Explore the Integration of Social Protection, Disaster Risk Resilience, and Climate Change Adaptation: A Review with Indonesia Policies and Program

社会保障と防災と気候変動への適応の融合に向けて インドネシアの政策・プログラムのレビュー

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Abstract

Disaster risk generates a complex result if intersects with human activity like poverty. A cross-cutting of planning leads to connecting how to reduce the poor while minimizing the risk impact. Indonesia faces a high disaster risk overshadowed with poverty. Some countermeasures of these issues were done but leading of less integration. It leaves a gap, so a synchronized solution through a planning tool as a "soft infrastructure "can deliver the resilience system. This paper aims to discover connection between social protection, climate change adaptation, and disaster risk reduction concepts for an academic broader discussion. Also, it reviews the readiness of Indonesia policies mainstreaming the integrated issues. Through content analysis, this study addresses the gap among conceptual thinking literatures regards the integration concept. First, how each concept address integration to other and interrelationship among them? Second, how the readiness of Indonesia's policies to integrate with each other? It concludes with comprehensive understanding in each concept or when it is associated with achieving resilience.

Keyword: disaster risk reduction, climate change adaptation, social protection, poverty and resilience, integration planning

1. INTRODUCTION

Natural hazards are issues that impossible to disregarded with national development planning. The overlaid between hazard and vulnerability always becomes a consideration in planning since its potential to disrupt social and economic development ¹⁾. Climate extremes and rapid onset events become a threat to many countries attaining inclusive, massive, sustainable development and growth. It also underpinned with poverty as classical issues, especially in a developing country. One projection

predicts that climate change impact could affect the contribution of 100 million people living in extreme poverty by 2030, mostly from low-income countries ²⁾. Natural disasters retain or set people back into poverty, which makes eradicating poverty so though. ³⁾. It is like a double burden when one country should reduce poverty and inequality and manage disaster impact ⁴⁾.

The world does not stand still. Major global agreements have been adopting as part of international countermeasures across the country. Started from Sustainable Development that mentions in its goal number 1 and 13 about to end up with poverty and take action to combat climate impact and its related hazard. It is hand in hand with the other 2030 Agenda agreements, including The Paris Agreement on Climate Change that concern about climate change issues, also Sendai Framework on disaster issues. They underline the need to strengthen the resilience of poor and vulnerable groups such as women, children, youth, older persons, people with disabilities, and marginal groups ⁵⁾.

Along with that efforts, we should agree that an effective way to build a resilient society is to have a cross-cutting mechanism through the multi-sector and multi-disciplines. Initiating integration had been developed to reducing the impacts of shocks and hazards on individuals and communities by anticipating risks and uncertainties ⁶⁾.

Social protection, disaster risk reduction, and climate change adaptation are three concepts linked by an essential concern with reducing vulnerability and building resilience. ⁶⁾⁷⁾⁸⁾⁹⁾. However, it less describes how the positioning of each viewpoint response regards the integration. It needs a thorough explanation that provides the critical reason to integrate, benefits, challenges until principals. A case study becomes a good example of measuring the integration possible to do or not.

This paper aims to discover the connection between social protection, climate change adaptation, and disaster risk reduction in academic discourses globally as a basis for broader discussion. A case study will be complete to briefly evaluate whether the potential integration approaches suitable or not in Indonesia. Therefore, this article has two questions to answer. First, how each concept address integration to other and interrelationship among them? Second, how the readiness of Indonesia's policies to integrate with each other? It concludes with a comprehensive understanding of each concept or when it is associated with achieving resilience.

Hence, the structure of this paper consists of Introduction as background. Next are the literature and methods in observing the basic concepts and exploring the case study's idea. After that, a result and discussion comprise the interrelationship between the three concepts (climate change, disaster risk

reduction, and social protection) and how it is implemented in Indonesia. Finally, the last part is the conclusion to summarize what has been explored in the previous part.

