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FINAL REPORT

Community-Based

Disaster Risk Management

(CBDRM) Policy Review in

Indonesia

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Executive Summary

As a disaster-prone country, Indonesia must cope with the constant risk of multi-hazards. National Disaster Management Agency (BNPB) in 2017 recorded that 148.4 million people live in earthquake-prone areas, 5 million in tsunami-prone areas, 1.2 million people in volcanic eruption-prone areas, 63.7 million people in flood-prone areas, and 40.9 million people live in landslide-prone areas. The situation has put communities in disaster-prone areas as the most vulnerable groups. Above all, the reoccurrences of disasters in Indonesia have shaped the country's disaster risk reduction (DRR) movement.

At the global level, the concept of community-based disaster risk management (CBDRM) emerged as an alternative to disaster management in the 1980s and 1990s. In Indonesia, the history of disaster risk reduction (DRR) can't be separated from the emergence of CBDRM in various regions. For instance, the DRR carried by the community who lived in the slopes of Mount Merapi after the major eruption that occurred in 1994 in Turgo. This community movement towards DRR are driven by the common goal to address the surrounding disaster hazard. It further developed as a joint effort to build preparedness, strengthen knowledge, be prepared in emergency response, and recover from post disaster.

A number of good practices have been produced and become a new knowledge that brought changes and progress in strengthening the governance of DRM in Indonesia. This includes climate change adaptation, inclusive CBDRM, gender equality, livelihoods, MSMEs Resilient (UMKM Tangguh), children and young people, sustainable economy, and COVID-19 and social protection. The institutionalisation of CBDRM started in 2005 is a result of NGOs and INGOs programmes that directly target communities in disaster-prone areas to build resilience by integrating cross-cutting issues. These organisations then established their own departments in DRR and Humanitarian and placed their experts to implement the programmes in various regions. Due to the unique characteristics of each community, the methodologies of CBDRM are diverse.

This includes, SIAP SIAGA, the five-year programme (2019-2024) on Disaster Risk Management (DRM) from the Australia-Indonesia Partnership. SIAP SIAGA supports the National Disaster Management Agency (BNPB) and local governments in the four target provinces to carry out activities to achieve the following outcomes related to CBDRM:

1. Develop a welfare-based resilient village (Desa Tangguh Bencana/Destana) model. This model integrates livelihoods, gender equality and social inclusion, disaster risk reduction, and environmental sustainability to be further developed and adopted by BNPB and other relevant ministries/institutions (M/A). It is carried out to demonstrate the shared values and policy objectives and implementation that are integrated and inclusive.
2. Improve village resilience strategies and systems that are inclusive, accountable, and appropriate to local contexts and practices, such as customary villages in Bali. This strengthens socio-economic aspect, in particular the new tourist destinations that are prone to disasters due to climate change. This also includes the better capacity at participatory disaster risk analysis and evaluation at the village level.

As such, this study aims to analyse policies and regulations on the effectiveness in addressing imperatives, gaps, clarity, and coherence between applicable policies, regulations, and guidelines. In particular, the document focused on the village-based programmes by M/A to

be able to provide recommendations or as position paper in drafting the regulations and/or the most strategic supporting guidelines that will enhance and strengthen the clarity and coherence of CBDRM policies in Indonesia.

This study used a combination of online and offline based qualitative and quantitative methodologies. There are 5 (five) main methods used in this study, including: (1) Desk study, (2) Focus Group Discussion (FGD), (3) Online survey on CBDRM, (4) Semi-structured interviews, and (5) National CBDRM Conference XIV 2021 in plenary and group sessions. This research method used a participatory approach involving 20 sub-regions or provinces representing nine major islands in Indonesia: Sumatra, Java, Bali, West Nusa Tenggara (NTB), East Nusa Tenggara (NTT), Sulawesi, Kalimantan, Maluku, and Papua. It used a regional approach through a reflection process on CBDRM and its dynamics in accordance with the local context involving penta-helix (the government, civil society organisations, universities, business institutions, and the media). The document focused on how policies both at the national and village levels can support the CBDRM movement in Indonesia based on the good practices result produced by the communities in disaster-prone areas to build their resilience.

To determine the level of village-based programs effectiveness, the researcher conducted an online survey covering three issues on (1) village-based programs, (2) supporting policies, and (3) data and information on village-based programs in Indonesia. The survey involved 174 respondents that represent the penta-helix throughout Indonesia in the period of August–September 2021 with the ratio of 76.2% male to 23.78% female. The survey found 90% of respondents agree the village-based programs that were implemented directly could support CBDRM in the village or could be part of efforts to build the village resilience. However, regarding the integration of village-based programmed into village development planning, 46.26% stated yes, and 34.69% stated no, and 19.05% stated don't know. Forms of integration that can be done in village-based programs are policies, funding, resources sharing, achievement indicators, and program implementation.

The supporting factors that strengthen village-based programmes synergised in developing the village resilience are (1) the integration of village-based programmes into village development planning, (2) increasing knowledge and institutional capacity in villages and local governments, (3) programme funding that regulated in regional policies, (4) village facilitators and assistants, (5) CBDRM data and information availability in the village, and (6) to be included in work program of Regional Working Unit (OPD). CBDRM policies are translated in strategic or structural and operational policies that support the existing policies to be implemented at the village level. M/A have no authorities to do direct implementation at the village, instead, it is handed to the regions as regulated in Law 23/2014 on Regional Government.

Operational policy is issued to be able to become a guidance for the structure underneath in implementing the programs in accordance with its authority. Village-based programs carried out by the M/A are based on relevant ministerial regulations that further adopted to be used as references for NGOs, INGOs, civil organisations, and communities in implementing the CBDRM. It becomes a reference in formulating a program, determine goals, outputs, and outcomes, and how to implement them in accordance with achievement indicators. This policy contains guidelines, indicators, and instruments to measure achieving indicators that serve as

guidelines in implementing a program. The village-based program developed by M/A becomes a reference for regions and villages in regional development.

In general, village-based programs have been strongly supported by existing policies, but these policies have not been in synergy with one another, especially in village development planning. It is shown through survey where 54.9% of respondents stated village-based programs did not synergise, 24.7% said they do not know, and only 20.4% stated that village-based programs are synergised. It is also strongly influenced by the supporting factors mentioned above. M/A programs can be synergised if there are supporting policies that can structurally cover the needs from the survey results, which are (1) cross-sectoral or cross-ministry policies that complement and strengthen each other, (2) budget allocation in the regions and villages, (3) key indicators that can be measured and can synergise the indicators in each program, (4) implementation focuses on processes not just activities, (5) the same program location for strengthening in the village.

Structural policy is a strategic policy that can move all components from the centre and regions to implement plans and programs that achieve the big goals outlined in the National–Provincial–Regency/City Medium Term Development Plan down to the village. This policy is mandatory to be implemented in every governance system. This policy is closely related to Planning, Budgeting, Strategic Programs, and Work Programs from the highest to the lowest or village level. Institutionally, CBDRM currently has a fairly strong umbrella policy, but it must remain as a grassroots movement that grows from local communities in developing resilience. The results of the evidence and good practices of the CBDRM program in Indonesia have now evolved in various sectors, the latest of which is how communities and villages adapt to the COVID-19 pandemic in their programmes. The institutionalisation of CBDRM through policies must refer to strategic policies that ensure the CBDRM program in the villages can become a work program in regional development planning. The escorting of CBDRM included in the regional development plan must start from ensuring that the team working on document preparation and the village facilitators who facilitate the village planning process have the same understanding of CBDRM. Therefore, it can be stated in the document by synchronising the nomenclature in village policies and escorting the facilitation process until the establishment of the Village Medium Term Development Plan document.

Many village-based programs have been contributed by M/A and various organisations working on community empowerment issues. Based on the mapping results from the Coordinating Ministry for Human Development and Culture in 2019, 5,077 villages have been registered with village-based program interventions, not including programs initiated directly by the village or programs that contribute to disaster management in the community. The survey results show that the community is unable to obtain data and information about village-based programs that are relevant to CBDRM. 67.1% stated that data and information on village-based programs were not available, 32.9% said they could access data and information which in general are program subjects who were connected to local governments, universities, and NGOs/INGOs that had program bases in the village. Meanwhile 68% of respondents stated that data and information on village-based programs were difficult to access, and 31.6% stated that they were accessible. The data and information that are very much needed are the name, location, results, facilitator(s), and duration of the programme. These data are critical to find out the gaps of disaster-prone areas with no programme implementation. The form of data and information needed by most respondents stated that there was a need for a data and information visualisation dashboard in which information could be accessed on social media

and websites. In addition, there is also a suggestion for a data collection form that can be used by villages or communities that are able to automatically update the village-based data program. The CBDRM directory is also needed to be able to identify CBDRM subjects, whether they are organisations or communities that implement the CBDRM programs. Moreover, with a massive communication mechanism, it is necessary to develop a chatbot model to be able to disseminate CBDRM data and information in Indonesia via WhatsApp, Telegram, and SMS that can be connected to Indonesia CBDRM database.

The reflection process in 19 regions, from 20 contributing regions, 3 plenary sessions, and 15 thematic discussions in National CBDRM Conference XIV 2021 involved more than 8,000 participants from all parts of Indonesia consisting of the public, communities, volunteers, civil society organisations including organisations of persons with disabilities, faith-based institutions, government, private entities, mass media, and academics. The research findings in 20 regions highlight the needs to strengthen **(1) CBDRM Governance: Operational Policies, Funding Mechanisms, and CBDRM Institutionalisation; (2) Resilient Model, Expansion Strategy including replication, modification, innovation, and collaboration; and (3) Monitoring and Evaluation of CBDRM in Indonesia: Quality Control, Strengthening CBDRM Movements/Programs, Independence and Sustainability** to realise sovereignty, benefit, independence, sustainability, and the dissemination of CBDRM practices in Indonesia, particularly in disaster-prone areas.

Glossary

BNPB	National Board for Disaster Management
BPBDs	Regional Board for Disaster Management
Destana	Disaster Resilient Village
DRR	Disaster Risk Reduction
FGD	Focus Group Discussion
CBDRM	Community Based Disaster Risk Management
KN PRBBK	National Conference on Community Based Disaster Risk Management
GPDRR	Global Platform for Disaster Risk Reduction
CBNRM	Community-Based Natural Resource Management
CBDRM	Community-Based Disaster Risk Management
CSDRM	Climate Smart Disaster Risk Management
NGO	Non-Government Organisation
INGO	International Non-Government Organisation
UU/Law	Law
PP	Government Regulation
Perpres	Presidential Regulation
Permen	Ministerial Regulations
MSMEs,	Medium, Small, Micro-scale Enterprises
MER	Minerals and Energy Resources
Ministry of Environment and Forestry	Ministry of Environment and Forestry
Ministry of Social Affairs	Ministry of Social Affairs
Ministry of Agriculture	Ministry of Agriculture
MTCE	Ministry of Tourism and Creative Economy
Ministry for HDCA	Coordinating Ministry for Human Development and Cultural Affairs
RGB	Regional Government Budget
IB	The Indonesian Budget:
M/A	Ministries/Agencies
NMTDP	National Medium Term Development Plan
RMTDP	Regional Medium Term Development Plan
INS	Indonesian National Standard
MSS	Minimum Service Standards

Table 1. List of Abbreviations

Background

Indonesia is a country that has multiple disaster hazard, in fact, not a few people live in the disaster-prone areas. Indonesian National Board for Disaster Management in 2017 recorded that 148.4 million people live in earthquake-prone areas, 5 million in tsunami-prone areas, 1.2 million people in volcanic eruption-prone areas, 63.7 million people in flood-prone areas, and 40.9 million people live in landslide-prone areas. This condition places the people or communities in disaster-prone areas as the most vulnerable groups. The history of the Disaster Risk Management (DRM) movement in Indonesia cannot be separated from the succession of disasters that have occurred in Indonesia. At the global level, the concept of community-based disaster risk management emerged as an alternative in the 1980s and 1990s. In Indonesia, the history of the development of Disaster Risk Reduction cannot be separated from the emergence of CBDRM movements in various areas. For instance, the Disaster Risk Management carried out by the people living on the slopes of Mount Merapi after the major eruption that occurred in 1994 in Turgo. The community movement towards DRM efforts emerged as a result of a common goal to deal with the hazard of disasters around them. From this, it developed into a joint movement in building preparedness, strengthening knowledge, being ready to face the emergency response period, and being able to recover after being impacted by the disasters.

