities.

Recommendation 9

Undertake further research among local communities

- Due to a limited timeframe, it was not possible for the purposes of this study to travel to and engage local communities in Indonesia as part of the research to a great extent.
- All DRR-related activities ultimately seek to reduce the exposure of communities to natural hazards and to empower communities to effectively manage their own risks.
- In order to provide a strong evidence base for suggested changes to the legal framework to improve community participation, it is recommended that further research is undertaken at community level to provide an indication of knowledge and implementation of national laws at local level, as well as to identify the key risks faced by communities and any mechanisms used to manage such risks.
- Research could also be undertaken with local authorities (primarily at district and village level) and branches of PMI at the same time.

Concluding remarks: looking forward

The government of Indonesia has recognised the need for long-term efforts and partnerships in order to build the country's capacity to ensure that communities are resilient to disasters.²⁷⁴ The findings and recommendations presented in this report are therefore presented in the hope of continued development, collaboration and partnership between the Indonesian government (including BNPB as well as other sectoral stakeholders), PMI, IFRC and other actors in order to achieve this objective. They are intended to provide a basis for reflection and consideration by relevant decision-makers.

It is often far easier to point out areas to improve rather than examples of good practice. In the case of Indonesia, it is important to highlight that the strength of the current system for disaster management, the sophistication of the legal framework and the level of understanding and integration of DRR are all extremely positive developments. Since the 2004 tsunami, Indonesia has used the Hyogo Framework for Action as a reference point to make significant progress in integrating and mainstreaming disaster risk reduction into its legislation and national development plans. This is especially relevant given the scale of natural hazards faced by Indonesia on a regular basis.

Indonesia ultimately has an extremely strong foundation upon which to further strengthen its institutions, laws and practices and to reduce the risks faced from disasters. The priority areas and recommendations developed in this study are offered as potential tools to continue supporting existing efforts.

²⁷⁴ See the statement by H.E. Mr. M. Jusuf Kalla, Vice-President of The Republic Of Indonesia and Chairman of the Indonesian Red Cross Society, Third World Conference on Disaster Risk Reduction, Sendai, Japan, 14 March 2015

Annex A: Initial Plan of Action

The points below outline some initial, proposed next steps to take forward the recommendations of this study and they key stakeholders to engage in the process.

Task Force establishment and next steps

- Establish a Law and DRR task force / working group to discuss the report and further develop the plan of action for next steps and implementation of the recommendations. The task force could consist of appropriate members from BNPB, IFRC and PMI. An overall task force should remain relatively low on members but input from other Ministries, international organisations and civil society should be incorporated.
- The task force should aim to share the final mapping report (hard and soft copies) with a target group of Ministries and other stakeholders (see the key stakeholders section below) and invite these stakeholders to a meeting to discuss the content and recommendations and the priorities from this plan of action.
- The task force should be mindful of the need to generate strong and sustained commitment and political will with the government and other stakeholders. Without this, achieving any of the priorities may be difficult. It should therefore consider assuming an advocacy role insofar as law and DRR is concerned. Such a task force would have an important role to play in encouraging different institutions and sectors to think critically about their legal framework for DRR and how it is implemented and to encourage any efforts towards reform or stronger implementation on the part of the institutions.

Priorities for future consideration by the taskforce and key stakeholders

- Considering the priorities for consideration outlined in this report, focus on **implementation of the existing** legal framework rather than amending or drafting new law can be taken as first step. This applies to all areas, from DM Law coordination mechanisms to public participation in spatial planning processes. Revision of the DM law and any sectoral laws can be considered as a longer-term priority and the opportunity for this should be seized if and when the time comes.
- Efforts should also concentrate **on coordination between multiple sectors** on DRR, as well as **coordination between national, regional, district and local levels**. A key partner is BNPB and in particular the role of its steering committee should be considered in this light.
- Following on from priorities identified at the workshop, an increased focus on **capacity, enforcement and implementation across all sectors** relevant to DRR is required. As this is a wide ambition, initial efforts could focus on the aforementioned task force linking with one or two sectors (e.g. environment or construction) to discuss these issues.
- The task force could also use their role to establish whether any Ministries plan to review framework sectoral laws and if so when. This would allow for a timetable of possible amendment processes to be established, with the ultimate aim of proposing relevant DRR-related amendments at appropriate times.
- BNPB will hopefully sign the **National Response Framework** agreement with New Zealand's Ministry of Foreign Affairs and Trade soon. The task force should try to ensure that they and the organisations they represent, are included in the development of the Framework and use the opportunity to highlight and if possible integrate DRR into its development.

