

Author's Reply to Reviewer 3.

Dear Reviewer 3,

I would like to thank for your detailed assessment of the paper. I am delighted that you find the paper is valuable and contributes to the betterment and increased roles of Indonesian researchers in the future.

The review was extremely detail touching on terms, formats, references and abbreviations, and this has greatly improved the readability of the paper.

I greatly value your suggestions on focusing and outlining strategies on improving the authorship and quality of publications for Indonesian authors / researchers.

My responses is uploaded as Supplementary 1 which outline point-by-point response to your review.

The revised version, by which the references on line numbers, are included in the Supplementary 2.

COMMENTS	AUTHOR'S RESPONSES
Sequence and Content	
Storyline (logical order)	
The paper has been presented in the manner, such as: starting from illustrating the different types of natural hazards and risks impacting Indonesia and the comparison between geophysical and hydro-meteor-climato-logical disaster (Line 33-35) (including the graph to underline and distinguished that comparison) and subsequently describing the aims, research questions, Advancement of methods, analysis, and conclusion.	Thank you. This is noted.
However, personally, to make this paper a perfect one; the author could link the missing piece of thesis statement or state stronger the relevance between pinpointing the comparison of geophysical and hydro-meteorclimato-logical disaster and the aims of the paper.	This is addressed in line 36-40. <i>Geophysical disasters caused more than 90% deaths while the hydrological, meteorological and climatological disasters occur more frequently, affected more people, and caused three times damages (EMDAT, 2016).</i>
The author could formulate stronger statement(s) of why elaborating the different disasters' impacts in the first place (as the intro) and later the aim(s) of the review.	Section 1 on introduction is rearranged / rewritten. Disaster impacts were addressed in line 36-40. <i>Between the period of 1900 to 2016, there have been a total of 434 disasters in Indonesia caused by natural hazards, with 237,728 deaths, 29.1 million people affected and total damage almost 30 Billion USD (EMDAT, 2016). Geophysical disasters caused more than 90% deaths while the hydrological, meteorological and climatological (HMC) disasters occur more frequently, affected more people, and caused three times damages (EMDAT, 2016).</i>
Please kindly state stronger motivation(s) of why reviewing natural hazards-DRR-and CC literatures in Indonesia with supporting references .	Yes, this is addressed. Line 54-57 <i>Also, there is an increasing focus on the impacts of climate change in the changing profile of hazards and disasters, and hence this calls for integrated DRR and climate change</i>

