



Ministry of National
Development
Planning/Bappenas



CLIMATE RESILIENCE
DEVELOPMENT 2.0

ROLES OF GOVERNMENT INSTITUTIONS

BOOK 2

Ministry of National Development Planning/Bappenas. 2025





CLIMATE RESILIENCE DEVELOPMENT POLICY 2.0

ROLES OF GOVERNMENT INSTITUTIONS

EDITORIAL

Director

Leonardo A. A. Teguh Sambodo
Deputy for Food, Natural Resources and Environment)

Editor-in-Chief

Nizhar Marizi
Director of Environmental Affairs

Editor

Irfan Darliazi Yananto
Adrianto Shifa Al Aro
I Ketut Gede Arta Putra

Writers

Andi Syahputra
Litany Meliala
Nurul Rusdayanti
Ridcho Andrian
Adinda Berlin Antika Sari Lavidia
Annisa Faradina Astini

Book Cover Designer

Oki Triono
Agung Saputra

Supporting Team

Riska Apriyani
Andrea Yudyat

SUPPORTED BY:



DEVELOPMENT PARTNERS:



TABLE OF CONTENT

<p>1</p> <p>The Importance of Institutional Frameworks in Implementing Climate Resilience Development 5</p> <hr/> <p>2</p> <p>Mapping of K/L and OPD 7</p> <hr/> <p>Roles of Line Ministries/Agencies (K/L) 7</p> <p>Role of Regional Government Organization 12</p>	<p>4</p> <p>Planning Control of the Climate Resilience Development Policy 20</p> <hr/> <p>5</p> <p>Institutional Coordination Mechanism in the Implementation of Climate Resilience Development Actions 21</p> <hr/> <p>6</p> <p>Conclusion 22</p> <hr/>
<p>3</p> <p>Mapping of Core Duties and Functions of Ministries and Agencies 14</p> <hr/> <p>Regulatory Framework 14</p> <p>Regulations related to the Marine and Coastal Sector 16</p> <p>Regulations related to Water Sector 16</p> <p>Regulations related to Agriculture Sector 17</p> <p>Regulations Related to Health Sector 18</p>	

LIST OF TABLE

Table 1	Roles of Ministries/Agencies in Climate Resilience Development	8
----------------	--	---

LIST OF FIGURE

Figure 1	Timeline of the Development of Climate Resilience Development Policy	5
Figure 2	Coordination of the Climate Resilience Development Policy within the SDGs Framework	12
Figure 3	Synchronization of National and Regional Development Planning	13
Figure 4	Sectoral Regulations Supporting the Implementation of the Climate Resilience Development Policy	15
Figure 5	National Development Control Mechanism	20
Figure 6	Coordination Mechanism of Climate Resilience Development	21



LIST OF ABBREVIATION

I

ICSR *Indonesia Climate Change Sectoral Roadmap*

K

K/L *Line Ministries (Kementerian dan Lembaga)*

Kementerian PPN/Bappenas *Ministry of National Development Planning / National (Kementerian Perencanaan Pembangunan Nasional/Badan Perencanaan Pembangunan Nasional)*

KLHS *Strategic Environmental Assessment (Kajian Lingkungan Hidup Strategis)*

O

OPD *Regional Government Organization (Organisasi Perangkat Daerah)*

P

PBI *Climate Resilience Development (Pembangunan Berketahanan Iklim)*

Permen *Ministerial Regulation (Peraturan Menteri)*

Perpres *Presidential Regulation (Peraturan Presiden)*

PN *National Priority (Prioritas Nasional)*

PP *Government Regulation (Peraturan Pemerintah)*

R

RAN API *National Action Plan for Climate Change Adaptation (Rencana Aksi Nasional Adaptasi Perubahan Iklim)*

RAN GRK *National Action Plan for Greenhouse Gas Emission Reduction (Rencana Aksi Nasional Penurunan Emisi Gas Rumah Kaca)*

Renstra *Strategic Plan (Rencana Strategis)*

RPJMD *Regional Medium-Term Development Plan (Rencana Pembangunan Jangka Menengah Daerah)*

RPJMN *National Medium-Term Development Plan (Rencana Pembangunan Jangka Menengah Nasional)*

RPJPD *Regional Long-Term Development Plan (Rencana Pembangunan Jangka Panjang Daerah)*

RPJPN *National Long-Term Development Plan (Rencana Pembangunan Jangka Panjang Nasional)*

S

SDGs *Sustainable Development Goals*

SPPN *National Development Planning System (Sistem Perencanaan Pembangunan Nasional)*