CBDRM appeared as the result of social movements, especially from people living in disaster-prone areas. The development of CBDRM movement in Indonesia along with the time period of 1996–1998 where the DRR (Disaster Risk Reduction) idea, which was initiated by practitioners and academics, emerged to make better disaster management practices. The 1998–2006 period was the coalition period where the DRR and CBDRM movements had become the public attention, especially after the 2004 tsunami in Aceh, where programs had begun to be organised through goals setting and developing movement strategies as an effort to build a resilient society. In 2006– 2008 the DRR movement entered a period of bureaucratisation as a legal umbrella in Indonesia issued with the Law Number 24 of 2007 concerning Disaster Management which gave new enthusiasm in the efforts to improve disaster management in Indonesia. This policy was strengthened by implementing regulations as its derivatives. including Government Regulations Number 21 of 2008 concerning Disaster Management Implementation System, Government Regulations Number 23 of 2008 concerning Participation of International Institutions and International Non-Government Organisation in Disaster Management, and Presidential Regulation Number 8 of 2008 concerning National Agency Disaster Management. From 2008 until now is included in the results period when CBDRM finds its shape and trend.

The institutionalisation of CBDRM started in 2005 from programs implemented by NGOs and INGOs that directly target communities in disaster-prone areas. It has been developed since then and has built community resilience with various integrated issues. Its process of institutionalisation is done by almost all organisations, both NGOs and the NGOs working in the community that also have departments in the field of DRR and Humanitarian. They place experts in the field of DRR when implementing the programs in various regions. Since it is implemented according to the unique conditions in each community, the CBDRM methodologies are basically very diverse. Indonesian Society for Disaster Management (MPBI), together with disaster monitoring institutions and supported by the government, national and international humanitarian agencies, academia, the private sector and the

community, has organised four CBDRM Symposiums since 2004 and 13 CBDRM National Conferences since 2009 to 2021.

Various good practices have been made as lessons and become new knowledge that has brought changes and strengthened disaster management governance in Indonesia. It includes climate change adaptation, inclusive CBDRM, gender equality, livelihoods, Resilient MSMEs (UMKM Tangguh), children and young people, economic sustainability, also the COVID-19 pandemic and social protection. In 2012, through *Perka BNPB* or Regulations of the Head of the National Board for Disaster Management Number 1 of 2012 on Guidelines for Disaster Resilient Villages has instituted CBDRM and divided community resilience to disasters into 20 indicators of resilience. The Disaster Resilience Villages (Destana) is a National and Regional Board for Disaster management program adopted from the CBDRM implemented in various regions in Indonesia. It became very massive after the issuance of Law Number 6 of 2014 concerning Villages, giving authority to villages in building and developing villages and managing its funds. More than 53,000 villages in Indonesia are located in disaster-prone areas and various village-based programs from ministries/institutions have been rolled out in all villages in Indonesia, including Disaster Resilient Village (BNPB), *Kampung Iklim* or Climate Villages (Ministry of Environment and Forestry), *Desa Siaga* or Alert Village (Ministry of Health), *Kampung Siaga Bencana* or Disaster Alerted Village (Ministry of Social Affairs), *Desa Mandiri Pangan* or Food Independent Village (Ministry of Agriculture), Energy Independent Village (Ministry of Energy and Mineral Resources), *Desa Siaga Pariwisata* or Tourism Prepared Village (Ministry of Tourism), *Desa Pesisir Tangguh* or Resilient Coastal Village (Ministry of Marine Affairs and Fisheries). Various policies have been made in strengthening villages from various sectors, this can create opportunities for the community to be reinforced further in building resilience to disasters.

As the world has been facing the COVID-19 pandemic, uncertainty of its risk and various disaster hazards have occurred. During 2020 alone, there were at least 2,952¹ hazard or disaster events in Indonesia, both associated with the climate crisis and geological processes. This condition further increases the risk level of people living in disaster-prone areas, because they must be exposed to the pandemic hazards and other disaster hazards within the past two years. For this reason, efforts to build community resilience against disaster risks and climate change that integrate economic strengthening and social protection are essential to reduce the community's vulnerability in both short and long term.

To increase the effectiveness of the village resilience approach, **SIAP SIAGA** Program supports the National Board for Disaster Management and local governments in 4 target provinces to carry out activities that achieve the following results:

1. Developing a welfare-based Disaster Resilient Village model. The Welfare-Based Disaster Resilient Village Model will combine livelihoods, gender equality and social inclusion, disaster risk reduction, and environmental sustainability to be jointly developed and adopted by the National Board for Disaster Management with other relevant ministries/institutions. It will then demonstrate the value of shared policy objectives and the implementation of inclusive and integrated policy management.
2. Improving village resilience strategies and systems that are inclusive, accountable, and appropriate to local contexts and practices (such as traditional villages in Bali). This improved system supports socio-economic strengthening, especially for new tourist

¹ BNPB 2020, "Infografis Kejadian Bencana di Indonesia 2020"

destinations that are vulnerable to climate change disasters. All of this includes better capacity for participatory disaster risk analysis and evaluation at the village level.

This document was prepared with the aim of analysing policies and regulations that focus on their effectiveness in addressing imperatives, gaps, clarity, and coherence between applicable policies, regulations and guidelines. In particular, the one that is made by the developed village-based programs to be able to provide recommendations or as position papers in drafting the regulations and/or the most strategic supporting guidelines that will enhance and strengthen the clarity and coherence of CBDRM policies in Indonesia.

Methodology

This study used a combination of online and offline based qualitative and quantitative methodologies. There are five (5) main methods used in this study, including:

1. **Desk Study** is done to review all the research documents, reports, relevant policies to the studied themes and policies on Disaster Management and its derivatives. Also for policy of village-based programs, learning outcomes of good practices from organisations/institutions programs whether they are government, academics, NGOs/INGOs, and communities.
2. **Focus Group Discussion (FGD)** with CBDRM subjects in Indonesia, including the government, academics, NGOs/INGOs, private sectors, and communities. FGD activities were carried out to explore the dynamics of CBDRM developments that can represent regional diversity of the 9 major islands in Indonesia (Sumatra, Java, Bali, NTB, NTT, Kalimantan, Sulawesi, Maluku and Papua). The reflection discussions then are used to reflect and evaluate on the CBDRM journey that has been done and implemented either in a program or in a community's movement. It would review what has been good also the gaps that still need to be improved, starting from policy governance, institutions, innovation, independence, sustainability, integration with various issues, village-based programs, data and information, and the inclusivity of CBDRM. It was held in 20 provinces, as a part of the event's series of the XIV 2021 National Community-Based Disaster Risk Management Pre-Conference.
3. **CBDRM Online Survey** was held for 2 months online which was shared through media that shares disaster, such as Whatsapp groups, Twitter, Instagram, and Facebook. This online survey aims to map perceptions of the community about the policies and resilience in the village-based programs, also how is the data and information on village resilience programs in Indonesia.
4. **Semi-Structured Interviews** with CBDRM subjects in Indonesia who are the key actors from ministries/institutions, regional governments, NGOs/INGOs, private sectors, and communities that have relevance in various community development issues based on good and bad experiences and practices that have or not have been implemented.
5. **CBDRM National Conference Session XIV 2021** to analyse and formulate important findings from the hypothesis based on the regional reflections findings made in 20 provinces. The results of these reflections then became material for discussion at the plenary session for four (4) days in this event that is held from September 20 – 24, 2021.