	<p><i>adaptation (CCA) to manage climate risks (EMDAT, 2016). This review will try to capture whether consideration of climate change risks have been considered as part of research progress in Indonesia.</i></p>
<p>Content's proportion</p> <p>The proportion of the content is illustrated very well. Minor suggestion would be in every section of HRD, DRR, and CC, especially in the section of Finding and Analysis; it would be better to elaborate more on the timeline, discussions, and focus area part.</p>	<p>We have added more elaborations on the section of Finding and Analysis.</p> <p>Line 178-198</p> <p><i>The literature in HRD category are mostly related to the study of volcanic eruptions, earthquakes and tsunami and the islands of Java and Sumatera are the two areas which receive most attention (more than 70%) (SCOPUS, 2016a). The oldest publications listed in Scopus are those by Reinout Willem van Bemmelen, a Dutch national born in Batavia (Netherlands East Indies/Indonesia), on Ein Beispiel für Sekundärtektogenese auf Java (An example of secondary isogenesis on Java) (van Bemmelen, 1934) and Über die Deutung der Schwerkraftanomalien in Niederländisch-Indien (On the Interpretation of the Gravity Anomalies in Dutch-India) (van Bemmelen, 1935), both from the Geologische Rundschau (now listed as the International Journal of Earth Sciences). Van Bemmelen continued to write extensively on theories in Tectonophysics, and on Indonesia (van Bemmelen, 1935, 1941, 1949b, 1953, 1963). He then wrote in English on the Origin and Mining of Bauxite in Netherlands-India (Van Bemmelen, 1941) and on the Report of Volcanic Activity and Volcanological Research in Indonesia (1936-1948) (van Bemmelen, 1949b) from the Bulletin of Volcanologique. These works formed his greatest contribution: The Geology of Indonesia (Van Bemmelen, 1949a; Van Bemmelen and Bourter, 1970). In addition, Rittman (1953) wrote specifically on the Magmatic Character and Tectonic Position of Indonesian Volcanoes. In terms of contributions by Indonesian researchers, John Ario Katili of the Bandung Institute of Technology (ITB), considered one the founding fathers of Indonesian Geology, wrote significant accounts on geotectonic knowledge of Indonesia from the period of 1963 to 1991 (Katili, 1975, 1991, 1974, 1967, 1971, 1989, 1969a, 1978, 1986, 1981b; 1963; 1969b, 1981a, 1980, 1973). Other early and significant contributions come from Mudaham Taufick Zen and Djajadi Hadikusumo, from the Geological Survey of Indonesia, who collaboratively wrote some of the earliest and most important accounts on volcanoes in Indonesia (Zen and Hadikusumo, 1965, 1964b, a; 1971, 1970, 1966; 1974). It is also important to mention, though not indexed in Scopus, the work by Kusumadinata (1979), of the Geological Survey of Indonesia, on the Catalogue of References on Indonesian Volcanoes with Eruptions in Historical Time, amongst others (Kusumadinata, 1963, 1964a, b, c; cited in Rampino and Self, 1982).</i></p>

	<p>Line 219-229</p> <p><i>The earliest accounts that explicitly examine DRR include Suryo and Clarke (1985) who wrote on the Occurrence and Mitigation of Volcanic Hazards in Indonesia, and laid out strategies such as the prediction of volcanic activity, hazard zoning and maps, and control of hazards through engineering structures. They wrote that ‘the main purpose of hazard maps is to assist the protection of people and their property in the vicinity of active volcanoes’ (Suryo and Clarke, 1985, p. 90). Verstappen (1994; 1993, p. 367) in his paper, the Volcanoes of Indonesia and Natural Disaster Reduction (with Some Examples), wrote that ‘since emergency scenarios inevitably vary with intensity and type of land utilization, the compilation of vulnerability maps of the endangered areas merits consideration in the context of disaster reduction policy’. An Indonesian notable scholar is Sudibyakto, from the Faculty of Geography, University of Gadjah Mada, and also the head of the Indonesia Disaster Scientist Association (IABI), who wrote Natural Disaster Mitigation and Management in Indonesia (Sudibyakto and Haroonah, 1997) and examine disaster from geographical and social science perspectives (Sudibyakto and Haroonah, 1997; 1992; 1996).</i></p>
<p>☐ It would be even better to have a summary/overview table of key findings and analysis with x-axis are the HRD, DRR, and CC and y-axis are the timeline, discussions, and focus area.</p>	<p>The author put the key findings in x axis but then the presentation lost its focus on the research topics to the numbers of the publications. Hence the opposite was adopted.</p> <p>However, for Figure 2 in line 209, I put the topic in x-axis since there are only 5 category.</p>
<p>Consistency of used terms and accuracy</p> <p>☐ Please kindly check the used terms of hydrometeor-climato-logical disaster (Line 33), whether it is the correct writing? And whether the above term is in line and consistent with the later used term throughout the text? For example in Line 176-177, Line 188, and Line 432.</p>	<p>Yes, we revise the term as: Hydrological, climatological and meteorological disaster</p>
<p>☐ The used term risk reduction maybe is a minor typo as risk deduction in Line 505-506.</p>	<p>Revised</p>
<p>☐ It would be better to spell out/introduce the abbreviations and acronyms used in the paper for the first time (within parenthesis) and later on only mention the short term.</p>	<p>I have double checked that acronyms are spelt out when first used and implemented consistently throughout.</p>
<p>Inter-linkages between parts</p> <p>☐ The link between different parts is strongly shown in the writing; although stronger link is needed to rationalize the purpose of the paper and the written different impacts of different type of disasters that were stated in the introduction part.</p>	