2. LITERATURES AND METHODS

2.1 Poverty Nexus Disaster

Various things could describe the relationship between poverty and natural disaster existence include climate change effect. Longer-term impacts such as income decreased, a lower standard of living, unemployment because of hazards will be born disproportionately by the poorer segment of society¹⁰⁾. Meanwhile, poor people and structurally disadvantaged minorities are much less able to respond effectively to disasters ¹¹⁾. The household's socio-economic status determines its vulnerability to disaster ¹⁰⁾ ¹²⁾.

Based on scientific projection, there will be 325 million impoverished people who could be living in the 49 countries most exposed to the full range of natural hazards and climate extremes in 2030¹³⁾. Some empirical cases show the connectivity between poverty and disaster include climate change effect. In Senegal, households affected by a natural disaster were 25% more likely to fall in poverty between 2006-2011¹⁴⁾. A positive correlation between low-income residents becomes victims because of lack of access to evacuation during Katrina hurricane¹⁵⁾. In Indonesia, low-income households engaged in family farm businesses, particularly rice farming, are most vulnerable to weather extremes¹⁶⁾.

2.2 Coping Strategy For Disaster And Poverty Reduction

The adverse impact of natural hazards underpinned with classic poverty issues becomes obstacles to achieving a sustainable, inclusive, and resilient society. There are three approaches to deal with these issues that potentially link each other: social protection, disaster risk reduction, and climate change adaptation.

Social protection plays an essential role in strengthening systems' resilience could be households or communities, achieving more significant equity, and supporting national human and economic development ¹⁷⁾¹⁸⁾. Social protection programs reduce poverty and inequality, help households manage risks, reduce the incidence and impact of shocks, and build human. Social protection experiences broader its narrow meaning since 1980s that use to be a similar "safety net" transform to a "set of all initiatives, both formal and informal, that provide¹⁹⁾:

- social assistance to extremely poor individuals and households
- social services to groups who need special care or would otherwise be denied access to basic services
- social insurance to protect people against the risks and consequences of livelihood

Moreover, the same author also distinguishes the definition of social protection into prevention, protection, and promotion popular, and included a transformative rights-based function.

Disaster reduction is an intervention to reduce exposure to hazards, decrease vulnerability, manage land and the environment, and improve preparedness for adverse events. Previously disaster countermeasures only focus on the emergency state but later shifting the coverage from preparedness until the response stage. Disaster risk reduction focuses not only a natural disaster but also a manmade-societal disaster to tackle with ²⁰⁾. A turning point in the history of disaster risk reduction (DRR) was the intergovernmental commitment through the United Nations to foster disaster risk management during the International Decade for Natural Disaster Reduction in 1990-1999 21).

Climate change, which is the result of global warming, will be revealed through changes in climatic and atmospheric factors and a host of other changes and interactions ²²⁾. It can be identified from the changing of rainfall, temperature, and CO2 concentration, so become additional challenges to existing historic weather-related shocks, including more severe drought impacts, heat waves, and accelerated glacier retreat, hurricane intensity, and sea-level rise ²³⁾. Climate change is continuously existing disrupting the socio-economic vulnerabilities, especially in developing countries with high exposure and low adaptive capacity ²⁴⁾. There are two mechanisms in dealing with climate change impact: climate change adaptation and climate change mitigation that need to balance facing similar barriers ^{25) 26)}.

Furthermore, climate change adaptation is an effort to moderate or avoid harm or exploit beneficial opportunities. Human intervention may facilitate adjustment to the expected climate and its effects ²⁴). Interest in adaptation developed relatively recently compared to mitigation, and as a result, adaptation research is still in the early stages and often inadequate, especially in developing countries ²⁷).

Since the issues are connected between poverty with disaster and climate change effect, vice versa, so the coping strategies could be connected and have an integrated solution. From social protection, disaster risk reduction, and climate change adaptation linked by an essential concern with reducing vulnerability and building resilience, be it to poverty, disasters, or long-term changes in average climate conditions and their distribution over time and space ⁶⁾.