- Continue to support the informal **DM Alliance** that has emerged to maintain momentum for amendments to the DM Law. Use this opportunity to promote the recommendations of the mapping report as possible starting points for future amendments.
- Ensure focus on **community-level implementation** and means to ensure stronger local engagement. Part of this involves advocating for better public participation in processes relevant to DRR (e.g. EIA, spatial planning). It also could involve collaborating with stakeholders on building capacity of villages to access funding under the Village Law of 2014.

Key stakeholders to involve

- BNPB
- PMI
- IFRC
- BAPPENAS
- Ministry of Environment and Forestry
- Ministry of Home Affairs
- Ministry of Education and Culture
- Ministry of Public Works
- PLANAS
- UNDP
- OCHA
- World Bank
- Zurich Insurance Indonesia
- Disaster Resource Partnership

Annex B: List of persons and groups consulted

Stakeholders interviewed during research mission in October 2015

Indonesian Government

- **Pak R. Sugiharto**, Head of Bureau, Legal Affairs and Cooperation Bureau, BNPB
- **Meiladyastrinda Hapsari**, Head, Sub-Division for Inter-State Cooperation and United Nation Agency, Legal Affairs and Cooperation Bureau, BNPB
- **Pak Lilik**, Head of Directorate for DRR, BNPB
- **Pak Kuswiyanto**, Senior Planner, Deputy for Regional Development and Local Authority, BAPPENAS
- **Ibu Aruminingsih Sudjatma**, Planner, Directorate for Special Areas and Disadvantaged Regions, BAPPENAS
- **Mozain Afif**, Head of Sub-Directorate for DRR, Ministry of Home Affairs
- **Pak Yoga**, Director, Ministry of Home Affairs
- **Novrizal Tahar**, Secretary, Director General for Law Enforcement of Environment and Forestry, Ministry of Environment and Forestry
- **Gogot Suharwoto**, Head of Division for Program & Evaluation, Directorate of Early Childhood & Community Education, Ministry of Education and Culture
- **Dr. Dwi Daryanto**, Head of Bantul (District) BPBD, Jogjakarta BPBD
- **Nyoman Suwanjaya**, Head of Emergency Operations Centre, Bali BPBD

Red Cross Red Crescent Movement

- **Lucia Cipullo**, Regional Disaster Law Delegate for South-East Asia, IFRC
- **Pascal Boucher**, Community Safety and Resilience Coordinator, IFRC
- **Giorgio Ferrario**, Head of Country Cluster Support Team for Indonesia and Timor-Leste and Representative to ASEAN, IFRC
- **Jaap Timmer**, Country Representative, Netherlands Red Cross
- **Donna Lagdameo**, Technical Advisor and Focal Point in Asia, IFRC Climate Centre
- **Pak Ritola Tasmaya**, Secretary General, PMI
- **Pak Tr Wuryanto**, Head, Surakarta PMI
- **Pak Arifin Muhammad Hadi**, Head of Disaster Management, PMI