U

UU *Law / Act (Undang-undang)*

1. THE IMPORTANCE OF INSTITUTIONAL FRAMEWORKS IN IMPLEMENTING CLIMATE RESILIENCE DEVELOPMENT

Climate change has emerged as a strategic global issue, driving the strengthening of international commitments through agreements such as the Paris Agreement. At the national level, Indonesia demonstrated its commitment beginning in 2007 with the preparation of the Climate Change Mitigation and Adaptation Document. This initiative continued with the development of the Indonesia Climate Change Sectoral Roadmap (ICCSR) in 2010, which was subsequently elaborated into the National Action Plan for Climate Change Adaptation (Rencana Aksi Nasional Adaptasi Perubahan Iklim – RAN API) in 2014. Following this, Indonesia ratified the Paris Agreement through the enactment of Law No. 16 of 2016 concerning the Ratification of the Paris Agreement to the United Nations Framework Convention on Climate Change. The timeline of the development of climate resilience development policy in Indonesia is presented in **Figure 1**.

The commitment to addressing climate change has been further strengthened through the establishment of the Strategic Coordination Team for Climate Change Management, tasked with providing policy recommendations and strategies for climate change response based on the RAN-GRK, RAN-API, and ICCSR frameworks. The formation of this Coordination Team was mandated by the Decree of the Minister of National Development Planning/Head of the National Development Planning Agency No. 97 of 2017. Subsequently, in 2018, the RAN-API was reviewed to enhance the quality of climate hazard analysis, incorporating scientific climate projections, assessments of climate change hazards, vulnerability and risk analyses, as well as the development of a climate resilience index.

Figure 1.
Timeline of the Development of Climate Resilience Development Policy



RAN API later evolved into the Climate Resilience Development Policy, incorporating indicators of potential economic losses resulting from climate change impacts in priority sectors. This policy serves as a reference for implementing National Priority 6 in the 2020–2024 National Medium-Term Development Plan (RPJMN). Further strengthening of the Climate Resilience Development Policy has been realized through its integration into the “Indonesia Emas 17” Development Direction: Disaster and Climate Resilience, within the 2025–2045 National Long-Term Development Plan (RPJPN). Subsequently, the policy has been operationalized in National Priority 8 of the 2025–2029 RPJMN. The policy aims to provide interventions to reduce potential economic losses, particularly in four priority sectors: marine and coastal, water, agriculture, and health. To ensure alignment and integration of national development plans at both central and regional levels, Regional Long-Term Development Plans (RPJPD) are formulated in accordance with the RPJPN.

As a derivative of the RPJPD, Regional Medium-Term Development Plans (RPJMD) are developed with reference to the RPJMN.

Throughout policy implementation, cross-sector collaboration plays a crucial role in ensuring alignment and effectiveness in implementation. In line with this, Book 2: Role of Government Institution has been prepared to support the development objectives under National Priority 8, Priority Program 3: Climate Resilience Development, with the following aims:

- A Describe the roles and responsibilities of Ministries and Agencies (K/L) as well as Regional Government Organizations (OPD); and
- B Enhance cross-sector coordination between K/L and OPD to ensure coherent and effective implementation of sectoral strategies.

This publication is expected to enhance institutional capabilities and promote harmonization among stakeholders in accordance with the development trajectory toward Indonesia Emas 2045.



2. MAPPING OF K/L AND OPD

The implementation of the climate resilience development policy requires robust coordination among government institutions, particularly those responsible for relevant sectors. The roles of Non-Government Actors are presented separately in PBI 2.0, Book 3 – Contributions of Non-Government Actors. The roles of K/L and OPD in the four priority

sectors of climate resilience development, namely Marine and Coastal, Water, Agriculture, and Health, outlined in this book, are mapped with reference to the National Long-Term Development Plan (RPJPN) 2025–2045 and the National Medium-Term Development Plan (RPJMN) 2025–2029.

ROLES OF LINE MINISTRIES/AGENCIES (K/L)

At both the national and regional levels, three K/L hold strategic roles in implementing the climate resilience development policy: the Ministry of National Development Planning/Bappenas, the Ministry of Finance, and the Ministry of Home Affairs. These institutions are responsible for ensuring that the strategies and implementation of the Climate Resilience Development policy are consistently integrated within national and regional development planning and budgeting systems. In addition, they strengthen governance and cross-sectoral as well as intergovernmental coordination mechanisms to ensure that policy implementation is directed, measurable, and sustainable.

Roles of each line ministries in supporting policy implementation, including:

1. Ministry of National Development Planning/Bappenas

Responsible for executing national development planning functions, including the preparation, determination, control, and evaluation of development plans. The Ministry of National Development Planning/Bappenas ensures the integration of the Climate Resilience Development policy into national planning documents and alignment between central and regional planning.

2. Ministry of Finance

Plays a key role in aligning fiscal policy and budgeting processes with the needs of Climate Resilience Development programs. Through the management of the state budget (APBN) and financing instruments, the Ministry of Finance ensures the availability of funds and promotes the use of financing schemes consistent with national development directions.