Content's structure ☐ The content of the structure in this paper is well organized. Minor suggestions would be on the content's proportion and consistency of the used terms (please kindly see the comments for the proportion and structure boxes).	I have double checked that all terms are consistent.
Content vs. Theme ☐ In my opinion, the content of this paper is generally justified with the overarching theme. Minor adjustments would be only on the aforementioned comments.	Noted

Deliverance, Usefulness, and Lessons Learned <i>Input regarding the view on the content of the lessons/case studies from the point of view of advantages or usefulness to the readers.</i>	AUTHOR'S RESPONSES
No doubt, the paper is well formulated, rich with new insights with vast literature, as well as the paper is extremely important for the readers, especially for the Indonesian researchers to take up new information, suggestions, and recommendations from the author. The Indonesian researcher could reflect, and set new courses of researches in terms of HRD, DRR, and CC, for example in areas where there are still huge gaps, according to author, in terms of less number of Indonesian contributions as first author, limited number of Indonesian organizations participate in international collaborations, insufficient power play amongst researchers, research capacity, English academic writing, and incentives.	Noted.
However, it would even better useful, especially for Indonesian researchers if the author could suggest and explore concrete key ideas and how to transform those ideas into practical actions (not only referring the setbacks) i.e. to conduct better/improve research, negotiate for authorship amongst international researchers, overcome challenges in international collaborations, factors contributing in improving research capacities including academic writing in	Many thanks for the suggestions. I have incorporated this in the second recommendation from line 453 to 499. This part is rewritten to include more examples of current initiatives. Line 449-504 <i>The second part of the recommendation is on the need to strengthen the capacity of research collaborations between Indonesian and international researchers, multi disciplinarity research and publications in high impacts journals. It is clear that some of the very limited Indonesian research from key universities doing disaster research such as the Bandung</i>