2.3. Methods

The authors took several literature categories to describe the difference and similarity among three concepts; social protection, disaster risk reduction, and climate change adaptation. It is not only detailing each of them but also the find out the intersection between them. Through content analysis and desk-study measurements, authors raise the question to address the gap among previous literature and conceptual thinking due to the concept integration. We collect earlier studies from the research paper, review paper, and project report until policy brief to summarize the concepts' positioning. Also, add a case study in Indonesia, a country wants to synergize the three approaches. In the case study, explore Indonesia's readiness through the existing policies, strategies, and programs to mainstream the integration.

3. RESULT AND DISCUSSION

This part consist is designated to answer the research question that has been raised in the first part. The first is to identify the global discourse of integrations three concepts. The second is to determine if Indonesia has the potential to integrate the coping concepts into one comprehensive approach.

3.1 The Integration of Three Approaches In Global Discourse as Planning Tools

A fundamental question to raise is why it needs integration since each concept was established for a long time individually. Secondly is to know how to make it integrate based on the existing discourse.

1) Why Should Integrate?

Answering this fundamental question is starting to bold the urgency of the substance's problems. Disaster includes climate change effect, and poverty is like eggs and chicken that have reciprocal action. Increased disaster risks are also expected to intensify poverty. On the contrary, vulnerability regarding environmental degradation and disaster is produced by local inequalities when dealing with shocks as an outcome in different people groups ^{8) 28)}. Therefore, the most affected because of these multiple incidents is the poor group²⁹⁾.

The risk impact created probabilities to become deprived. Like a vicious circle, the almost poor become poor, or even the poor become poorer. Within this limited condition, they anxious about the next future risk. The more exposure to hazard made poor households more vulnerable to the disruption. Simultaneously, they face limited assets as they deal with the successive environmental shocks and stress that occurred in their poor settlement area rapidly. Natural disasters force poor households to make choices that have harmful long-term effects that affect households and daily activities such as withdrawing a child from school or cutting health care expenses³⁰⁾. In short way natural disaster, even climate change drives not only hazards but also vulnerabilities³¹⁾.

It assumes that being poor and vulnerability has a causal effect connection. Poverty traps become a thread if there less intervention to the vulnerable status. Moreover, to resolve this problem is to have a solution that considers these two issues at once, not only partially. It is hard to explain one without addressing the other. Hence the integration approach might be the best option to tackle it. Next, it needs to integrate because these approaches have similarities among the differences that complete each other, making an integrative and comprehensive solution for the issues connected to prior knowledge.

Each of these approaches has a challenge in the implementation. Climate change is one contributor to disaster risk amongst many, while this phenomenon

will make social protection goals harder to achieve and change the types of risks that poor people face ⁸⁾. On the other side, poor and limited conditions in vulnerable status complicated the hazard risk mitigation.

There are some characteristics of social protection, climate change adaptation can be identified as difference and similarity.

Tabel 1 The characteristics between social protection, disaster risk reduction and climate change adaptation

Indicators	Social	Disaster	Climate	
mulcators	Protection	Risk		
	Fiotection	111311	Change	
	a	Reduction	Adaptation	
Core	Cushion the	Prevent and	Adapt the	
concept	idiosyncratic	response to	changing	
	and covariate	disaster	process	
	risk/disruption	affect	cause by	
			climate	
Discipline	Development	Physical	Social	
background	and	science	development	
	welfare		and physical	
	economics		sciences	
Global	ILO,	UNDRR	UNFCC-	
Platform	UNESCAP,	Sendai	The Paris	
	OECD task	Framework	Agreement	
	group	for Disaster		
	C 1	Risk		
		Reduction		
Similarity	All seek to mitig	ate risks faced	by poor	
	people; tackle the impact of, and seek to build			
	resilience against, shocks and stresses on			
	livelihoods. All of them are form of external			
	intervention that can stimulate the internal			
	system resilience. So need agents to lead the changing. All of them developed to enhance			
	the adaptive capacity of the vulnerable			
	systems (individual, community, state etc)			
	by storing (intervioual, community, state etc)			