3. Ministry of Home Affairs

Oversees and supervises regional governance to ensure policy alignment between central and local governments. The Ministry also directs the integration of national climate resilience development strategies into the Long-Term Regional Development Plans (RPJPD), Medium-Term Regional Development Plans (RPJMD), and regional budgets (APBD), while strengthening regulatory capacity and harmonization to support effective implementation at the local level.

As outlined in PBI 2.0 Book 1 – List of Priority Locations and Actions, the implementation of Climate Resilience Development actions is carried out across four priority sectors. Consequently, K/L responsible for these priority sectors play a strategic role in the execution of actions through various approaches, including infrastructure, technology, capacity building, as well as governance and financing.

The specific roles of each K/L according to sector and approach are detailed in **Table 1**.

Table 1.
 Roles of Ministries/Agencies in Climate Resilience Development

Institution (K/L)	Priority Sector of CRD	Role in Climate Resilience Approaches			
		Infrastructure	Technology	Capacity Building	Governance and Financing
Ministry of National Development Planning/Bappenas	Marine and Coastal, Water, Agriculture, and Health				Policy and planning formulation that supports and strengthens the implementation of Climate Resilience Development
Ministry of Marine Affairs and Fisheries	Marine and Coastal	Contributes to the provision of facilities and infrastructure that enhance the resilience of coastal areas, including fishing gear that supports the climate resilience of local fishers.	Develops technologies ranging from interventions in marine and coastal ecosystems to the production of superior broodstock with high resistance to climate change impacts.	Enhances community capacity to withstand the impacts of climate change, particularly in coastal areas and small islands.	Prepares recommendations for climate change mitigation actions in the marine and coastal sectors and establishes collaboration with relevant stakeholders to ensure convergence of climate resilience development efforts.
Ministry of Agriculture	Agriculture	Supports the provision of agricultural production facilities, including the development, maintenance, and rehabilitation of irrigation infrastructure, as well as the provision and optimization of agricultural land.	Develops new climate-adaptive seeds and pesticides.	Facilitates empowerment and capacity development for communities, farmers, extension workers, and other relevant stakeholders to enhance climate resilience.	Provides social protection for farmers to strengthen resilience against climate change impacts through the provision of agricultural insurance.
Ministry of Health	Health	Strengthens infrastructure through the construction and rehabilitation of hospitals, community health centers (puskesmas), and other health facilities, as well as the provision of medical equipment and supplies that support the prevention and control of climate-sensitive diseases.	Supports the application of health innovations and technologies for the prevention and control of climate-affected diseases through enhanced surveillance systems, early detection, vector and pathogen control, and improved health service capacity.	Facilitates and guides the development of adaptive capacity and resilience among health human resources, government personnel, and communities in preventing and managing the health impacts of climate change.	Strengthens governance and financing in the health sector through harmonization of climate-sensitive disease indicators and enhanced regional social protection measures.