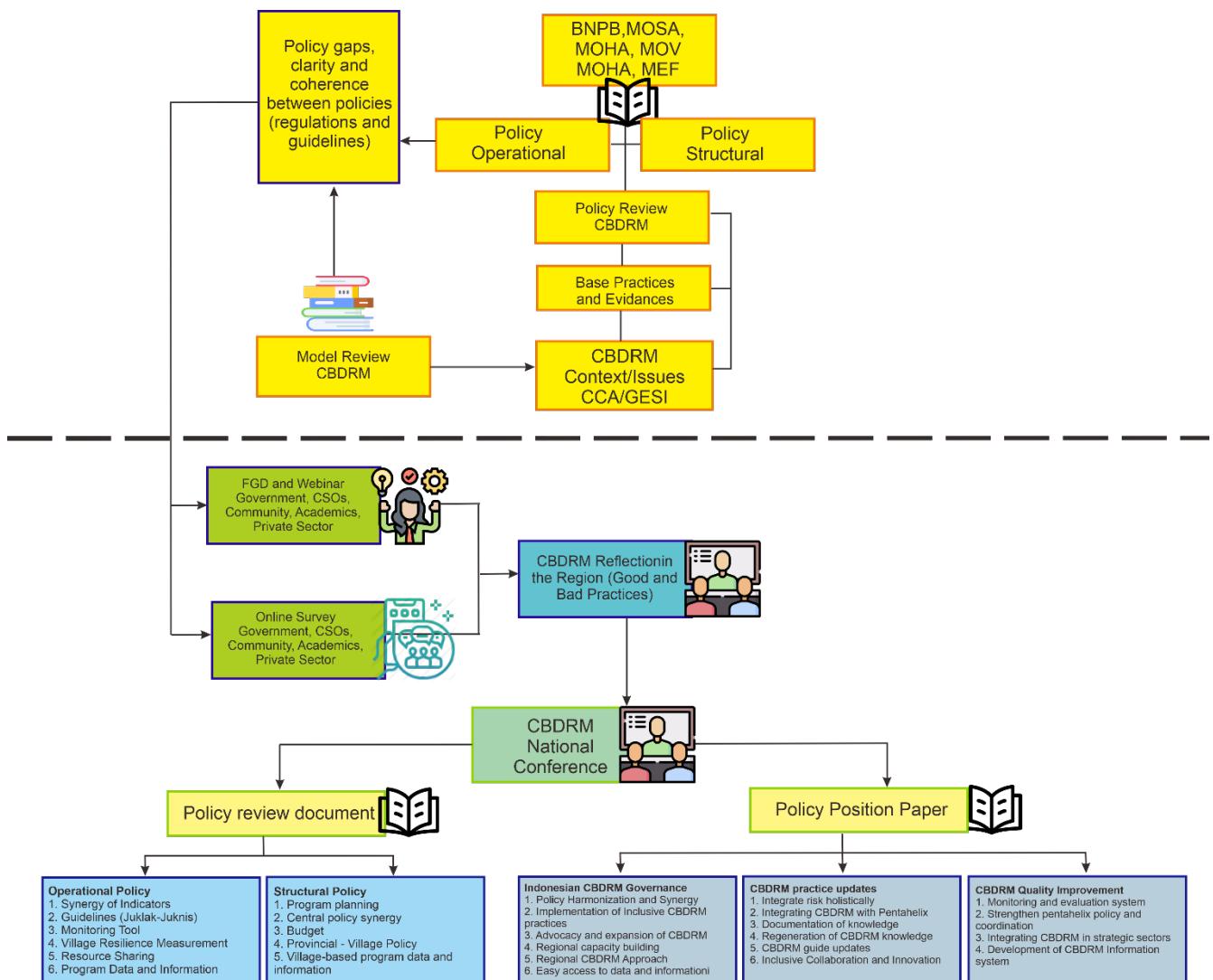


Figure 1. CBDRM Policy Review Flow Scheme

CBDRM in Indonesia

1. CBDRM is an Approach and Movement

Community-Based Disaster Risk Management becomes an approach that focuses on grassroots communities in managing the risks they face. In the disaster management cycle, placing the community as a key role must be based on the community needs. The key role community will have to manage prevention, mitigation, emergency response, and rehabilitation or reconstruction. In its global development, ever since the proclamation of International Decade for Natural Disaster Risk (IDNDR) which was then followed by the International Strategy for Disaster Reduction (ISDR), the term of Disaster Risk Reduction (DRR) has emerged which gives more messages to strengthen disaster management in anticipatory, preventive, and mitigative aspects. At the same time, terms such as "disaster management" became no longer popular and were a part of the status quo.¹ The UNISDR definition is the authoritative reference for the meaning of DRR. In a collection of terms published in 2009, DRR is defined as the concept and practice of reducing disaster risk through a systematic effort to analyse and manage the causal factors of disasters including reducing exposure to hazards, reducing human and property vulnerabilities, wise land and environmental management, and increased preparedness for adverse events.

Indonesia is faced with an uncertain situation because it is located in the meeting path of the plate and the ring of fire, which makes 80% of Indonesia's territory in disaster-prone areas. Furthermore, Indonesia is also faced with an ecological crisis coupled with the uncertainty of disasters and the impact of climate change which increases La Nina and El Nina in Indonesia. CBDRM is based on "Co-management," or community-based environmental management, which is widely used in developing countries by involving local stakeholders in government-led efforts to protect environmental resources. New policy formulation instruments were developed to provide a more anticipatory and participatory response (Jordan and Turnpenny, 2015). Good environmental governance can be seen from the participation of all parties in planning and decision making to determine policies. Community involvement in decision making is the concept of Community-Based Natural Resource Management (CBNRM), where the community has access and control over their own natural resources. Its Initiative aims to support local communities whose livelihoods are highly dependent on natural resources, such as forests and biodiversity, as well as on conservation's condition and sustainable use. Community-based approaches are starting to be widely used both in the development of village-based programs and the community's initiatives to adapt because of the pressures and hazards around them.

CBDRM governance is relevant to the environment governance which was started to be developed in the early 1980s where the local communities who are exposed to disaster risk due to environmental mismanagement, became the key actors in realising good governance from the bottom. In its development, communities cannot stand alone in risk management, it must be connected between the upstream and downstream which all have the same role and responsibility that is the efforts in reducing disaster risks. In managing Disaster Risk, it is appropriate to use a landscape base approach that has become a trend in recent decades. Originating in nineteenth-century landscape geography, its popularity since the 1980s was triggered by the debates on nature conservation, area restoration, ecosystem services, competing claims to land and natural resources, sectoral land use policies, and sustainable

development. The landscape-based approach is a multifaceted integrated strategy that aims to bring together various stakeholders from various sectors to provide solutions at various scales. It can be broadly defined as a framework for addressing increasingly pervasive and complex environmental, economic, social, and political challenges that typically transcend traditional management boundaries (Bas Arts, Marleen Buizer, et al, 2017). This approach was then developed within the community's shared risk management.

Climate change is a global problem that affects various sectors including human livelihoods (Barnett, 2010). It also has an impact on increasing the incidence of climate-related disasters, according to National Board for Disaster Management records, disaster events that occurred in the 2013 - 2020 period are 1500 to more than 2000 disaster events each year. It continues to increase and 90% of disaster events that occur in Indonesia are hydrometeorological disasters, which is due to climate change. In line with the government's target in disaster risk management, in 2009, the Global Facility for Disaster Reduction and Recovery (GFDRR) held a policy convention in Stockholm, Sweden with the theme 'Climate Smart Disaster Risk Management'. The forum brought together global climate and disaster experts to develop a new approach called Climate Smart Disaster Risk Management (CSDRM). CSDRM provides guidance on strategic planning, program development and policy making, which is used as an assessment of the effectiveness of existing Disaster Risk Management policies, projects, and programs, in the context of climate change. The CSDRM approach considers disaster risk reduction and climate change adaptation actions in response to current and future climate variability. There are three main pillars in the CSDRM approach, which are primarily related to The Progression of Vulnerability from root causes to unsafe conditions (Wisner et al. 2004), also relates to resilience, adaptive capacity, and uncertainty (e.g. Holling, 1973 & Folke, 2006). The three pillars are: (1) Addressing changing disaster risk and uncertainty, (2) Increasing adaptive capacity, and (3) Addressing poverty, vulnerability, and its structural causes.

According to Tom Mitchell (2010) as in Vincent and Mambo (2017), the concept of CSDRM is the first step in adapting with the climate change and variability to assist policy makers with practical steps to allocate resources and reduce current and future risks at all levels. It is also an evidence-based approach to incorporate climate change into current disaster reduction models. The following is an overview of the CSDRM concept:

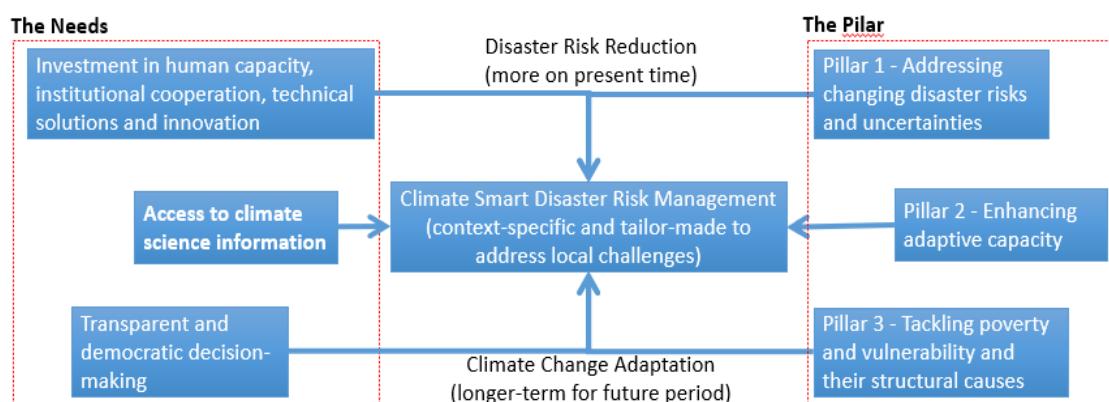


Figure 2. Climate Smart Disaster Risk Management Concepts

Source: Modified from Mitchell et al. (2010)

The CBDRM methodology in Indonesia has been developing in terms of enriching cross-sectoral issues including climate change, livelihoods, health, socio-culture, agriculture, gender, and disability inclusion which enables all CBDRM practitioners to continue develop. On the other hand, the community has become more independent as well. Various methodologies are not documented, and each organisation has its own way of managing data and information, so the CBDRM movement is not yet fully documented. However, efforts to expand the application of appropriate perspectives and methodologies also inspire the practitioners to encourage the government's involvement through policy formulation, program planning, and budgeting that supports CBDRM. This can be seen from the many village-based programs which basically have the same goal of building village independence and resilience from various issues that should be synergised.

2. The Journey of CBDRM in Indonesia

Nugroho and Men Yon, 2011, have conducted research on CBDRM in Indonesia and divided its stages based on the theory of social movements. Hulbert Blumer identified four stages of social movements, which are "social ferment", "popular excitement", "formalisation", and "institutionalisation". Nevertheless, the stages of the social movement are still relevant to the stages of the CBDRM journey in Indonesia. CBDRM requires a hub to map out and become a centre of knowledge on CBDRM developments that can be used as a reference for the annual activities' participants, both the Symposium/National Conference on Community-Based Disaster Risk Management and the DRR Month which is held every October as part of Knowledge Hub for CBDRM and DRR in Indonesia.

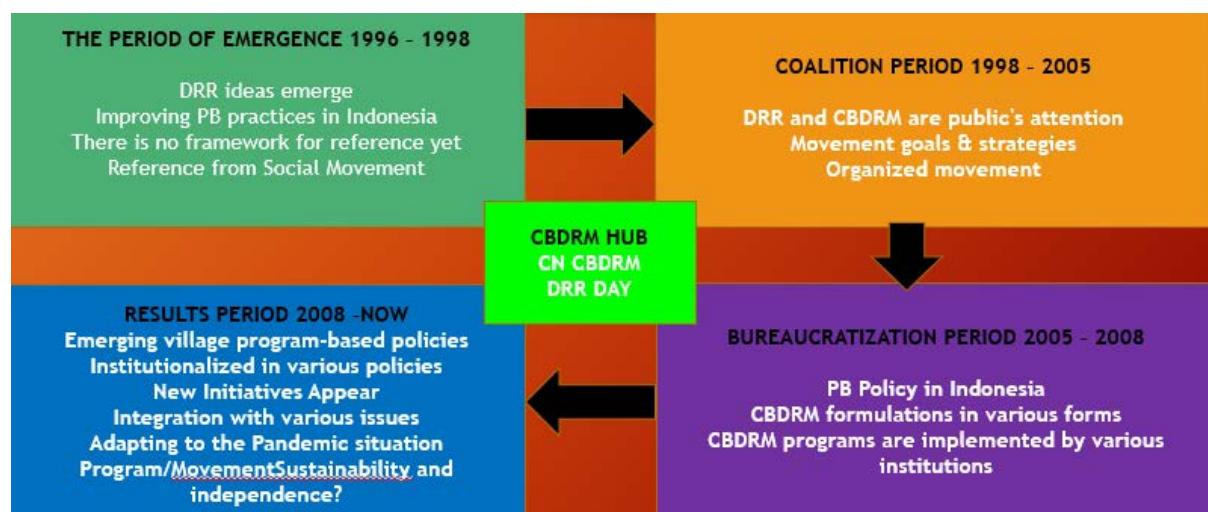


Figure 3. The stages of the CBDRM period in Indonesia from its emergence until now

a. Emergence Period

The emergence of CBDRM in Indonesia was initiated by the emergence of DRR ideas in the world and in Indonesia. Kappala Indonesia (Community of Nature Lovers and Environmentalists) together with the people of Turgo Village, South Slope of Mount Merapi, after the 1994 eruption, started the idea of developing the community's preparedness in disaster-prone areas. First is to begin recognising the hazard characteristics of Mount Merapi, then to conduct participatory disaster risk studies and build the community preparedness

mechanism in facing the hazards of Mount Merapi disaster. The efforts succeeded in building the knowledge and capacity of the community in mobilising their resources for disaster preparedness. At this time, the emergence of CBDRM was based on the movement of people in disaster-prone areas, meanwhile during this period, there was a gap between the government and the community in managing disaster hazards since the paradigm shift was not raised yet.