International organisations, civil society, NGOs etc

- **Iwan Gunawan**, Senior DRM Specialist, World Bank
 - **Jeong Park**, Disaster Management Advisor, Australian Embassy
 - **Charles Thursby-Pelham**, Manager – Disaster Response Unit, Australian Embassy
 - **Kristanto Sinandang**, Board Member, Indonesian Society for DM (MPBI)
 - **Annisa Srikandini**, PhD researcher, Wageningen University
 - **Puji Pujiono**, Regional Adviser on DRR, United Nations ESCAP
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- **Firliana Purwanti**, Senior Development Programme Coordinator, New Zealand Foreign Affairs & Trade Aid Programme
- **Sylvester Ndaparoka**, DRR Specialist, CARE International
- **Titi Moektijasih**, Humanitarian Affairs Analyst, UNOCHA
- **Iwan Rahardja**, Consultant, UNOCHA
- **Christian Budi Usfinit, Head of DRM Programmes, UNDP**
- **Agus Hekso P.**, FAO
- **Arthur Mitchell**, Consultant, FAO
- **Lian Sofiani**, UNICEF
- **Wipsar Dina Adnari**, WFP
- **Yuniarti W.**, UNESCO
- **Wirahadi Suryana**, Director, Head of Corporate/Commercial Lines, PT Zurich Insurance Indonesia
- **P. Raja Siregar**, Director of Programs, Climate Change Adaptation & Disaster Risk Reduction, Mercy Corps
- **Pak Djoni**, Mercy Corps
- **Nanang Subana Dirja**, Rights in Crisis Lead – Humanitarian Program Manager, Oxfam
- **Ninil Jannah, Director**, LINGKAR Association
- **Victor Rembeth**, National Manager, Disaster Resource Partnership
- **Henny Dwi Vidiarina**, Local consultant

Organisations present at the DRR and Law Workshop, February 2016

- ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)
- CARE International
- CARITAS Indonesia (Karina KWI)
- Indonesian Red Cross Society (Palang Merah Indonesia) (PMI)
- Indonesian Society for Disaster Management (MPBI)
- International Federation of Red Cross and Red Crescent Societies (IFRC)
- Japan International Cooperation Agency (JICA)
- Ministry of Defence (Kementerian Pertahanan Republik Indonesia)
- National Agency for Disaster Management (Badan Nasional Penanggulangan Bencana) (BNPB)
- National Humanitarian Institute (PKPU Lembaga Kemanusiaan Nasional)
- National Standardization Agency of Indonesia (Badan Standardisasi Nasional)
- Netherlands Red Cross
- United Nations Education Scientific and Cultural Organization (UNESCO)
- United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA)
- Wahana Visi Indonesia
- Wetlands International
- World Bank
- Zurich Insurance

Annex C: Bibliography

A. List of Laws

- Civil Code of Indonesia, 1927
 - Constitution of the Republic of Indonesia, 1945 (as amended)
 - Law Number 11 of 1974 on Water Resources Development
 - Law Number 4 of 1997 on Persons with Disabilities
 - Law Number 18 of 1999 on Construction Services
 - Law Number 39 of 1999 on Human Rights
 - Law Number 41 of 1999 regarding Forestry
 - Decree Number IX of 2001 on Agrarian Reform and Natural Resources Management
 - Government Regulation Number 68 of 2002 on Food Security
 - Law Number 28 of 2002 on Buildings
 - Law Number 17 of 2003 on State Finances
 - Law Number 20 of 2003 on the National Education System
 - Law Number 1 of 2004 on State Treasury
 - Law Number 25 of 2004 on National Development Planning
 - Law Number 32 of 2004 on Regional Government
 - Law Number 7 of 2004 on Water Resources
 - Government Regulation Number 36 of 2005 on Implementing Regulation of Law Number 28 of 2002 on Building
 - Presidential Instruction Number 4 of 2005 on Eradication Of Illegal Logging In Forest Areas and Distribution Throughout The Territory Of the Republic Of Indonesia
 - Minister of Communications Regulation Number 20 of 2006 on Early Warning for Tsunamis or Other Disasters Through Nationwide Broadcasting Services
 - Coordinating Minister of Social Welfare Decree Number 21 of 2006 concerning Appointment of a Government Institution as Focal Point and
 - Establishment of a Tsunami Early Warning System Development Team
 - Government Regulation Number 6 of 2007 on Forest Arrangement and Formulation of Forest Management Plan as well as Forest Exploitation
 - Law Number 24 of 2007 concerning Disaster Management
 - Law Number 26 of 2007 on Spatial Planning
 - Government Regulation Number 3 of 2008 amending Regulation 6 of 2007
 - Government Regulation Number 21 of 2008 concerning Disaster Management
 - Government Regulation Number 22 of 2008 concerning Disaster Aid Financing and Management
 - Government Regulation Number 23 of 2008 concerning Participation of
 - International Institutions and Foreign NGOs in Disaster Management
 - Government Regulation Number 26 of 2008 on the National Spatial Plan
 - Government Regulation Number 76 of 2008 on Forest Rehabilitation and Reclamation
 - Presidential Regulation Number 8 of 2008 concerning National Agency Disaster Management
-