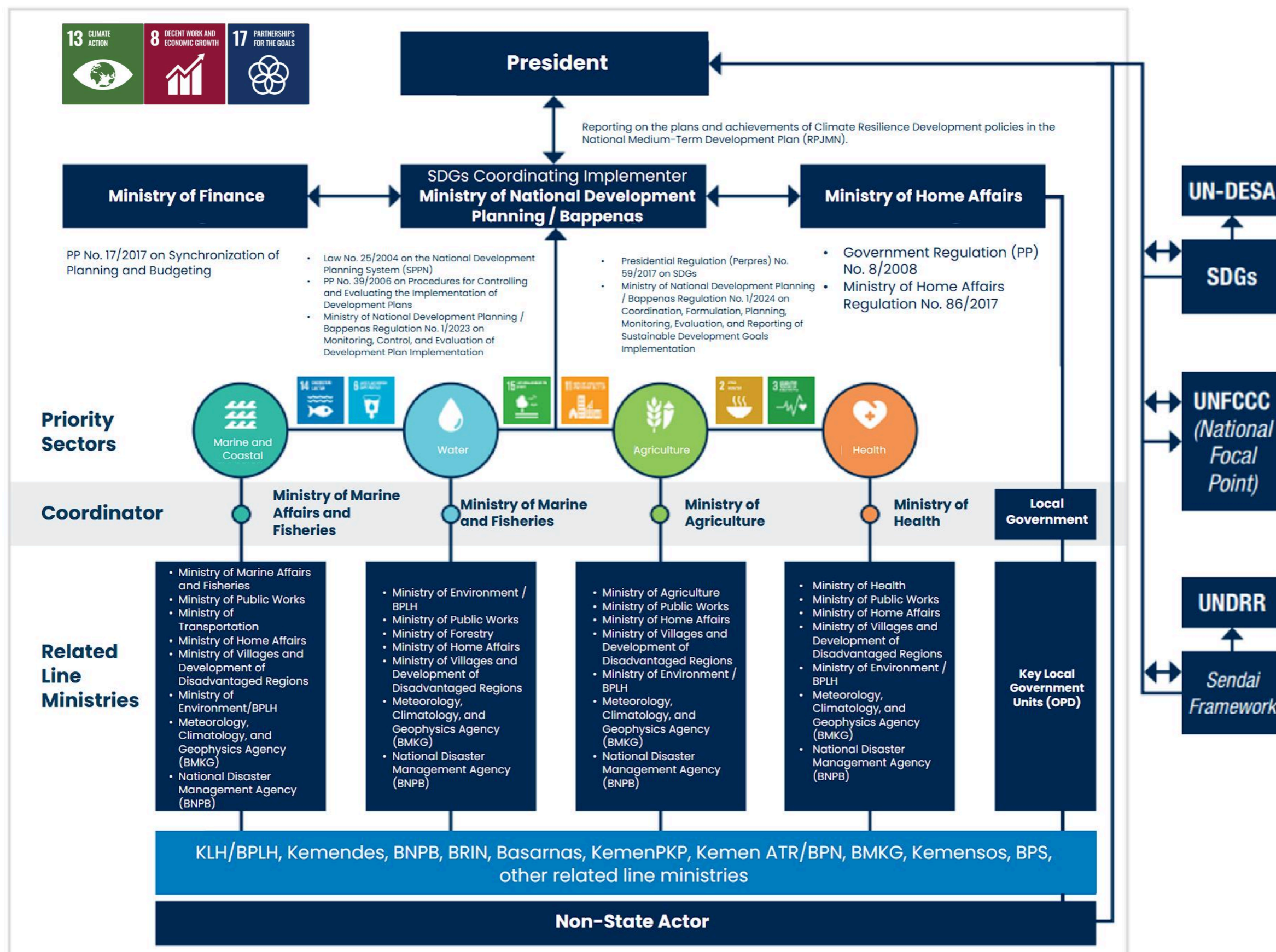
Institution (K/L)	Priority Sector of CRD	Role in Climate Resilience Approaches			
		Infrastructure	Technology	Capacity Building	Governance and Financing
Ministry of Public Works	Marine and Coastal	Responsible for providing infrastructure that strengthens the safety and protection of coastal areas, as well as facilities supporting aquaculture and fisheries.			
	Water	Oversees the construction and maintenance of water storage infrastructure, implements measures to control water-related destructive forces, and manages lava and sediment to preserve water resource functions and enhance resilience against climate-related disasters.			
	Agriculture	Responsible for the provision, enhancement, and rehabilitation of irrigation network infrastructure and irrigation water storage facilities.			
	Health	Oversees the development and improvement of infrastructure systems that strengthen environmental health within residential areas			
Ministry of Transportation	Marine and Coastal	Provision of infrastructure to enhance maritime safety and supply of fishing equipment	Deployment of navigational aids supporting maritime and coastal safety, alongside development of marine technology and information systems	Provision of maritime navigation information systems to improve the capacities of fishers	
Ministry of Environment/Environmental Management Agency	Marine and Coastal, Water, Agriculture, and Health			Contributes to enhancing community resilience and adaptive capacity through strengthening climate-focused community engagement	Responsible for monitoring and evaluating climate adaptation actions, as well as documenting data and information on climate vulnerability and risks.

Institution (K/L)	Priority Sector of CRD	Role in Climate Resilience Approaches			
		Infrastructure	Technology	Capacity Building	Governance and Financing
Ministry of Forestry	Water	Provides infrastructure to control terrestrial water damage, rehabilitates catchment areas and mangrove forests to enhance water availability	Develops innovative technologies and information systems to support watershed protection efforts.		Provides policy recommendations and climate vulnerability and risk data to strengthen water resource regulations.
	Coastal Subsector	Implements rehabilitation of forests and lands, including mangrove restoration, to enhance the protection of coastal areas			
Ministry of Home Affairs	Marine and Coastal, Water, Agriculture, and Health				Provides guidance and oversight to regional governments in integrating the Climate Resilience Development Policy into local planning and budgeting. Facilitates cross-level government coordination to support the implementation and monitoring of climate resilience actions at the regional level.
Ministry of Villages and Development of Disadvantaged Regions	Marine and Coastal, Water, Agriculture, and Health				Strengthens village-level capacity and funding mechanisms to support the implementation of climate resilience initiatives in local development.
BMKG (1/2)	Marine and Coastal			Enhances the capacity of fishers by increasing knowledge on weather and climate, provides maritime meteorological information and early warning systems that contribute to improved preparedness and resilience against climate impacts.	
	Water		Advances technologies to improve water availability through weather modification and watershed protection	Provides forecasts, early warning systems, and weather and climate information to enhance the capacity of government agencies in water resource management	