Following the good lessons that started from the community's movement, the idea of Disaster Risk Reduction began to emerge from academics and practitioners who saw that there was still no framework that could be used in Indonesia. To bridge this, ideas emerged to improve the practice of Disaster Management (DM) in Indonesia. These ideas were then used as material for discussion by academics and practitioners, also involved several communities whose intent were to be held in the 1996-1998 period.

b. Coalition Period

In this period DRR and CBDRM have become a new paradigm, with many disaster events, but at this time there is still little information about disasters, not much information is obtained when an area is affected by a disaster, DRR is starting to become a public concern, the CBDRM approach is a breakthrough in development of community-based programs. DRR has started to be organised, and already has a clear goal in a program framework. There is already a global awareness that has begun to emerge to become a common concern. The Aceh Tsunami disaster in 2004 became a turning point for CBDRM which has a global framework that was adopted by all countries including Indonesia through the Hyogo Framework 2005 – 2030. During this period the form of capacity building for communities and organisations became mandatory in implementing village-based programs. CBDRM policies still do not have the power for the government to implement CBDRM programs, but the institutionalisation of CBDRM has occurred in NGO/INGO programs and donors are starting to see the CBDRM approach as an answer in efforts to reduce disaster risk in the community. The PRBBK movement which has begun to be organised has emerged as leadership in developing strategies to achieve the common goal of making the community resilient, especially those in disaster-prone areas. After the tsunami in Aceh, 90 percent of community development programs were directed at DRR programs with various models and approaches, the need for increased resources, community assistance tended to be directed at DRR efforts, and there was a forum for knowledge sharing that brought together practitioners and actors. CBDRM was initiated by the National Symposium on Community-Based Disaster Risk Management (CBDRM) I, "Sharing Experiences on the Implementation of CBDRM", held in Yogyakarta in August 2004. This activity was complemented by a field visit to the Merapi Community. This activity is dominated by civil society organisations, academia and the community. And a little government involvement.

c. Bureaucratisation Period

Nugroho and Men Yon, 2011 stated that the stage which Blumer called formalisation shows the level of organisation and strategy of the movement coalition that is getting more established. Social movements have succeeded in raising awareness to a degree where all the individuals, groups and organisations involved have voluntarily adopted the same strategy. After the 2004 Aceh Tsunami, which became a global turning point in developing the Hyogo Framework for 2005, it is still homework for practitioners and academics in building collaborations with the government to organise Indonesia's Disaster Management. The

Indonesian Disaster Management Society, which initiated the improvement of disaster management in Indonesia, has succeeded in combining various parties and various interests to build a common consensus to make Indonesia's disaster management governance better, by promoting the issuance of the Disaster Management Law which has been initiated by civil society since 2001. and has become the attention of the DPRRI, the public consultation process is carried out and civil society escorts are carried out making CBDRM evidence as an advocacy tool that emerges from the communities. The 2006 eruption of the Merapi Volcano to the south seemed to be a test of how CBDRM had succeeded in building community preparedness for Merapi, but when all focused on Mount Merapi, an earthquake occurred on 27 May 2006, which became a turning point in the acceleration of the need for an institutionalised legal umbrella. CBDRM in Indonesia and in April 2007 Law No. 24 of 2007 concerning Disaster Management was enacted which became the legal umbrella for Disaster Management in Indonesia and was followed by its derivative regulations through Government Regulation No. 21 of 2008 concerning the Implementation of Disaster Management, Government Regulation No. 23 of 2008 concerning Participation of International Institutions and Foreign Non-Governmental Organisations in Disaster Management and gave birth to Disaster Management Institutions in Indonesia with the birth of the National Disaster Management Agency (BNPB).

The birth of Disaster Management policies in Indonesia further strengthens the formulation of CBDRM in Indonesia in various forms and issues that are mainstreamed and the Government is present as the holder of a greater mandate in protecting communities in disaster-prone areas, starting to have many CBDRM programs in various forms carried out by institutions, the increasing need human resources who have competence on DRR, massive capacity building activities on CBDRM driven by the Indonesian Disaster Management Society, the need for DRR institutions in the regions, including government, universities, business institutions, and communities, in every organisation that creates new divisions in the field of DRR and humanitarian organisations in various organisations, and CBDRM programs have become massive and have begun to be developed in various regions in Indonesia. CBDRM programs are integrated with local government based DRR programs with the aim of institutionalising the initiation of CBDRM into a policy at the regional level, especially for communities in disaster-prone areas.

d. Result Period 2008 - Present

The results period became a turning point in the development of CBDRM in Indonesia as the CBDRM Program which initially focused on the issue of building community resilience to disasters began to develop with relevant issues, there was an integration between DRR and Adaptation to Climate Change within the framework of Climate Smart Disaster Risk Management (CSDRM).), issues of adaptive agriculture, livelihood sustainability, social and economic protection, disability inclusion, gender mainstreaming and most recently the COVID-19 pandemic. During this period, mainstreaming in various issues had resulted from evidence/good practices that emerged from the development of the CBDRM program in Indonesia. CBDRM programs with a variety of issues are then institutionalised in Ministry/Agency village-based programs. Starting from the institutionalisation of CBDRM to become a Disaster Resilient Village (Destana) through BNPB Perka No. 1 of 2021 concerning Guidelines for Disaster Resilient Villages. Since 2012 until now the Destana program has been implemented in 1,111 villages/sub-districts and 541 villages have been measured through the Village/Sub-districts Resilience Assessment (PKD) based on SNI: 8357-2017 Disaster

Resilient Villages & Sub-districts (2019), 350 villages/sub-districts as Tangguh Pratama , 173 Intermediate Tangguh, and 28 Main Tangguh. In this period the institutionalisation of CBDRM was reflected in village-based programs, since 2011 the Ministry of Social Affairs has also developed the Disaster Alert Village program, the Ministry of Tourism and Creative Economy has run the Independent Tourism Village program, the Ministry of Health in 2010 developed the Active Alert Village and Sub-District Program, In 2012 the Ministry of Maritime Affairs and Fisheries also implemented the Tangguh Coastal Village program, in 2008 the Ministry of Energy and Mineral Resources implemented the Energy Independent Village program, in 2015 the Ministry of Agriculture developed a Food Independent Village Program, in 2021 the Ministry of Environment and Forestry implemented the Climate Village Program. This village-based program aims to build village community self-reliance and build community resilience from various aspects. Village-based programs are an opportunity to strengthen village resources. The Coordinating Ministry for Human Development and Culture in 2019 mapped out the distribution of village-based actors and programs relevant to CBDRM/Destana, as many as 5,077 villages that have been intervened by both Ministries/Agencies, local governments, INGOs, NGOs and communities, but data and information on village-based programs have not been integrated into one system.

Since the enactment of Law No. 6 of 2014 concerning Villages, villages have become the centre of development through village development planning that is integrated into all sectors. The village law further strengthens the role of villages, especially those in disaster-prone areas, in developing the CBDRM movement in villages/sub-district. Since 2018 disaster mitigation and management has become one of the priorities for using village funds in accordance with their authority.

CBDRM Policy in Indonesia

In terms of existing policies in Indonesia after the issuance of Law No. 24 of 2007 on Disaster Management, Disaster Management is adequate and even Indonesia has become one of the champions in the field of disaster recognised by the world, this cannot be separated from the role of and all parties because disasters are everyone's business without exception with the pentahelix collaboration approach between the government, universities, media, business institutions, and the community. Law No. 6/2014 on villages seems to be the main reference in implementing village-based programs and villages have autonomy and authority given especially in village development, but this is not enough to need policies that can be derived as operations so that village-based programs can be implemented and institutionalised in one movement in the village supported by the community.

During the research period, several pre-KN PRBBK XIV 2021 activities were carried out in the period August – September 2021, through CBDRM reflections in 20 regions/provinces representing nine (9) regions representing the diversity of contexts and issues across islands in Indonesia, including Sumatra, Java, Bali, NTB, NTT, Sulawesi, Kalimantan, Maluku and Papua, this is in line with the Bappenas Program in the 2020-2024 RPJMN seeing a development perspective based on regional characteristics, where Ministries/Agencies are encouraged to develop regional-based programs according to their characteristics through local governments. To determine the level of effectiveness related to village-based programs, researchers conducted an online survey covering three issues, including (1) village-based programs, (2) supporting policies, and (3) data and information on village-based programs in Indonesia involving 174 respondents representing pentahelix throughout Indonesia in the period August – September 2021 consisted of 76.2 male respondents and 23.78% female respondents.

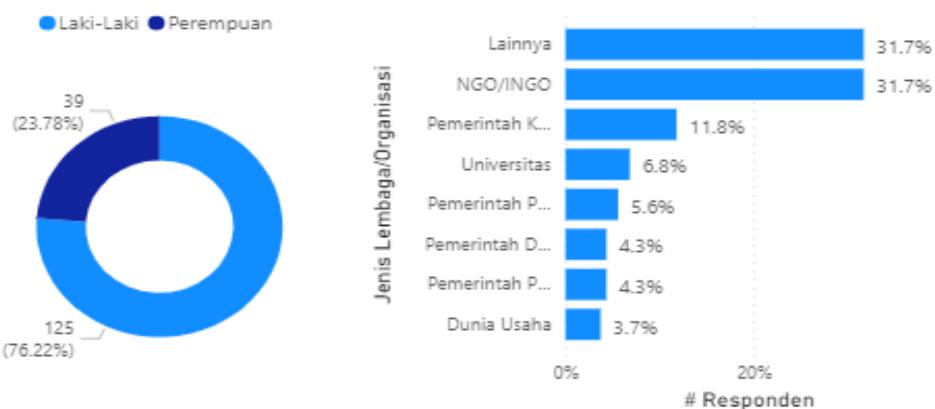


Figure 4. Online survey of village-based program policies

90% of respondents stated that village-based programs that were implemented directly could support CBDRM in the village or could be part of efforts to build village resilience, but have village-based programs been integrated into village development planning 46.26% stated that it had been integrated, 34.69% had not been integrated and 19.05 did not know whether the village-based program had been integrated. Forms of integration that can be carried out in village-based programs are policies, funding, resource sharing, achievement indicators and program implementation.