- Presidential Regulation Number 47 of 2008 on the Establishment and Organization of State Ministries
 - Head of BNPB Regulation Number 4 of 2008 on Guidelines for Preparing Disaster Management Plans
 - Minister of Home Affairs Decree Number 46 of 2008 concerning the establishment of Local Disaster Management Agencies
 - Minister of Public Works Regulation Number 10 of 2008 on types of public infrastructure/facilities activities/projects requiring environmental management efforts and environmental monitoring efforts
 - Law Number 11 of 2009 on Social Welfare
 - Law Number 31 of 2009 on Meteorology, Climatology and Geophysics
 - Law Number 32 of 2009 on Environmental Protection and Management
 - Government Regulation Number 10 of 2010 on the Procedure of altering the appropriation and function of forest areas
 - Government Regulation Number 24 of 2010 on Use of Forest Areas
 - District of Bantul Regulation Number 5 of 2010 on Disaster Management
 - Regent of Bantul Regulation Number 6 of 2010 on the Establishment of the District BPBD
 - Government Regulation Number 4 of 2011 on Forest Reclamation Guidelines
 - Presidential Decree Number 61 of 2011 regarding National Action Plan to reduce GHG emissions
 - Presidential Instruction Number 10 of 2011 regarding Moratorium on the Granting of New Licenses and the Improvement of Primary Natural Forest and Peat Lands Management
 - Minister of Public Works Regulation Number 6 of 2011 on Utilization Guidelines of Water Resources
 - Law Number 12 of 2012 on Higher Education
 - Decree Number 199 of 2012 on the Creation of the Preparatory Unit for the Macro Plan for Forestry Tenure
 - Government Regulation Number 17 of 2012 concerning Guidelines on Public Participation in EIA
 - Government Regulation Number 27 of 2012 on Environmental Permits
 - Government Regulation Number 39 of 2012 on the Implementation of Social Welfare
 - Minister of Environment Regulation Number 5 of 2012 regarding Types of Business Plans and/or Activity that Must Have Environmental Impact Assessments
 - Minister of Environment Regulation Number 16 of 2012 on Guidance for the preparation of Environment Documents
 - Minister of Environment Regulation Number 18 of 2012
 - Regulation of the Minister of Public Works Number 7 of 2013, on Guideline for granting permit for development of drinking water supply system to be conducted by business entity together with the community for fulfilment of own requirement
 - District of Bantul Regulation Number 1 of 2013 on Preparedness and Early Warning
 - Head of BNPB Regulation Number 11 of 2014 on community participation in disaster management
 - Head of BNPB Regulation Number 12 of 2014 on participation of the private sector in disaster management
 - Head of BNPB Regulation Number 13 of 2014 on gender mainstreaming in disaster management
 - Head of BNPB Regulation Number 14 of 2014 on handling, protection and participation of the disabled in disaster management
-

- Law Number 6 of 2014 on Villages
- Law Number 23 of 2014 on Local Government
- Law Number 40 of 2014 on Insurance
- Law Number 2 of 2015 on National Development Plan