Social protection as a concept for poverty alleviation can be combined with disaster risk reduction, including climate change adaptation countermeasures for natural disruption. It can be seen when a global assessment has been considering integration. The Sendai Framework for Disaster Risk Reduction 2015-2030 promotes the development of social protection as an instrument for building resilience to disasters and emphasizes the importance of safety net mechanisms for integrating disaster risk reduction with measures to reduce poverty, enhance the livelihood, and improve access to health care and essential services 32). Social protection was mentioned as tools to improve and promote the comprehensive risk, including climate change effect in Forum for Damage and Loss in Warsaw ³³⁾. It is in line with The Paris Agreement on Climate Change calls for climate change adaptation by integrating adaptation into relevant socioeconomic and environmental policies and actions. Meanwhile, recently, it has evolved to address adaptive social protection systems to global change challenges like migration, climate change, and environmental degradation through insurance and livelihoods diversification, a safety net to enhance the adaptive capacity ^{8) 34)}.

It indicated the high-level recognition that integrates climate and disaster risk considerations into social protection programs' planning and design. The sector can help prevent poor and vulnerable households from falling deeper into poverty, reduce their overall exposure to risk, and contribute to long-term adaptation to climate change ⁸⁾.

2) How would it be integrated?

We knew the reason and urgent of three concepts should connect from the previous subchapter, but how should we do to make it an integration approach still discussing in the global discourse. Practically these three approaches with each community seemed to work principally in silos, disregarding their commonalities and overlapping agendas or being unable to overcome institutional constraints or poor communication that prevented them from working together ⁹⁾. According to the previous, most studies that promote integration are using social protection as primary tools to improve with the disaster risk reduction and climate change adaptation because they have an overall objective of reducing vulnerability (idiosyncratic and covariate events).

The old version of social protection programs focusing on addressing current vulnerabilities will not be sufficient to support poor households deal with future vulnerabilities and strengthen adaptive capacity. Social protection ensures people absorb the adverse impacts of hazards without taking actions that put their livelihoods at risk and can still meet their basic needs if can be planning and design with risk consideration, early warning systems, social protection programs support to ensure³⁵⁾.

Earlier, three new approaches contribute to strengthening the resilience of people to shocks and disaster consist of shock responsive -social protection, next climate responsive-social protection, and recently adaptive social protection³⁶.

The first occurs shock responsive -social protection focusing on determining how the safety net protects the vulnerable ones caused by disaster or humanitarian crisis ³⁷⁾ Besides social protection and disaster reduction, it also including humanitarian assistance. It emphasizes response disaster victims with aid and intervention. It is more toward shortterm responses focusing on relief interventions to improve the coping strategies and absorptive capacities of the populations affected by shocks 9). The instruments used in this approach include conditional cash transfers, near-cash instruments such as vouchers and fee waivers, social funds, and specific services such as child protection, orphanages, and rehabilitation for persons with disabilities ³⁸⁾. In line with the shift, the disaster risk reduction away from reactive, post-disaster coping strategies, such as providing food aid, towards more proactive and longterm disaster preparedness and management, so when it is related to social protection, make a broader approach more preventive.

Hence, the second attempt, called climate-responsive social protection, functions as ex-ante prevention against shocks (e.g. social insurance and risk diversification programs). Social protection can contribute to climate resilience and interventions in the water, agriculture, urban planning, and disaster risk reduction area. There are basic principles for climate-responsive social protections based on World bank Report:

i) Climate aware planning: involving flexibility and feedback systems of climate situation also predictable ex-ante financing, ii) Interventions placed on livelihoods: understanding how household decision-making and strategies will change, understanding power relations and differing vulnerabilities, iii) a focus on building adaptive capacity at all levels: climate change is a covariate risk, so strategies must include community and national level plans, including local empowerment 8).

The last is accumulated of three approaches names Adaptive Social Protection (ASP). It is a transformation form based on the two previous approaches that cover a broader definition. It is an integrated approach of social protection, disaster risk reduction and climate change adaptation, resulting in the chance to have more impact on people's vulnerability and help them escape poverty ³⁹⁾.