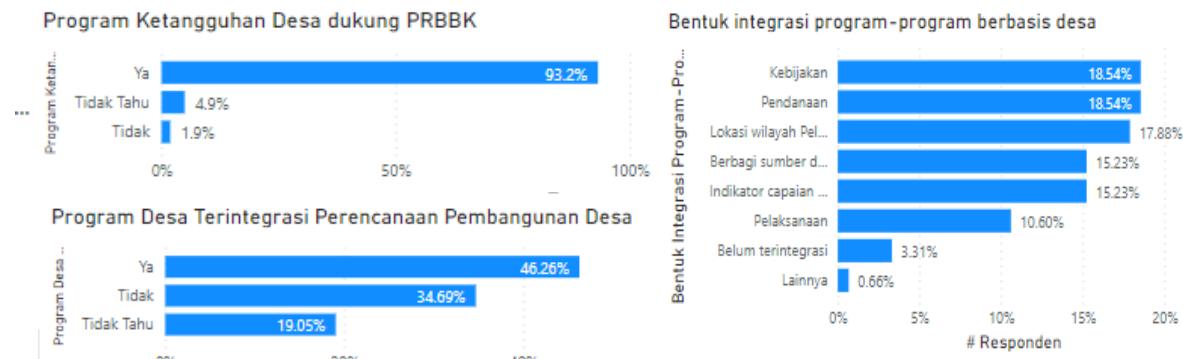


Figure 5. Survey results Integration of village-based programs with CBDRM

Village-based programs require synergy to be able to become a common goal in strengthening villages and communities, not a few village-based programs are defined as activities that are implemented in accordance with the guidelines, encourage involvement, participation of several groups in the community. village, but was unable to build a movement in the grassroots community. Several evaluations of the implementation of the Destana program in several areas which were carried out in 3 days of training, or 1 week of training and formal institutional formation were considered as Destana without a long mentoring process, this was left to the village to ensure sustainability occurred but not a few when village officials Having a good capacity this will be an opportunity in program development in the village, but on the other hand if the village government apparatus does not have the capacity in this field, it is not impossible that CBDRM will not be a concern. The policies needed in implementing village-based programs are strategic policies that can structurally provide authority to regions and villages and are equipped with technical guidelines that can be used as references. Based on the results of surveys and interviews with key respondents in the regions and villages, the supporting factors that strengthen village-based programs synergised in building village resilience are (1) integrating into village development planning, (2) increasing knowledge and institutional capacity in villages and local governments, (3) program funding regulated in regional policies, (4) village facilitators and assistants, (5) availability of data and information on CBDRM in villages, and (6) inclusion in regional OPD work programs.



Figure 6. Required policies and supporting factors to implement village-based programs

policies are contained in strategic or structural policies and operational policies that support existing policies to be implemented at the village level, but in accordance with the authority of Ministries/Agencies should not implement the program directly in the village but submits this to the regions that have autonomy in accordance with their authority as regulated in Law No. 23 of 2014 concerning Regional Government.

1. Operational Policy

Operational policy is a policy issued to be able to become a guide for the structure under it in implementing the program in accordance with its authority. Village-based programs carried out by ministries/agencies as legal footholds are based on relevant Ministerial regulations, and these are then adopted and used as references for NGOs, INGOs, civil society organisations, and communities in implementing the CBDRM program which is used as a reference in formulating a program, determine goals, outputs and outcomes and how to implement them in accordance with achievement indicators. This policy contains guidelines, indicators, measuring instruments for achieving indicators that serve as guidelines in implementing a program. The village-based program developed by K/L becomes a reference for regions and villages in regional development. In general, village-based programs have been strongly supported by existing policies, but these policies have not been in synergy with one another, especially in village development planning.

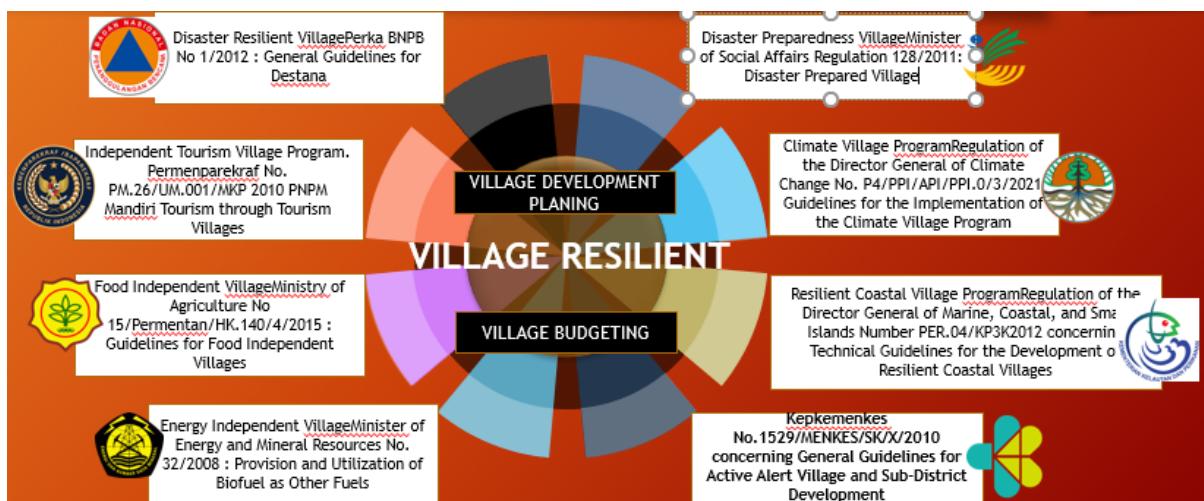


Figure 7. Village-based programs supported by operational policies from each M/A

The above policies can operationally be used across ministries/agencies and can be used by organisations or communities that will implement the program as a reference and guide, but structurally this policy does not bind ministries/agencies or regions to be mandatory, which indeed functions as a guide that is derived in technical guidelines and implementing guidelines, this results in the biggest challenge being how the sustainability of programs at the regional to village level can be maintained, but on the other hand this can be a tool assist in building the CBDRM movement in accordance with the CBDRM principle that the program is part of an external factor that can move the community. To strengthen villages in accordance with the mandate of Law No. 6/2014 concerning Villages, all village-based programs must be coordinated and synergised. The survey results showed that 54.9% of respondents stated that village-based programs had no synergy, 24.7% said they did not know, and only 20.4% stated that village-based programs had synergy. This is strongly influenced by the supporting factors above. K/L programs can be synergised if there are supporting policies that can structurally provide an umbrella, the survey results show the need to be able to synergise village-based programs are (1) cross-sectoral or cross-ministry policies that complement and strengthen each other, (2) Budget allocation in the regions and villages, (3) key indicators that can be measured and can synergise indicators in each program, (4) implementation focuses on processes not just activities, (5) the same program location for strengthening in the village.

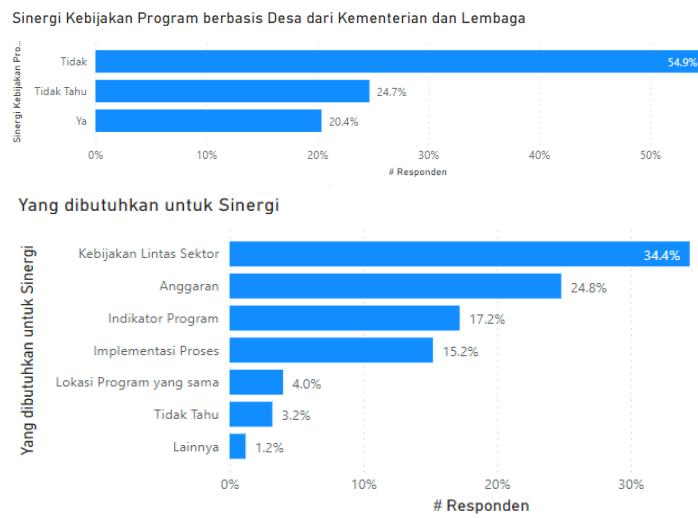


Figure 8. Synergy of village-based program

2. Structural Policy

Structural policy is a strategic policy that can move all components from the central and regional levels to be able to implement plans and programs to achieve the big goals outlined in the National – Provincial – Regency/City RPJM down to the village. This policy is mandatory to be implemented in one governance system. This policy is closely related to Planning, Budgeting, Strategic Programs, and work programs from the highest level to the bottom at the village level. Institutionally, CBDRM currently has a fairly strong policy umbrella, but back to the principle, the CBDRM movement must remain a grassroots movement that grows from local communities in building resilience. The results of the evidence and good practices of the CBDRM program in Indonesia have now evolved in various sectors, the latest of which is how communities and villages adapt to the COVID-19 pandemic in their programs.

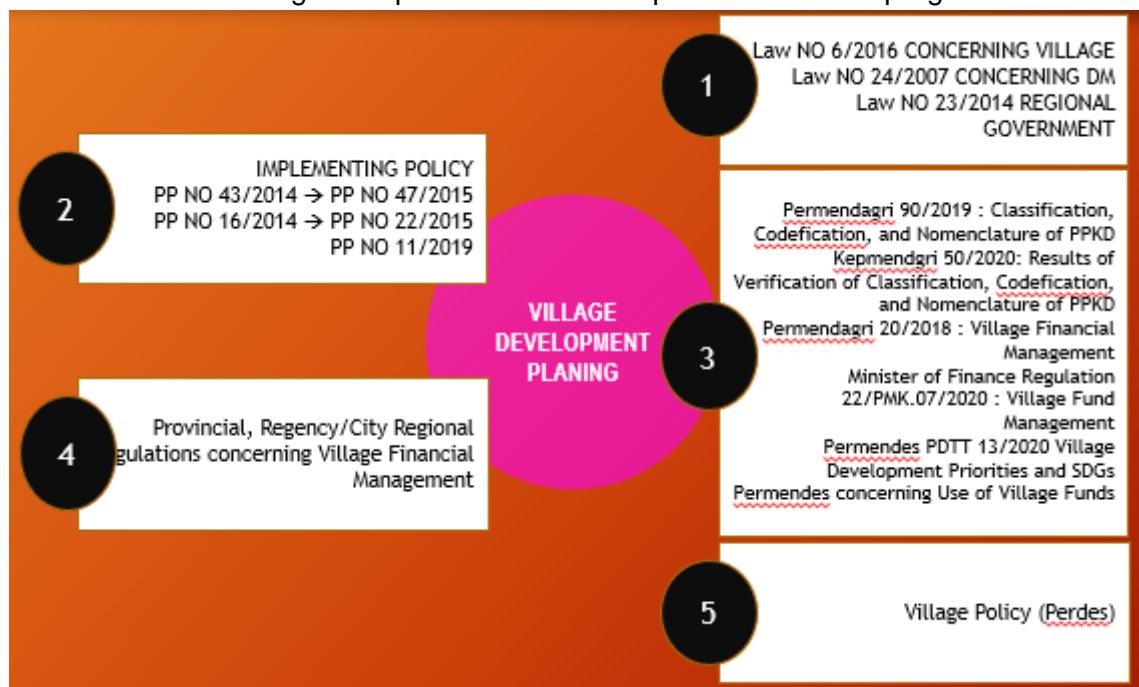


Figure 9. Structural policies in regional and village development planning

The results of the Plenary discussion reflecting on CBDRM in 20 regions/regions some important findings are that the institutionalisation of CBDRM has been facilitated by various implementing policies in the form of guidelines that enable village-based programs to be implemented, but the basic problem is Sustainability issues that are submitted to the village through existing policies cannot be fully implemented. Several factors that influence the sustainability of CBDRM are not from a policy perspective but are (1) the capacity of local and village government administrators, (2) not yet synergised with village-based programs, (3) village-based programs have not been accommodated in regional policies such as regional regulations, mayoral/regent regulations, and other regional policies that can serve as bridges to strengthen regional programs; (4) K/L village-based programs have not been accommodated in regional or village development planning; (5) there are rules that serve as references for different nomenclatures so that they cannot be accommodated in mandatory programs in the region or in the village.