B. List of Secondary Sources

Publications and reports

- Asian Development Bank, *Republic of Indonesia: Improving Water Planning, Management and Development*, August 2013, available at <http://www.adb.org/sites/default/files/project-document/78745/46233-001-ino-tar.pdf>
- Association of Southeast Asian Nations' Agreement on Disaster Management and Emergency Response, AADMER Work Programme 2016-20, April 2016, available at <http://www.asean.org/storage/2016/02/AADMER-Work-Programme-2016-2020ADOPTED.pdf>
- BAPPENAS, *Indonesia National Action Plan for Climate Change Adaptation*, presentation for the 22nd Asia-Pacific Seminar on Climate Change, 28 June 2013, available at https://www.env.go.jp/en/earth/ap-net/documents/seminar/22nd/18_Indonesia_Virgiyanti.pdf
- BAPPENAS, *Policy paper on Gender Mainstreaming in Climate Change Adaptation*, 2012, available at http://www.bappenas.go.id/files/1813/5763/0712/policy-papergmccalaunching-cetak__20130320120610__3756__0.pdf
- BMKG, *Tsunami Early Warning Service Guidebook for INATEWS*, 2012, available at <http://iotic.ioc-unesco.org/resources/awareness-and-education-materials/98/guidebooks/detail/29/tsunami-early-warning-service-guidebook-for-inatews>
- BNPB, *Disaster Risk Index of Indonesia*, 2013 (not available online)
- BNPB, *National Assessment Report on Disaster Risk Reduction (Executive Summary)*, 2013, available at <http://www.bnpb.go.id/uploads/migration/pubs/573.pdf>
- BNPB, *National Progress Report on the implementation of the Hyogo Framework for Action (2013-2015)*, HFA Monitor update, Preventionweb, 23 April 2015, available at <http://www.preventionweb.net/english/hyogo/framework/progress/v.php?id=28912&pid:45>
- Build Change Indonesia, *Newsletter*, January 2013, available at http://buildchange.org/pdfs/130131_Build_Change_Indonesia_Newsletter_FINAL.pdf
- Center for Excellence in Disaster Management & Humanitarian Assistance (CEDMHA), *Indonesia: Disaster Management Reference Handbook*, 2015, available at <http://reliefweb.int/report/indonesia/indonesia-disaster-management-reference-handbook-2015>
- Central Intelligence Agency, *The World Factbook*, Indonesia, available at <https://www.cia.gov/library/publications/resources/the-world-factbook/geos/id.html>
- Emma Willmott, *DRR Education in Indonesia*, undated, available at https://brage.bibsys.no/xmlui/bitstream/handle/11250/221384/Willmott_Emma.pdf?sequence=1
- Fumiyo Kagawa and David Selby, *Disaster Risk Reduction In The School Curriculum, The Present And Potential Role Of Development Agencies And The Implications For The Hyogo Framework For Action 2005-2015 Successor*, 19 February 2014, available at <http://www.preventionweb.net/english/hyogo/gar/2015/en/bgdocs/inputs/Kagawa%20and%20Selby,%202014.pdf>
- German Research Centre for Geosciences, *Ten years after the disaster: Tsunami-Early Warning System for the Indian Ocean*, 19 December 2014, available at <http://www.gfz-potsdam.de/en/media-communication/press-releases/details/article/zehn-jahre-nach-der-katastrophe-tsunami-fruehwarnsystem-fuer-den-indischen-ozean/>