Institution (K/L)	Priority Sector of CRD	Role in Climate Resilience Approaches			
		Infrastructure	Technology	Capacity Building	Governance and Financing
BMKG (2/2)	Agriculture			Strengthens the capacity of farmers by enhancing knowledge and providing weather and climate information services	
	Health		Provides applied climate information services, environmental climate data, and infrastructure that support the development of health information systems		
BNPB	Marine and Coastal		Strengthens early warning systems for hydrometeorological disasters and develops disaster management strategies that support technological advancement and marine information systems	Provides information and conducts disaster management training to enhance community resilience against the impacts of climate change in the marine sector	Supports vulnerability and capacity mapping to improve resilience to climate change impacts
	Water		Strengthens early warning systems and disaster risk management for flood control and watershed protection.	Facilitates technical coordination for disaster risk mapping and evaluation, as well as the development of disaster-resilient villages, to enhance government capacity in water resource management	
	Health			Conducts studies, mapping, analysis, as well as monitoring and evaluation of disaster risks to strengthen government capacity in the health sector	Develops disaster response strategies to improve early detection of diseases and outbreak control

Figure 2.

Coordination of the Climate Resilience Development Policy within the SDGs Framework



ROLE OF REGIONAL GOVERNMENT ORGANIZATION

The role of OPD in implementing Climate Resilience Development at the regional level is centered on identifying the needs for addressing climate change impacts in accordance with local characteristics. OPD functions as the executing unit, ensuring the integration of Climate Resilience Development across all stages of regional planning and budgeting. In the initial stage, OPD identifies the needs for addressing climate change impacts. The results of this analysis form the basis for formulating strategic issues and required interventions according to the sectoral duties

and functions within the region. Subsequently, OPD consolidated these findings into regional planning documents through the preparation of the Strategic Plan (Renstra) and Work Plan (RKPD) of the Regional Apparatus Organization. Synchronization is carried out while considering regional priorities and local characteristics to ensure the relevance of interventions. This stage ensures that climate change response needs are addressed systematically within the planning process.

Implementing Climate Resilience Development at the regional level aims to reduce potential losses due to climate change and strengthen social and ecological resilience. To achieve this goal, activities and sub-activities in regional development planning documents are designed to respond to climate change impacts, both existing and projected.

Additionally, regions can identify needs for interventions beyond their capacity and authority. The preparation process is conducted through formal regional planning mechanisms, including the Long-Term Regional Development Plan (RPJPD), Medium-Term Regional Development Plan (RPJMD), Regional Government Work Plan (RKPD), OPD Strategic Plans (Renstra OPD), and the Regional Budget (APBD) or planning forums. Through this process, regional governments can align national and regional policies while enhancing their capacity to withstand, recover, and adapt to various climate risks and impacts.

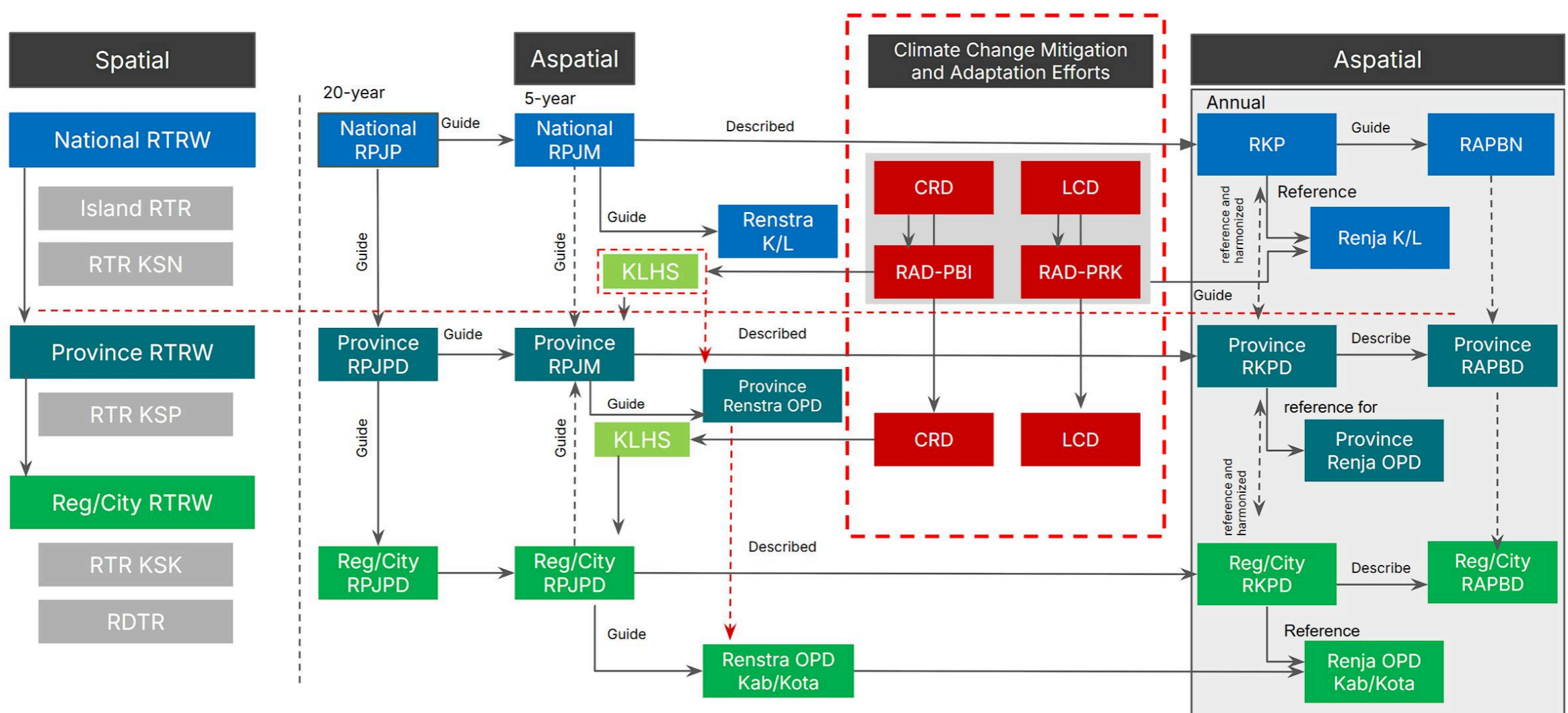
In line with this process, climate change considerations are incorporated into the Strategic Environmental Assessment (KLHS) as an instrument to ensure that policies, plans, and development programs integrate the principles of Sustainable Development.