In development planning, the Region refers to Permendagri 90/2018 concerning Classification, Codification and Nomenclature of Regional Development Planning and Finance and is strengthened by Kepmdagri 50/2020 concerning Verification of Classification, Codification and Nomenclature of Development Planning and Regional Finance has determined the division of mandatory and optional affairs, with a predetermined nomenclature, regions are given the authority to develop at the sub-program level and program indicators that can be a space to integrate cross-sectoral issues, but in a large program it has been determined and cannot be changed which provides regional references in development planning and budgeting in the regions, considering that the allocation of central to regional funds contributes quite significantly to the APBD and APBDes. From the results of the survey conducted, the need for policies in strengthening and synergising village-based programs in village development planning must be reflected in regional development planning, including (1) Regional policies; (2) Government Regulation that can coordinate K/L; (3) Guidelines (Juklak-Juknis); (4) Regional Head Decree; (5) joint ministerial regulation that can coordinate key indicators.

Kebijakan Program Ketangguhan Desa menjadi Program Pembangunan Desa

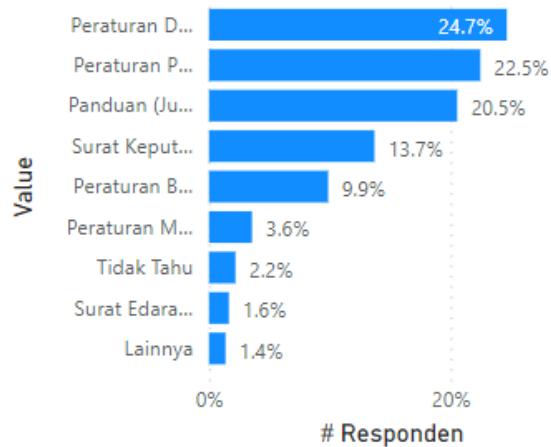


Figure 10. The results of the survey on policy needs for the Village Resilience program to become a Village Development

Program. CBDRM institutionalisation through policies must refer to strategic policies that can ensure that the CBDRM program in the village can become a work program in regional

development planning. The escorting of CBDRM included in the regional development plan must start from ensuring that the team working on document preparation and the village facilitators who facilitate the village planning process have an understanding of CBDRM so that it can be stated in the document in the form of synchronising the nomenclature in village policies and escorted in the facilitation process. until the determination of the RPJMDes document

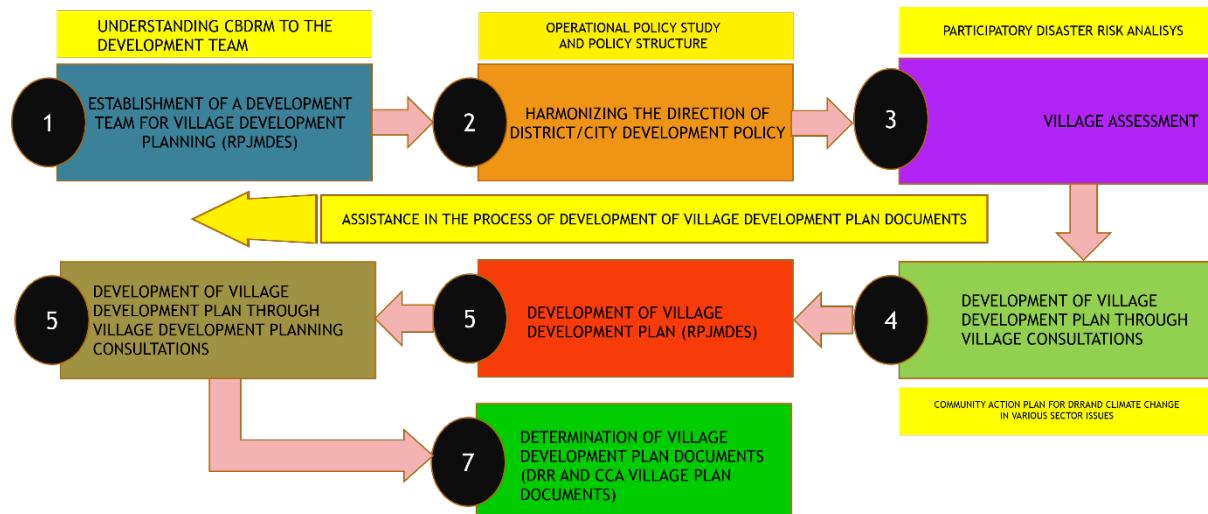


Figure 11. Flow of the preparation of the RPJMDes that can be synchronised with CBDRM.

In fact, institutionally CBDRM has been interpreted in village development planning, where the results of disaster risk studies are the basis for villages/sub-districts located in disaster-prone areas to be considered in conducting village assessments. The results of this study become the basis for making an action plan, if this action plan is considered important and mandatory to be implemented in the village program, schematically the results of the community action plan for DRR and API need to be selected in the context of the Village program which can be included in the development program. village. Structurally the use of village funds has been regulated in Permendagri 20/2018 concerning Village Financial Management which is a reference for Regencies/Cities in accordance with their authority based on Law No. 23/2014 concerning Regional Government, has explicitly included Disaster Management as a village priority in village budget allocations facilitated by the local government. There are 5 areas of expenditure that are regulated in the use of village funds in the regions, including

1. the Village Government Implementation Sector which can be used for village administration, community services, and other village administrations.
2. The Village Development Implementation Sector which can be synchronised with structural mitigation in DRR and API efforts. inclusive access, facilitating infrastructure progress in the fields of economy, tourism and so on.
3. The Village Community Development sector can be synchronised with strengthening village institutions in various aspects including disasters and climate change, institutions in the economic, social and community fields, and so on;
4. The Village Community Empowerment Sector can be synchronised with community strengthening from the economic, social, environmental, and cultural aspects in improving the quality of life of the community in
5. the village. village preparedness, contingency plans, early warning systems and disaster emergency response, and post-disaster recovery.

The priority areas above are strengthened in various Regulations of the Minister of Villages and Disadvantaged Regions every year which includes disaster management as one of the

priorities for village development. Permendes No 7 of 2021 concerning Priority for Use of Village Funds in 2022 emphasises the use of village funds for 3 things, including (1) National economic recovery in accordance with village authority; (2) The national priority program is in accordance with the village authority; and (3) Mitigation and handling of natural and non-natural disasters. Village-based program indicators must be able to answer village needs in accordance with regional and village authorities. So that to be able to synergise existing policies, there needs to be an intermediary policy that must be encouraged at the provincial, district/city and village levels in the form of regional regulations or village regulations to be able to absorb models of resilience in accordance with the authority and characteristics and needs of the village. each.

Policy synergy sees that operational aspects in village-based programs have one key indicator that can be agreed upon in integrating various issues in resilience, this can be started from the existence of a resilience baseline data covering aspects of basic services, prevention, mitigation and preparedness, disaster management systems. Key indicators are compiled based on village-based program indicators that are used as operational and technical references, but in integrating into regional development planning down to the village, it is necessary to compare the program nomenclature set out in structural strategic policies as the policy that forms the basis in the regional and village development planning system through a planning process carried out from the community level, hamlet deliberations, village deliberations which are brought into the regional development deliberation process. Factors that can strengthen policy synergies in village-based programs need to implement a breakthrough through joint policies across ministries/agencies at the national level that can provide direction in synergising village-based programs, so that they can be used as a reference for regions in making policies at the regional level up to policymaking. at the village level that can synchronise the operational needs of the program with the structural processes in regional development planning down to the village (Figure 12).

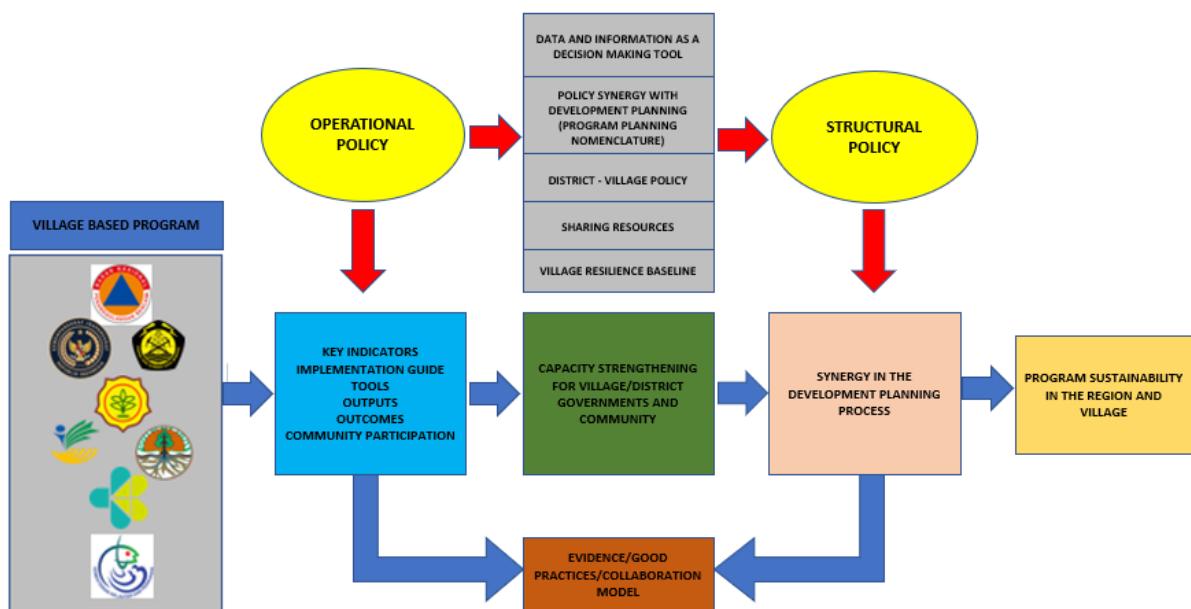


Figure 12. Schematic of a synergy model of operational policies and structural policies in village development planning

3. Village-Based Data and Information Program

Programs-based programs have been widely contributed by K/L and various organisations engaged in community empowerment issues. Based on the results of the mapping from the Coordinating Ministry for Human Development and Culture in 2019, 5,077 villages have been registered with village-based program interventions, not including programs initiated directly by the village or village programs that contribute to disaster management in the community.

Table 2. Mapping of the Number of Village-Based Programs by Coordinating Ministry for, 2019

No	Programme Name	Actors	Number of Villages
1	Disaster Resilient Village (Destana)	BNPB	626
2	Disaster Resilient Village (Destana)	BPBD	1,179
3	Disaster Preparedness Village (KSB)	Ministry of Social Affairs	735
4	Climate Village Program	KLHK	1,888
5	Climate Independent Villages	Ministry of Agriculture	67
6	Development of Resilient Coastal Areas (PKPT)	Ministry of Maritime Affairs and Fisheries	84
7	Disaster Resilient	Villages Ministry of Villages	102
8	Disaster Resilient Villages	NGO	106
9	PermataProgram	PMI	125
10	Thematic KKN PRB	University/FPTPRB	35
11	Citarum Harum	Kemenko PMK	17
TOTAL			5,077

Source: Kemenko PMK, 2019

Data and information on village-based programs that support CBDRM cannot be mapped as a whole, since CBDRM was instituted in Indonesia, many programs have been implemented by various parties, but in the course of more than 15 years this data and information becomes a problem that is difficult to access. In this study, a survey of data and information on village-based programs was conducted to find out the data and information needs of village-based programs. In the process of KN PRBBK XIV 2021 activities, various types of programs to Build Community Resilience to disasters and climate change have been mapped, which have been and are being implemented by NGOs/INGOs, universities and communities. There are 73 types of CBDRM programs with various approaches in 117 villages, 19 sub-districts, 58 regencies/cities and 17 provinces, complete information can be seen from the link <https://bit.ly/dashboardKNPRBBK2021>.