- Government of Indonesia and UNDP, *Safer Communities through Disaster Risk Reduction in Development: Evaluation Report*, 2011, available at http://www.id.undp.org/content/indonesia/en/home/operations/projects/crisis_prevention_and_recovery/safer-communities-through-disaster-risk-reduction-in-development.html
- Government of Indonesia, *National Action Plan for Climate Change Adaptation – Synthesis Report*, November 2013, available at https://gc21.giz.de/ibt/var/app/wp342deP/1443/wp-content/uploads/filebase/programme-info/RAN-API_Synthesis_Report_2013.pdf
- Handicap International, *Lessons Learned from the project Mainstreaming Disability into Disaster Risk Management Initiatives in Indonesia and Philippines*, 2011, available at https://www.academia.edu/5728821/Mainstreaming_Disability_into_DRM_in_Indonesia_and_The_Philippines_-_Lesson_Learned
- Heri Sutanta, *Spatial Planning Support System for an Integrated Approach to Disaster Risk Reduction*, December 2012, available at http://www.csdila.unimelb.edu.au/publication/theses/Heri_Sutanta_PhD_Thesis.pdf
- Herry Darwanto, *Preliminary Examination of Existing Methodologies for allocating and tracking National Government Budget for Disaster Risk Reduction in Indonesia*, January 2012, available at <https://www.unisdr.org/we/inform/publications/32377>
- IFRC and PMI, *International Disaster Response Law in Indonesia*, 2014, available at <http://www.ifrc.org/Global/Publications/IDRL/country%20studies/Indonesia%20IDRL%20Report%20FINAL.pdf>
- IFRC and UNDP, *Effective law and regulation for disaster risk reduction: a multi-country report*, 2014, available at <http://www.drr-law.org>
- IFRC and UNDP, *The Checklist on Law and Disaster Risk Reduction (Pilot Version)*, March 2015, available at <http://www.ifrc.org/PageFiles/115542/The-checklist-on-law-and-drr.pdf>
- IFRC and UNDP, *The checklist on law and disaster risk reduction*, October 2015, available at: <http://www.drr-law.org>
- IFRC, *Indonesia: Java eruption, Sumatra earthquake and tsunami, Emergency appeal no MDRID006 Operations update no. 4*, 23 May 2011, <http://www.ifrc.org/docs/appeals/10/MDRID00604.pdf>
- IFRC, *Legal issues from the international response to the tsunami in Indonesia: An international disaster response laws, rules and principles (IDRL) programme case study*, July 2006, available at <http://www.ifrc.org/PageFiles/139604/indonesia-cs.pdf>
- Jin Chen, *Utrecht University and Netherlands Commission for Environmental Assessment, Public Participation provisions in Environmental Impact Assessment legal system: case studies in China, India and Indonesia*, November 2013, available at http://api.commissiener.nl/docs/mer/diversen/masterthesis_jinchen_2013.pdf
- Luois Durey and Esther Mwangi, *Land-use planning in the Moluccas: What of customary tenure security?*, undated, available at http://www.cifor.org/publications/pdf_files/WPapers/WPaper143Mwangi.pdf
- Masyhur Irsyam et al, *Development of Seismic Hazard and Risk Maps for New Seismic Buildings and Infrastructure Codes in Indonesia*, 2013, available at <https://wiryanto.files.wordpress.com/2013/08/k32-39.pdf>
- Mohamad Ali Fulazzaky, *Challenges of Integrated Water Resources Management in Indonesia*, in 'Water' journal, 17 July 2014, available at <http://www.mdpi.com/2073-4441/6/7/2000>
- Nonette Royo and Adrian Wells, *Community Based Forest Management in Indonesia: a review of current practice and regulatory frameworks*, 30 January 2012, available at <https://openaccess.leidenuniv.nl/bitstream/handle/1887/16242/03.pdf?sequence=9>
- Statement by H.E. Mr. M. Jusuf Kalla, Vice-President of The Republic Of Indonesia and Chairman of the Indonesian Red Cross Society, *Third World Conference on Disaster Risk Reduction, Sendai, Japan*, 14 March 2015, available at <http://www.wapresri.go.id/statement-by-h-e-mr-m-jusuf-kalla-vice-president-of-the-republic-of-indonesia-at-third-world-conference-on-disaster-risk-reduction/>