Adaptive social protection involves examining the role of social protection in strengthening adaptation made more robust in the face of current and future shocks. Below is the picture that modify from Davies, 2009⁴⁰⁾



Fig.1 Adaptive Social Protection

Adaptive social protection occurred in late 2000 by researchers from the Institute of Development Studies in UK. ASP claimed can reduce vulnerability by play a critical role in lowering/buffering the negative impact of climate change and disaster ³⁹⁾. This framework is used by World Bank to have a pilot project in 6 countries (Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal). This project improves and develops in several developing countries with different agencies to lead in each country. Along with implementing the concept, ASP advances the indicators and considers the Sustainable Livelihoods Framework, which describes how people utilize different forms of capital, such as natural or financial resources, to construct a living ^{41) 42)}.

The existence of Adaptive Social Protection basically try to improve the existing social protection with the climate and disaster consideration. So based on O'Brien also Bowen, here is how to scaling up the protection program^{36) 43)} such as:

- 1. **Design tweaks** are small adjustments to a routine social protection program
- 2. **Vertical expansion** is the temporary increase of the value or duration of a social protection intervention to meet the additional needs of existing beneficiaries.
- 3. **Horizontal expansion** is the temporary inclusion of new beneficiaries from disaster-affected communities into a social protection program, by extending geographical coverage, enrolling more

eligible households in existing areas, or altering the enrolment criteria.

- 4. **Piggybacking** occurs when an emergency response uses part of an established system or program while delivering something new
- 5. **Alignment** describes designing an intervention with elements resembling others that already exist or are planned, but without integrating the two.

3.2 The Readiness of Indonesia to have an Integrated Approaches (A Case Study)

Indonesia is a country that implements the three approaches in national development planning. As a developing country located in a risk-prone area, Indonesia challenges the poverty rate and disaster effect. In Indonesia, poor people in Indonesia have reached 25,4 million in 2019, and the poverty level 9,14 % ⁴⁴⁾. Through National Planning Agency or Bappenas report in 2019 reveal that 18 provinces with more than 10 % of the poor are also affected by disaster impact. Still, from the same source, the report analyzes that some regions with a percentage of the population affected by the disaster above the national average also have a prevalence rate of poor people above the national average.

In general, the Government of Indonesia (GoI) has many efforts to complete the countermeasure in planning and action dealing with poverty and disaster, including the climate change effect. Not only align the internal agenda with the approach but also participate in every international forum such a Sustainable Development Goals, SDG's Paris Agreement, Sendai Framework, etc.

Internally, the technical ministry that plays the role of these approaches is different. Social protection is under supervised by the Ministry of Social Affairs. Climate change adaptation is part of the Ministry Environment and Forestry task, and disaster risk reduction belongs to National Disaster Agency These become a challenge when (BNPB). "coordination" is the tough thing to achieve. However, the National Planning Agency (Bappenas) becomes a glue institution for developing the linked program among the issues. From these three Government Institutions, the Ministry of Social Affairs is the oldest ministry where having intersection managing social protection and dealing with disaster impact issues. Prior to working by

BNPB in 2007, disaster issue is part of the Ministry of Social Affairs task. Therefore, there is still division in this ministry response to disaster reduction in terms of a humanitarian context.

The countermeasures activities among poverty and disaster impact include climate change effect is held not only by the government but also by the non-government sector. Multi- stakeholder and cross-discipline are participating to gain a resilient and sustainable society. Several significant efforts lead by government and non-government identified through the explanation in Table 3 (from the appendix) Distinguish the policy, planning, or strategy from the government and program that lead by government and non-government agency.

As a mandate in the National Constitution, GoI should ensure all citizen welfare. Expressly, GoI, through the Ministry of Social Affairs, obliged to protect unconditional and conditional mechanisms for poor groups. In table stated that in policy, social protection been mandated since 2004. Many improvements have been made for strategy and planning, until in the National Medium-Term development plan (2020), GoI put comprehensive social protection named Adaptive Social Protection. Meanwhile, the programs that are still implemented until now are Program Keluarga Harapan, a national safety net scheme. This program complements the database program called Unified Database Program (BDT), which an integrated data source of social assistance beneficiaries. This BDT program was held by the Ministry of Social Affairs and coordinated with other government institutions like National Statistics, BNPB, Ministry of Internal Affairs.