KLHS guarantees that the integration of climate issues is reflected in RPJMD documents, ensuring that regional development aligns with long-term climate resilience needs (Figure 3).

The involvement of OPD in the planning, implementation, monitoring, and evaluation of Climate Resilience Development includes, but is not limited to, the following regional apparatus:

- 1 Agencies responsible for regional development planning, ensuring climate resilience issues are prioritized in RPJMD and RKPD.
- 2 Agencies with authority over coastal and marine sectors.
- 3 Agencies with authority over water resource management.
- 4 Agencies with authority over agriculture.
- 5 Agencies with authority over health.
- 6 Agencies with authority over regional infrastructure development.
- 7 Agencies with authority over regional disaster management.

Figure 3.
 Synchronization of National and Regional Development Planning



Source: Directorate General of Regional Development (Dirjen Bina Bangda), 26 November 2020. Alignment of National Priorities for Urban Development and Climate Resilience.

3. MAPPING OF CORE DUTIES AND FUNCTIONS OF MINISTRIES AND AGENCIES

REGULATORY FRAMEWORK





As stipulated in Presidential Regulations No. 194 and 195 of 2024, the Ministry of National Development Planning/Bappenas holds authority over the formulation, enactment, coordination, synchronization, and control of national development. In this context, the principal regulation governing the implementation of the Climate Resilience Development Policy refers to Presidential Regulation No. 12 of 2025 concerning the National Medium-Term Development Plan (RPJMN) 2025–2029, in which the Climate Resilience Development Policy serves as the operationalization of National Priority 8 under the third Priority Program.

The Climate Resilience Development Policy is implemented through a multi-stakeholder approach to support regulatory execution across each sector. The regulatory framework of CRD functions to clarify the institutional scope of Ministries/Agencies and to establish the legal basis for implementing PBI actions in each priority sector. The key regulations guiding the implementation of the Climate Resilience Development Policy in the respective priority sectors are outlined as follows:

Key Regulations for CRD		
Planning	Funding and Process Synchronization	Monitoring, Evaluation, and Reporting
<ol style="list-style-type: none"> 1. Law No. 25 of 2004 on the National Development Planning System (SPPN) 2. Presidential Regulations No. 194 and 195 of 2024 concerning the Ministry of National Development Planning/Bappenas 3. Presidential Regulation No. 12 of 2025 on RPJMN 2025–2029 4. Presidential Regulation No. 59 of 2017 on Sustainable Development Goals (SDGs) 	<ol style="list-style-type: none"> 1. Law No. 23 of 2014 on Local Government, partially repealed by Law No. 1 of 2022 on Financial Relations between Central and Local Governments 2. Government Regulation No. 17 of 2017 on the Synchronization of National Development Planning and Budgeting Processes 3. Government Regulation No. 8 of 2008 on Procedures for Preparation, Control, and Evaluation of Regional Development Plans 	<ol style="list-style-type: none"> 1. Government Regulation No. 39 of 2006 on Procedures for Control and Evaluation of Development Plans Implementation 2. Government Regulation No. 8 of 2008 on Procedures for Preparation, Control, and Evaluation of Regional Development Plans 3. Ministry of National Development Planning/Bappenas Regulation No. 1 of 2023 on Procedures for Monitoring, Control, and Evaluation of Development Plan Implementation

Figure 4.