SEBARAN WILAYAH PROGRAM PRBBK


Figure 13. Mapping of CBDRM programs in Indonesia carried out by organisations and communities in Indonesia in data collection carried out during KN PRBBK XIV 2021.

The survey results show that the community cannot obtain data and information about village-based programs relevant to CBDRM. 67.1% stated that data and information on village-based programs were not available, 32.9% said they could access data and information, in general they were program actors who were connected to local governments, universities and NGOs/INGOs that had program bases in the village. 68% of respondents stated that data and information on village-based programs were difficult to access, and 31.6% stated that they were accessible. This creates a problem when many village-based programs are developed by various organisations, ministries/agencies whose output can be seen but learning outcomes and evidence can only be obtained if there are publications in seminars, workshops, webinars. This data and information can be used as a reference for all parties in making decisions and developing village-based programs that can be contributed from various programs as an effort to build community resilience at the village level.

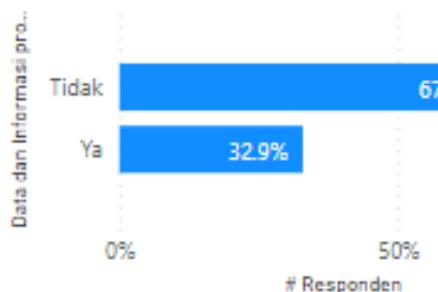
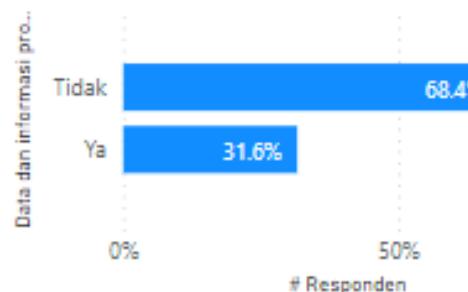
Data dan Informasi program PRBBK dan program berbasis desa tersedia

Data dan Informasi program PRBBK dan program berbasis desa mudah diakses


Figure 14. Survey Availability and ease of access to data and information on CBDRM programs

In the FGD and KN CBDRM XIV 2021 process, this data and information became an issue discussed in the process of regional reflections, because data and information are very important to be used as a basis for making decisions. decisions related to village-based program development. Many programs in the village have been implemented but not all organisations, ministries/agencies and communities are aware of the programs that have been implemented, the results that have been achieved, lessons learned and documentation of

good practices that can be used as references. The journey of CBDRM in Indonesia has diversity that takes into account local culture in every movement. Bappenas, 2020 then divides it into different regional characteristics based on regions or islands, but in terms of complexity, the diversity will be more and more in each Regency/City area. There are three components that must be considered for the sustainability of CBDRM, as outlined in the village-based program, namely: effectiveness, participation, and equality. The keys to the success of village-based programs include:

1. Through comprehensive community empowerment;
2. Support from internal and external in developing village-based program policies and institutions in CBDRM;
3. Policies that support and provide space for optimising local values in DRR; and
4. Moving on from community needs that serve as a turning point to become a community movement.

The CBDRM program has specifically been institutionalised into a Disaster Resilient Village (Destana) program, but actually Destana is to find the resilience that the community already has, then maintain it, and disseminate the information to the entire community, so that resilience can be maintained and maintained. In building community resilience, contributions from various sectors, and there needs to be a standard that can be used as a reference for villages/communities to measure the level of community resilience, this can be seen directly when a community in a disaster-prone area experiences the impact of a disaster, but from On the other hand, data and information about resilience can be used as a reference for villages and communities to be able to adapt and have preparedness in accordance with the development and needs of the community. Village-based program data and information are important where data will be a source of information, which can be a source of knowledge for the community. Based on the results of reflections, FGDs and surveys conducted in this study, there is a need to provide a platform that can provide information related to the distribution locations of village-based programs in Indonesia, information on facilitator resources, organisations/institutions working in villages for CBDRM programs, documentation CBDRM good practice from various parties (pentahelix) and village/ sub-districts resilience assessment to be used as material in program development. Data and information need to be contained in a platform that is integrated into it, so that it can be accessed by anyone and all parties who have implemented the program and provide their data independently in a CBDRM catalogue that can be contributed from village-based programs. The need for data and information can support operational policies to be able to provide input in the development of village-based programs, or can be part of a village information system that continues to innovate.

Social media can be used as an alternative to be used as a platform to disseminate information on CBDRM in Indonesia, but all information must be built in a big house that can integrate all data and information through a website that can be accessed by anyone. Based on the survey results, the easiest media to use to be able to distribute data and information is social media related to village-based programs, websites that are the centre for visualising data and information, information and publications from organisations/communities carrying out CBDRM activities or program reports that published, but often this report has limited access and can only be accessed by certain groups because it is a limited document.

Media paling mudah bagi anda untuk mendapatkan data dan informasi program PRBBK dan program berbasis desa di Indonesia

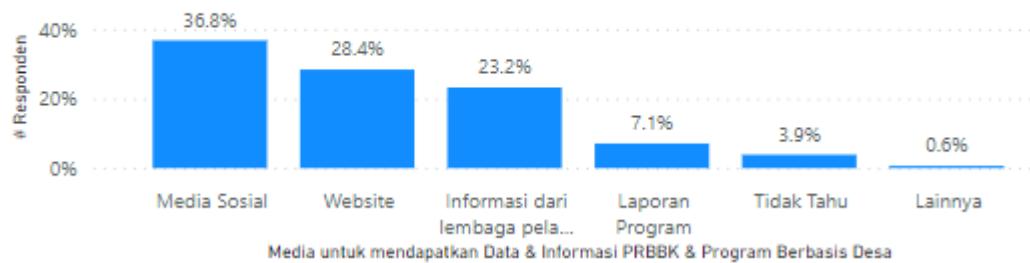


Figure 15. The easiest media to use as access to get data and information

data and information that are very much needed are the name of the program, the location of the program, the results of program implementation, the name of the facilitator, and the duration of the program. This data is very much needed to find out which areas are included in the disaster-prone area that the program has not implemented. The form of data and information needed, most respondents stated that there was a need for a data and information visualisation dashboard, information could be accessed on social media and websites. In addition, there are also those who suggest a data collection form that can be used by villages or communities that can directly update village-based program data. The CBDRM directory is also needed to be able to identify CBDRM actors, either organisations or communities that implement CBDRM programs, in addition to a massive communication mechanism, it is necessary to develop a chatbot model to be able to disseminate CBDRM data and information in Indonesia via WhatsApp, Telegram, SMS that can be connected to CBDRM. Indonesian CBDRM database.

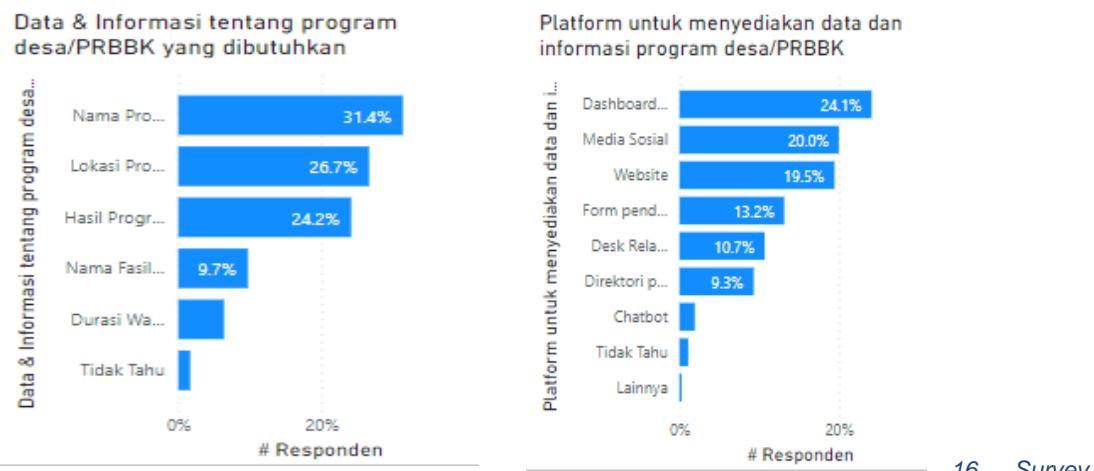


Figure 16. Survey results on data and information needs and platforms that can be used to provide CBDRM data and information

Policy Position Paper & Recommendations

This position paper is the result of synthesis and analysis of policy studies which are then evaluated through a reflection process in 20 regions. The results of the synthesis of the findings in the region are brought into the KN PRBBK XIV 2021, with the main agenda being to carry out Committee and Plenary Sessions that present resource persons from universities, ministries/agencies, INGOs, NGOs, media and communities representing 9 regions or islands throughout Indonesia (Sumatra, Java, Bali, NTB, NTT, Sulawesi, Kalimantan, Maluku, and Papua) to formulate key findings that are reflected on for discussion and triangulation confirming various sources. Three main issues were discussed in the commission and plenary sessions involving more than 8,000 participants from all over Indonesia consisting of elements of the public, communities, volunteers, civil society organisations including organisations of persons with disabilities, religious/belief-based institutions, government, private entities, mass media, and academia. The discussion of the committee meeting aims to formulate a policy position paper that will be the material for building a roadmap for CBDRM in Indonesia. The focus of the discussion in the Plenary Session was:

1. CBDRM Governance: Operational Policies, Funding Mechanisms, and CBDRM Institutionalisation CBDRM

governance in Indonesia starts from operational policies, funding mechanisms and CBDRM institutionalisation. In the first plenary discussion, various policies that can support CBDRM in villages and communities were identified, which are related to village-based programs that have loci in the village from various ministries and institutions. Operationally, existing policies have provided space for implementing CBDRM through village programs and village funds. The challenge faced is the large number of programs from various ministries, so that the village has a heavy burden to implement all programs, because there is no synchronisation between one program and another. On the other hand, there is an opportunity to synchronise all programs implemented in the village, because there are already guidelines/legal basis for integrating programs. To be able to achieve this big goal, there must be an understanding between all stakeholders at the village level to higher levels. At the lowest level, it must be supported by regional policies or Regional Regulations (Perda) that can bridge village-based programs, because villages are very dependent on local governments as supervisors in the region through the Community and Village Empowerment Service. The DRR program is very likely to be included and integrated into programs implemented by other institutions/ministries by utilising funding sources at the village level. In addition, it is necessary to increase the capacity of local government and village government officials. The issue of decentralisation of DRR at the village level is quite interesting to discuss is how the government at the city/district level supports villages to be able to optimise DRR efforts in the village.