Meanwhile, GoI has already constituted to manage the disaster impact from preparedness until the recovery phase for the disaster risk reduction issues. It leads by BNPB as the National Agency that since 2008 has a vital role in dealing with disaster risk issues. The strategic planning regards this issue written in the National medium-term development plan, which has mitigation action until coordinating across sectors and institutions. Disaster risk reduction programs are belongings in BPPB and in the Ministry of Social Affairs as the former institution that leads to the disaster. The reinforcement of the disaster database becomes a concern program. Additionally, TAGANA as a designated social worker and Kampung Siaga Bencana for the successful example to mainstream the disaster issues in local. The nongovernment program is also designed by UNDP that has a pilot project in 6 provinces in Indonesia.

Climate change adaptation is the latest approach among the three others. GoI accommodates the purpose of transformation in National Mandates regards Environment Protection and Management. Also, there is a policy that synchronizes with The Paris Agreement. It manifested through the mediumterm development plan/strategy and RAN API as National action plans for the adaptation. It is an effort to mainstreaming climate issues in national development. Moreover, programs in climate change adaptation have a wide range of coverage. It is from a participatory action from the local community called Program Kampung Iklim until what has been done from the international donor try to assist national and local government to blend the climate issues in the development plan.

Each approach has a fixed and firm path to establish each goal through policy, planning/strategy, and program. Even though different ministries lead to unlinked potential, some programs are already open for coordination with other agencies and Ministries.

The analysis also finds out due to the intersection among the policy, plan, and program in Indonesia in Table 2 .Through the table, we can see GoI has tried to implement the integration. In the scale of policy, GoI tries to link for two approaches, whether social protection with disaster management and climate change adaptation with disaster risk reduction. The policy not yet considers three approaches being integrated. Program PKH adaptive can be the entry point to enhance the integration among them.

The latest National Mid Term Planning 2020-2024 also stated Adaptive Social Protection as the effort of comprehensive integration. The purpose is to increase the accuracy and effectiveness of social assistance considering disaster thread, including climate hazards. It also covers for the poor and vulnerable at once.

The first phase to integrated is connecting the database registry to determine and expanding the beneficiary's target. It includes incorporating population data, social welfare data with a social assistance program, and information regarding climate risk and the disaster incident as embedded data. The second phase is creating an adaptive and flexible system mechanism in protecting vulnerable

people. It includes managing services and resources—the latest in to make integrated budgeting.

Table 2 Intersection between social protection, climate change and disaster risk reduction in Indonesia

Social Protection	Climate Change	Social
and Disaster	Adaptation and	Protection -
Management	Disaster Risk	Disaster Risk
include Climate	Reduction	Reduction -
Change Adaptation		Climate Change
		Adaptation
• UU No 13/2011	• National	National
(Handling the	medium-term	medium-
Poor) ⁴⁵⁾ :	development	term
Social protection	plan 2020-	development
for the poor due to	2024 ⁴⁷⁾ :	plan 2020-
natural disasters,	Cross cutting	2024 ⁴⁷⁾ :
the economic crisis	disaster risk	Directing
and social conflicts	reduction	adaptive
(Policy)	plans with the	social
	CCA action	protection ;
• Disaster	plans	direct to have
assistance	(Planning)	a an integrated
funding and		data, type of
management ⁴⁵⁾ :	• Housing	social aid
Manage social	Stimulant	(Planning)
assistance funds to	$Funds^{48)}$:	
local governments	Housing	• PKH
(Policy)	improvement	Adaptif ⁴⁵⁾ :
	funds for	Social
• TAGANA ⁴⁵⁾ :	residents.	assistance
Community based	(Program)	program to
voluntary group		poor
related to disaster	• Kampung	household that
management	Siaga	add natural
(Program)	Bencana ⁴⁵⁾ :	disaster
	Community-	victims, social
Agricultural	based disaster	disaster
insurance	management	victims and
facilities ⁴⁶⁾ :	and	remote
Insurance for	strengthening	community
farmer due crop	social	as
failure from crop	interaction of	beneficiaries
failure (<i>Program</i>)	community	(Program)
	member	
	(Program)	