Sectoral Regulations Supporting the Implementation of the Climate Resilience Development Policy

Sectoral Regulations Supporting the Implementation of the Climate Resilience Development Policy			
 Marine and Coastal	 Water	 Agriculture	 Health
Law No. 32 of 2014 on Marine Affairs	Law No. 37 of 2014 on Soil and Water Conservation	Law No. 22 of 2019 on the Sustainable Agricultural Cultivation System	Law No. 17 of 2023 on Health
Law No. 1 of 2014 on the Management of Coastal Areas	Law No. 17 of 2019 on Water Resources	Presidential Regulation No. 192 of 2024 on the Ministry of Agriculture	Presidential Regulation No. 170 of 2024 on the Ministry of Public Works
Law No. 66 of 2024 on Shipping Presidential	Law No. 31 of 2009 on Meteorology, Climatology, and Geophysics	Presidential Regulation No. 170 of 2024 on the Ministry of Public Works	Regulation of the Minister of Health No. 2 of 2023 on the Implementing Regulation of Government Regulation No. 66 of 2014 on Environmental Health
Regulation No. 193 of 2024 on the Ministry of Marine Affairs and Fisheries	Presidential Regulation No. 12 of 2024 on the Meteorology, Climatology, and Geophysics Agency (BMKG)	Regulation of the Minister of Agriculture No. 2 of 2025 on the Organization and Governance of the Ministry of Agriculture	Regulation of the Minister of Health No. 22 of 2022 on Malaria Control
Regulation No. 170 of 2024 on the Ministry of Public Works	Presidential Regulation No. 37 of 2023 on the National Water Resources Policy Presidential		Regulation of the Minister of Public Works and Public Housing No. 04/PRT/M/2017 on the Implementation of Domestic Wastewater Management Systems
Law No. 27 of 2007 on the Management of Coastal Areas and Small Island	Regulation No. 182 of 2024 on the Ministry of Environment	Decree of the Minister of Agriculture No. 72 of 2018 on National Agricultural Areas	Decree of the Minister of Health of the Republic of Indonesia No. HK.01.07/Menkes/2147/2023 on the National Clinical Guidelines for the Medical Management of Pneumonia in Adults
Minister of Marine Affairs and Fisheries Regulation No. 16 of 2025 on Climate Change Adaptation in Coastal Areas	Presidential Regulation No. 170 of 2024 on the Ministry of Public Works	Instruction of the President of the Republic of Indonesia No. 2 of 2025 on the Acceleration of Development, Upgrading, Rehabilitation, and Operation and Maintenance of Irrigation Networks to Support Food Self-Sufficiency	Regulation of the Minister of Health No. 82 of 2014 on the Control of Communicable Diseases
	Regulation of the Minister of Environment and Forestry No. 23 of 2021 on the Implementation of Forest and Land Rehabilitation		

The implementation of Climate Resilience Development across the four priority sectors is conducted synergistically by the respective K/L in accordance with their roles and authorities under the Climate Resilience Development framework. The Climate Resilience Development is formulated to

support the achievement of sectoral objectives and ensure the sustainability of each sector. These four sectors are underpinned by regulations that also serve as references for the implementation of Climate Resilience Development. The regulations governing each sector are detailed as follows.

REGULATIONS RELATED TO THE MARINE AND COASTAL SECTOR

Law No. 32 of 2014 on Marine Affairs provides the legal foundation for managing marine resources to achieve a sustainable and secure ocean as a living space and strategic domain for Indonesia.

Management is conducted in an integrated and sustainable manner, encompassing the planning and utilization of marine space. This management is primarily aimed at maximizing public welfare through protection, conservation, rehabilitation, utilization, and enhancement of coastal resources, small islands, and their ecological systems in a sustainable manner; fostering harmony and synergy between central and regional governments in managing coastal and small island resources; strengthening the participation of communities and government institutions; and encouraging community initiatives in resource management to achieve equity, balance, and sustainability.

The Climate Resilience Development Policy serves as a policy instrument that supports marine management as mandated under Law No. 32 of 2014. Climate

Resilience Development actions align with the objectives of marine spatial management, as stipulated in Articles 50–57 of Law No. 32 of 2014, including the protection of marine resources, prevention and mitigation of pollution, damage, and disasters, particularly arising from global warming, sea-level rise, and climate phenomena such as El Niño and La Niña.