2. Resilient Model, Expansion Strategy including replication, modification, innovation, and collaboration

CBDRM is a movement within the community to build awareness in reducing disaster risk. The purpose of CBDRM is to make people aware that they are in disaster-prone areas, with this awareness, it is hoped that the community will be more active in activities to build

preparedness. Because the community is the *first responder* when a disaster occurs, preparedness must start from the community itself. Talking about replication, the substance is to make people aware that they live in disaster-prone areas, so the community must develop a DRR pattern in accordance with their local wisdom in dealing with disaster risk. The replication that has been carried out so far continues to be developed with various innovations. For example, the approach in the Merapi community that has been considered successful, but in reality there is no harmony with the government. Learning from this condition, when replicating in other locations the approach was developed differently, involving the government from the start. Criticism for the Destana program, why the suspended village, why not the suspended area? Because talking about disaster will talk about the region. DRR efforts must be regionally based and it is hoped that each region can coordinate and collaborate with each other in DRR. Innovation means that CBDRM must continue to develop and be renewed. For example, the current disaster issue is not a single issue, at one time there can be more than one different type of disaster, therefore, the issue of innovation must continue to be developed, otherwise our CBDRM model/method will be left behind. Coordination is not just fighting over resources, coordination is a very important thing, because if the coordination process does not go well, the disaster management process will be *chaotic*. Coordination is not only important for DRR actors, but also for donors. If these efforts are not carried out properly, there will be overlapping activities and will only waste existing resources. To build a good partnership is to reduce the institutional centric ego. Partnerships can be built between civil society organisations (CSOs), CSO partnerships with the government, and CSOs with donors. An important note is that the CSO's partnership with the government is not just one or two joint meetings, so that the essence of the partnership does not work. CSOs are not just affixed and become claims that the government has partnered with the community through CSOs. The CBDRM approaches are also diverse, and it is possible that all these approaches are correct. Several variants of CBDRM in Indonesia include time, actors, relationships, participation, space, issues, tools, and resources. Each group/community has different variants and all of them could be true, as long as it cannot be separated from the substance of CBDRM itself, which is bottom-up, involving the community in a participatory manner, and protecting the community with various assets they have.

3. Monitoring and Evaluation of CBDRM in Indonesia: Quality Control, Strengthening CBDRM Movements/Programmes, Independence and Sustainability

An important note in the CBDRM journey is to accommodate diversity by taking into account culture and local policies. in all regions in Indonesia. The synthesis of the reflection discussions in the regions are: (1) Integration of disaster education with aspects *livelihood*; (2) Formal active involvement of women; (3) Recognition of local culture; (4) Strengthening social capital; (5) The role of volunteers has not received optimal support and commitment from the authorities; (6) Integrating natural resource capabilities through economic activities of communities living in disaster-prone areas; (7) Regeneration and regeneration; (8) The tools for supporting community actions are still limited; (9) External support is required; (10) A paradigm shift as a victim who must be helped; (11) Intervention processes that empower communities and change their mindset as actors in building resilience. Talking about the sustainability of CBDRM, there are three components that must be considered, namely: effectiveness, participation, and equality. quality monitoring and inclusion cannot be separated

from the monitoring and evaluation process. National BNPB Destana program in accordance with BNPB Perka No. 1 of 2012. The CBDRM strategy is in accordance with John Twigg 2007 in the book *Indonesia's Experience Building Community Resilience: governance, disaster risk assessment, knowledge and education, vulnerability management and reduction, and disaster preparedness and response*. The monitoring instrument uses (1) BNPB Perka No. 1 Year 2021 there are 16 principles and 20 indicators; (2) SNI 8357-2017 concerning resilient villages and sub-districts; (3) Village Resilience Assessment (PKD), 2021; and (4) Permendagri 101/2019: Minimum Service Standards (SPM) for Disasters. Inclusiveness in CBDRM mostly refers to the *Sendai Framework for Disaster Risk Reduction Sendai Framework for Disaster Risk Reduction/ the (SFDRR)*. The note is, this inclusiveness should not only embrace young people, women and children, but also the elderly and *indigenous people*, as well as migrant groups. Good practices of CBDRM inclusiveness that already exist in Indonesia include the involvement of young people in DRR. The important notes that emerged during the discussion in the region and were stated in plenary paper #3 Quality monitoring and inclusion in CBDRM:

1. Empowering community initiatives.
2. The pentahelix gotong royong is the key.
3. The need for *tools* participatory monitoring that are easily accessible and filled by the community (<http://www.aksikomunitas.id>).
4. It is necessary to encourage *knowledge management* and *knowledge production* at the local level in a participatory manner and the integration of local wisdom, technology, and modern knowledge.
5. Need to encourage investment aspects of infrastructure resilience to ensure community safety
6. Need to encourage *training of facilitators* regular and ongoing to provide a domino effect in the region.
7. Need to encourage capacity in decision making.
8. Need to push the capacity of 7 toughness objects.
9. Acceleration of CBDRM Inclusion with the spirit of science, engineering, technology, and innovation.
10. Collaboration, mobilisation of resources (human, facilities, infrastructure, and funding)

The findings in the XIV 2021 KN PRBBK plenary session highlight the need to strengthen several aspects that will be the concern of all pentahelix parties, in order to be able to build a more massive CBDRM movement. These include: (1) Governance, (2) Practices, and (3) Quality of CBDRM in Indonesia in order to realise sovereignty, benefit, independence, sustainability, and disseminate CBDRM practices in Indonesia, particularly in areas prone to hazards and disasters.

To realise this commitment, we invite all parties to undertake the following efforts covering the three aspects above, among others:

I. Strengthening CBDRM Governance:

- 1) Encouraging and ensuring the harmonisation and synergy of planning and budgeting policies related to CBDRM programs from the national, regional, and local levels. village or hamlet. This policy harmonisation process is used as a reference for coordinating and synchronising development programs from various development sectors so that they are integrated as a unified development agenda.

- 2) Develop policies and implement CBDRM practices that are inclusive and substantially implementable to address the needs and take sides with vulnerable and/or high-risk groups including children, women, disability groups, indigenous peoples, elderly groups, and minority groups who tend to be marginalised.
- 3) Encourage the policy, planning and implementation of the CBDRM program by development actors to strengthen local wisdom, social capital, and community socio-culture in line with disaster resilience. CBDRM practices and approaches should support, strengthen, and be in line with socio-cultural values and the vision of community development.
- 4) Advocating to development actors for the expansion of CBDRM in Indonesia, specifically encouraging the commitment of regional heads to expand CBDRM by making policies to optimise funding sources² and resources owned by the community in their area.
- 5) Carry out capacity building and strengthening for regional leaders, especially at the village/ sub-districts level to have a CBDRM perspective and the ability to integrate it into development programs and community empowerment in the working administration area.
- 6) Encourage and develop resilience through a regional approach. Collaborative governance is a strategy for coordination and communication as well as involving various parties to strengthen CBDRM in a disaster-prone area³.
- 7) Encouraging the preparation and implementation of spatial plans that apply CBDRM principles in responding to spatial planning needs in disaster-prone areas.
- 8) Encouraging policies at the national, regional, and village or sub-district levels that can support the implementation of the Disaster Safe Education Unit (SPAB) program, both formal and non-formal⁴ as well as informal education⁵ in the CBDRM program, both from the aspect of coordination, linkages to mitigation and preparedness systems, planning risk reduction, and financial support.
- 9) Encouraging easy access to risk information and village or sub-districts capacity by all parties. The availability of this data is needed as a basis for planning, implementing, and monitoring development.

II. Updating of CBDRM Practices and Strong Partnerships

- 10) Integrating disaster risks holistically, including climate change, environmental degradation, handling pandemics, including COVID-19 and risks from other non-natural hazards into the CBDRM movement that contributes to building prosperity and providing social protection
- 11) Integrating practices CBDRM works with universities, academics, and researchers as well as the private sector to encourage innovation and support the expansion of the CBDRM movement that is inclusive, empathetic, and iterative in nature and can actually solve the problems that exist in society, reaching various communities throughout territory of Indonesia

² For this reason, it is necessary for all parties to understand that the financing opportunities for CBDRM at the regional level are not only focused on the Village Fund, but there are still Regional Fund Allocation (ADD) schemes, profit-sharing funds, and provincial assistance as well as from Multi-stakeholder Cooperation.

³ In this case, the administrative cooperation scheme that has a unified landscape and is included in a disaster-prone area becomes a priority.

⁴ There are many informal learning groups or educational entities in the community. These groups have the potential to integrate education and CBDRM in a disaster-prone area.

⁵ Informal education such as at the village level, family, and other groups outside formal and non-formal institutions. This

- 12) Document participatory local knowledge related to the character and history of disasters, potential hazards, and community resilience models as a more contextual and relevant CBDRM knowledge production process in Indonesia.
- 13) Regeneration of CBDRM knowledge and skills in Indonesia through literacy expansion, democratisation of disaster knowledge, and optimisation of the role of educational institutions. By involving the community in the production and management processes knowledge including children, youth, and elderly groups by supporting the development of inclusive inter-generational knowledge taking into account gender and disability status.
- 14) Encouraging the implementation of an optimal upstream to downstream Disaster Early Warning System (SPDB) policy. Not only focusing on the hazard monitoring aspect, but also paying attention to aspects of risk knowledge, dissemination, and communication of warning information, as well as capacity building in responding to disaster warnings by people living in disaster-prone areas. SPDB must be in line with and pay attention to aspects of the knowledge modality and culture of the local community where the community and the mandate holder can run and function optimally in increasing preparedness. In the process of developing community involvement, capacity utilisation and communication networks of local communities need to be harmonised with the developed early warning system.
- 15) Conducting inclusive collaboration, and mutually reinforcing the functions, roles, contributions, and involvement of various actors in strengthening CBDRM. It is appropriate that inclusive collaboration does not eliminate or weaken pre-existing capacities. On the other hand, it opens up opportunities for new programs, new funding, and innovation.

III. Continuous improvement of the quality of CBDRM

- 16) Ensure the process of monitoring CBDRM programs so that it can increase community resilience in a sustainable manner and strengthen relationships and social capital that had previously been built in the community.
- 17) To increase the capacity of the community and stakeholders as well as to build an inclusive feedback mechanism, so as to avoid gaps between policy and implementation.
- 18) Develop indicators for the achievement of the CBDRM Program⁶ so that it includes elements of prevention, mitigation, and preparedness, quality mapping, and also pays attention to aspects of targeted livelihood assets, and distribution of programs based on the potential level of disaster hazard so that priority scales can be determined accurately.
- 19) Encouraging that every disaster program puts forward a critical awareness paradigm, so that the community, including vulnerable and high-risk groups, can develop their potential as actors in building resilience through CBDRM.
- 20) Strengthening policies, coordination, and capacity building of the Penta helix (community, government, business actors, journalists, universities) that are centered on community needs.
- 21) CBDRM integration in strategic sectors, such as: education; protection & evacuation; logistics; infrastructure; rescue and assistance; early recovery; economy; and health and encourage local leadership.

⁶ includes Destana, Proklam, Disaster Preparedness Village, CBAT, and other similar programs.

- 22) There is a comprehensive village study guideline that can be carried out independently, so that actors, access, capacity, and policies are mapped to improve the community's ability to carry out CBDRM.
- 23) Organising, building capacity, and strengthening volunteer networks in a systematic and structured manner, and involving business entities, media, and universities to be actively involved in advancing community resilience and being part of disaster risk reduction. Encouraging local government recognition, support, and commitment to volunteers in their activities to support the CBDRM movement.
- 24) Encourage the development of an inclusive and participatory CBDRM information system that can be accessed by all parties. This information is expected to become a coordination tool, common reference, and basis for decision making in the process of planning, drafting, implementing, and monitoring CBDRM that is integrated with all development sectors.

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