- Sustainable Development Goals, 2015, available at <https://sustainabledevelopment.un.org/?menu=1300>
- The Asia Foundation, *Environmental Governance in Indonesia*, undated, available at <https://asiafoundation.org/resources/pdfs/EnvironmentalGovernanceApril2012.pdf>
- The Asia Foundation, *Indonesia's Village Law: A Step Toward Inclusive Governance*, 7 February 2016, available at <http://asiafoundation.org/2016/02/17/indonesias-village-law-a-step-toward-inclusive-governance/>
- The SMERU Research Institute, *The role of social protection in disaster risk reduction and climate change adaptation in Indonesia*, May 2014, available at http://www.unicef.org/eapro/Session_5_-_Indonesia._The_role_of_social_protection_in_DRR_and_CCA.pdf
- UNDP, *Human Development Report 2014*, 2014, available at <http://hdr.undp.org/en/content/human-development-report-2014>
- UNISDR, *Asia meets to implement Sendai Framework*, 4 June 2015, <http://www.unisdr.org/archive/44674>
- United Nations Environment Programme, *EIA Training Resource Manual, Public Participation in Indonesian EIA*, undated, available at [http://www.unep.ch/etu/publications/15\)%2075%20to%2083.pdf](http://www.unep.ch/etu/publications/15)%2075%20to%2083.pdf)
- United Nations International Strategy for Disaster Reduction, *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters* (Extract from the Final Report of the World Conference on Disaster Reduction), World Conference on Disaster Reduction. 18-22 January 2005, Kobe, Hyogo, Japan, available at <http://www.unisdr.org/2005/wcdr/intergover/official-doc/L-docs/Hyogo-framework-for-action-english.pdf>
- United Nations Office for Disaster Risk Reduction, *Sendai Framework for Disaster Risk Reduction 2015-2030*, 2015, available at <http://www.unisdr.org/we/inform/publications/43291>
- USAID, *APEC Building Codes, Regulations and Standards – Minimum, Mandatory and Green*, 2013, available at <http://www3.cec.org/islandora-gb/islandora/object/islandora:1213/datastream/OBJ-EN/view>
- USAID, *Environmental Compliance and Enforcement in Indonesia: Rapid Assessment*, November 2008, available at http://www.aecen.org/sites/default/files/ID_Assessment.pdf
- World Bank, *Global Facility for Disaster Reduction and Recovery, Indonesia: Advancing a National Disaster Risk Financing Strategy – Options for Consideration*, October 2011, available at http://www.gfdrr.org/sites/gfdrr/files/publication/Indonesia_DRFI_Report_FINALOct11.pdf
- World Bank, Global Facility for Disaster Reduction and Recovery, UNDP, European Union, *Institutionalizing Post-Disaster Recovery: Learning from Mentawai Tsunami and Merapi Eruption – Recovery Framework Case Study (Conference version)*, September 2014, available at <https://www.gfdrr.org/sites/gfdrr/files/Indonesia%20Post-Disaster%20Recovery%20Institutionalization.pdf>
- World Economic Forum, *Gender Gap Index 2014*, available at <http://reports.weforum.org/global-gender-gap-report-2014/rankings/>

Websites

- EM-DAT: The OFDA/CRED International Disaster Database, www.emdat.be
- IFRC, *Red Cross helps flood-prone communities through traditional and modern approaches*, 29 April 2016, available at <http://www.ifrc.org/en/news-and-media/news-stories/asia-pacific/indonesia/red-cross-helps-flood-prone-communities-through-traditional-and-modern-approaches--72184/>
- Integrated Regional Information Networks Asia, *El Niño brings drought, hunger to Indonesia and South Pacific*, 22 October 2015, <http://www.irinnews.org/report/102140/el-nino-brings-drought-hunger-to-indonesia-and-south-pacific>
- Jakarta Post, *Court bans monopoly on water resources*, 20 February 2015, <http://www.thejakartapost.com/news/2015/02/20/court-bans-monopoly-water-resources.html>
- Jakarta Post, *Greater Jakarta: City to revise ground water bylaw*, <http://www.thejakartapost.com/news/2015/05/30/greater-jakarta-city-revise-ground-water-bylaw.html>
- Jakarta Post, *What next after the water law annulled*, 3 March 2015, <http://www.thejakartapost.com/news/2015/03/03/what-next-after-water-law-annulled.html>
- NASA Earth Observatory, *El Niño Brought Drought and Fire to Indonesia*, 14 January 2016, <http://www.nasa.gov/feature/goddard/2016/el-nino-brought-drought-and-fire-to-indonesia>
- Reuters, *Beyond haze, El Niño drought poses poverty challenge for Indonesia*, 29 October 2015, <http://www.reuters.com/article/2015/10/29/us-indonesia-elnino-idUSKCN0SM2SK20151029>
- Widodo Putro and Ward Berenschot, *Freedom of information*, in *Inside Indonesia* 116 (April – June 2014), available at <http://www.insideindonesia.org/freedom-of-information>
- World Bank Group, *Doing Business – Dealing with Construction Permits in Jakarta, Indonesia*, undated, available at <http://www.doingbusiness.org/data/exploreeconomies/indonesia/sub/jakarta/topic/dealing-with-construction-permits>

The Fundamental Principles of the International Red Cross and Red Crescent Movement

Humanity / The International Red Cross and Red Crescent Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.

Impartiality / It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.

Neutrality / In order to enjoy the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.

Independence / The Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.

Voluntary service / It is a voluntary relief movement not prompted in any manner by desire for gain.

Unity / There can be only one Red Cross or Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

Universality / The International Red Cross and Red Crescent Movement, in which all societies have equal status and share equal responsibilities and duties in helping each other, is worldwide.

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