6. CONCLUSION

Since being poor and vulnerable has a causal effect connection, the countermeasures need to correlate the three concepts of social protection, disaster risk reduction, and climate change adaptation. Each approach already established the path with the various principal and programs base on each goal. However, they are still a gap that can be complete from one to another. Many types of integration from the shock responsive social protection, climate shock responsive until the ultimate one is adaptive social protection that strengthening adaptation to be more robust in the face of current and future shocks.

Indonesia is one of the countries' potential to implement an adaptive social protection scheme. The existing policy, planning/strategy, and programs lead to integration among the approaches. It has been mentioned in the National Mid-Term Development Plan (2020-2024), the entry point to hold the adaptive social protection starts from integration data among three entities (stakeholders and ministries). Then the following steps are creating a flexible system of protection, includes the institution and budgeting mechanism.

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APPENDIX

Tabel 3 Policy, planning and program on social protection, climate change adaptation and disaster risk reduction in Indonesia

	POLICY	PLANNING	PROGRAM
Social Protection	UU No 40/2004, National Social Security System: Regulations regarding universal social protection and security for every citizen UU No 13/2011, Handling the Poor: Social security and protection for the poor UU No 24/2011, Social Security Administrator and PERPRES No 46/2015, Ministry of Social Affair: Regulations regarding the implementing agency for social protection	PERPRES No 18/2020, National medium-term development plan 2020-2024: A comprehensive social protection schemes to increases effectiveness social assistance program especially for the poor and vulnerable Directing Adaptive Social Protection that put climate change and natural disasters as part to consider in social protection	Program Keluarga Harapan: National Conditional cash transfer program to poor household also with family development session which has regional assistant Unified Database (BDT): A single database for all national Social Assistance Programs. Registry that categorized of poor families
Climate Change Adaptation	UU No 32/2009, Environment Protection and Management: An adaptation and mitigation to climate change as part of environment issues UU No 16/2016, Authorization of Paris Agreement The ratification of the Paris treaty into Indonesia regulation and program PERPRES No 16/2015, Ministry of Environment and Forestry: Managing the institution that operate climate change adaptation and mitigation activity include the guideline in CCA activities	RAN-API: National action plans for adaptation because of impact of climate change in marine and coastal Sector, water, agriculture and health) which is coordinated and integrated with all stakeholders PERPRES No 18/2020 National medium-term development plan 2020-2024: Planning to protect food security and public health against climate change	Program Kampung Iklim: Participatory action led in local community regards climate hazard and its impact climate-related disease control; handling sea level rise; increasing vegetation cover and others Climate change adaptation and resilience (APIK): Assist the GoI integrating CCA plan in RAN API and DRR from local to national levels.
Disaster Risk Reduction	UU No 24/2007, Disaster Management: Highest mandates as principal for disaster management in Indonesia. Government is responsible for disaster risk reduction, disaster protection, recovery from disaster impacts and related budgets PERPRES NO 8/2008, National disaster management Authority: Following decentralisation, National disaster management agency up to district levels	PERPRES No 18/2020, National medium-term development plan 2020-2024: Strengthening Disaster Data, Information Improvement of Mitigation, Management and Infrastructure Integration of policies and spatial planning based on DRR Strengthening the integrated multi-threat disaster mitigation system, National plan disaster management 2015-2019: Guidelines for cross stakeholder to have an integrated and comprehensive plan	Disaster data and information management: One single entries data about disaster information Kampung Siaga Bencana: Community-based disaster management and strengthening social interaction of community member TAGANA: Social worker with that related to disaster management Safer Communities through Disaster Risk Reduction in Development (SC-DRR) by UNDP: Assisting the Government to link the National Disaster Management Plan with provincial level