<p>English, and innovation of some sort of incentives for international collaborations and publications.</p> <p>These might very useful to the readers and add precious value to the paper.</p>	<p><i>Institute of Technology (ITB), Indonesia Institute of Science (LIPI), the Gadjah Mada University (UGM) have been involved in international collaborations and publications of high impacts journal (QS, 2016). There needs to be more collaboration between local universities (Indonesia) and universities partner (outside Indonesia) to promote International publications in Indonesia, particularly to enlarge the topics related to the disaster, hazard, and risk reduction. There are only nine universities in Indonesia that are within the list of QS World University Rankings, with University of Indonesia at the top of the list (QS, 2016). Other universities on the islands of Sumatra, Sulawesi, and Kalimantan and other locations need to address disaster issues as part of their research agendas (OECD and ADB, 2015).</i></p> <p><i>There is a need for better targeting of scholars to do more collaboration for research and writing for high impact journals. This goes along with strengthening the capacity of researchers and lecturers at the universities to write and publish in international journals. In particular, there are a limited number of authors involved with publications in the highest IF journals such as Nature and Science. Indonesian authors beyond this 4 organizations largely lack experience in international collaboration and the language and writing skills necessary for submitting their works to internationally accredited journals. High impact articles and collaborations were only done through organizations centered on ITB, UGM, LIPI and PVMBG. Despite some Indonesian researchers who have been strongly influential within the study of hazards, DRR or climate change in Indonesia and could potentially contribute to the global development of knowledge in these fields, they have mostly published in Bahasa Indonesia and did not submit their works into international mostly English language journals. The Ministry of Education has indeed conducted a training scheme and provided incentives for lecturers that have published internationally (RISTEKDIKTI, 2016), however, the overall quality and quantity of papers by Indonesian researchers are still much less than those at comparable universities in Malaysia or Singapore (RISTEKDIKTI, 2016). The list from Scopus shows that there is still only small numbers of female and early career researchers (SCOPUS, 2016a). Studies on the roles of international and local authorships and collaborations show that although it rapidly increasing, there are still more efforts needed to strengthen and advance those collaborations (Bordons et al., 1996; Wagner and Leydesdorff, 2005b, a; Gazni et al., 2012). It further shows that there is still imbalance in the ratio of male to female scientists, as the global trends also show (Sidhu et al., 2009; Lewison, 2001; Koppel et al., 2002; Sugimoto et al., 2013). The author could not find a repository of researchers from the Ministry of Education website, let alone systematically determining their progress, history of schooling and research. Early career researchers (ECR) are defined as those who are within 8 years after completing PhDs or within 6</i></p>
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	<p>years of trainings (AHRC, 2016). While globally there has been some systematic efforts to strengthen the capacity of ECR such as through mentoring and connecting ECR with established researchers or organizations internationally (Clarke, 2004; Kram and Isabella, 1985), there are no clear similar strategies for the Indonesian ERC from the Indonesian governments. Some initial activity by DIKTI is to connect and invite Indonesian researchers that have worked internationally to visit and mentor Indonesian researchers and universities (RISTEKDIKTI, 2016). Other activity was through the TWIN-SEA network between UNU-EHS, University Hannover and LIPI which aim to connect researchers on the topic of disasters and climate change, through activities such as collaborative writings, publications and research. Through the research school scheme, the TWIN-SEA connects the ECR from Indonesia to get access to expertise in Germany and also connects with DAAD Indonesia and LPDP as the scholarship providers to support the ECS to do master and doctorate degrees in Germany (UNU-EHS, 2017). International journals (e.g. Elsevier, 2016), international and other national research council such as the United States of America have allocated research funding research specifically for international collaborations such as the Partnerships for Enhance Engagement in Research (PEER) (NSF, 2017) or the UK Government who allocates funding specifically for ECR (RCUK, 2016). The Indonesian Association of Disaster Experts was formed in 2014 and meets annually to discuss their future research guidelines (IABI, 2016). IABI can be involved to review current publications in Bahasa Indonesia and collaborations undertaken by Indonesian experts which can enable better identification of research progress and hence research needs in the future. There is increasing call for more inter-disciplinary collaborations so that complex problems on social and environmental issues can be understood better and problems identifications can better target those in needs (Future Earth, 2016). Hence this implies increasing importance of social science adoption to study disasters and their impacts. The roles of private business and the communities at risk have rarely been part of the research and collaborations. It is also not clear how collaborations amongst scientists from social and physical backgrounds have taken place in Indonesia. It is also not clear how or whether science (Wagner and Leydesdorff, 2005a), policy and industry (Lee, 1996) collaborations have taken place and were documented in these listed publications. These collaborations are important to face the complexities of future problems (Leydesdorff and Wagner, 2008), and also to help achieve the outcomes of the Sustainable Development Goals (United Nations, 2015). The importance of science communication and the increasing demand for researchers to publish their works outside of traditional methods such as journal articles, but also through blogs, websites, policy briefs, and popular media is now encouraged (Gu and Widén-Wulff, 2011; Thelwall et al., 2013; Bik and Goldstein, 2013).</p>
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<p>Methodology <i>Input regarding on the suitability of the writing with reference to the standardized writing rules, including the presentation of quotations, case studies, references, etc.</i></p>	<p>AUTHOR`S RESPONSES</p>
<p>In my personal opinion, the writing of the paper is of high quality. The author has used complicated method and required high focus and vast amount of time. The presentation of the quotations and sources of literature have been mentioned throughout the text and in the list of references. Due to vast amount of used references, it is worth to double-check the list in the end of paper, to avoid discrepancies.</p>	<p>Thank you for this compliments. I used EndNote as the reference software to make sure that all references are consistent both in the text and also in the reference list.</p>