Furthermore, the implementation of Climate Resilience Development actions also supports maritime safety and security, as articulated in Law No. 66 of 2024 on Shipping, particularly Article 172. In addition, Climate Resilience Development is consistent with the mandate of Law No. 27 of 2007 on the Management of Coastal Areas and Small Islands, which emphasizes conservation and rehabilitation efforts to address coastal degradation while managing resources to meet community needs, balancing the utilization of coastal resources for economic development without compromising the needs of future generations.

REGULATIONS RELATED TO THE WATER SECTOR

The Climate Resilience Development Policy in the Water Sector supports the implementation of Law No. 17 of 2019 on Water Resources, which establishes fundamental principles for water resource management. These principles aim to: protect and guarantee the fulfillment of the public's right to water; ensure sustainable availability of water and water sources for equitable societal benefit; preserve the function of water and water sources to support sustainable development; secure legal certainty for public participation in monitoring water resource utilization across planning, implementation, and evaluation stages; protect and empower communities,

including Indigenous Peoples, in water resource conservation and utilization; and regulate water-related hazards.

Based on state ownership of water resources, the Central Government and/or Regional Governments are mandated to regulate and manage water resources, including ensuring the minimum daily water needs of the population. Furthermore, the law grants authority to village governments, or other local entities, to assist in water resource management and to encourage local initiatives and community participation in managing water resources within their jurisdiction.

Within this framework, the Climate Resilience Development Policy addresses two primary challenges in the water sector arising from climate change: increasing water scarcity risks and heightened water-related hazards, such as floods and landslides. Efforts to mitigate water scarcity are reinforced through groundwater conservation and sustainable water supply interventions, in alignment with Law No. 37 of 2017 on Groundwater Conservation. Interventions in priority locations directly support conservation efforts to sustain water supply for domestic, agricultural, and other climate-sensitive productive activities.

Simultaneously, the management of water hazards is pursued through upstream area rehabilitation, strengthening protective functions of critical zones, and restoring the hydrological condition of watersheds (DAS). These actions are consistent with the mandate of Minister of Environment and Forestry Regulation No. 23 of 2021 on Forest and Land Rehabilitation, which emphasizes the restoration of protected forest areas to maintain hydrological resilience and reduce hydrometeorological disaster risks

REGULATIONS RELATED TO THE AGRICULTURE SECTOR

Climate Resilience Development Policy plays a critical role in reinforcing the implementation of Law No. 22 of 2019 on the Sustainable Agricultural Cultivation System, which aims to ensure water availability for agriculture to withstand the impacts of climate change and enhance food security. This law mandates that the utilization of agricultural outputs be directed to meet the population's needs for food, clothing, shelter, health, and the improvement of farmers welfare. To achieve these objectives, the use of agricultural land must consider land carrying capacity, suitability, and environmental preservation, particularly water and soil conservation. Consequently, the Climate Resilience Development in the agriculture sector serves as a strategic instrument to ensure that water and agricultural land resources are managed adaptively, sustainably, and based on climate risk, through designated CRD priority locations

Moreover, Presidential Regulation No. 37 of 2023 on the National Water Resources Policy provides national guidance to enhance water resilience through conservation, utilization, and hazard management. Water resilience is defined as the condition in which adequate and sustainable water supply meets human and development needs while managing water-related risks. The level of water resilience is measured against Sustainable Development Goals (SDGs) and the National Medium-Term Development Plan (RPJMN), including: universal access to safe, equitable, and affordable drinking water; improved water-use efficiency across all sectors; guaranteed sustainability of water supply; protection and restoration of ecosystems related to water resources; and reduced risk of losses from water-related disasters. These objectives align with the goals of the Climate Resilience Development Policy in the Water Sector, particularly in enhancing the resilience of water resources and reducing economic losses caused by climate change impacts on the water sector.

Regarding water utilization, Articles 47 paragraphs 2 and 3 of the law stipulate that in the implementation of the sustainable agricultural cultivation system, the government is authorized to regulate water use and availability by taking into account hydroclimatological, hydrological, and hydrogeological conditions. Moreover, within its mandate, the government is responsible for protecting agriculture through integrated pest management systems and measures addressing climate change impacts. This aligns with climate resilience actions in the agriculture sector, which promote water availability interventions to enable agriculture to withstand climate-related risks and strengthen food security.

Climate Resilience Development also seeks to maintain agricultural productivity to achieve food security. Water availability constitutes a critical factor for

ensuring continuity and is a key intervention area within the Climate Resilience Development Policy. Presidential Instruction No. 2 of 2025 on Accelerating the Development, Improvement, Rehabilitation, and Operation and Maintenance of Irrigation Networks to Support Self-Sufficiency serves as an operational instrument regulating the enhancement of irrigation systems to foster resilient and climate-adaptive agriculture.

Additionally, Minister of Agriculture Decree No. 472 of 2018 on National Agricultural Area Locations establishes priority zones for the development of food crops, horticulture, plantations, and livestock. Climate Resilience Development Policy is directed to support the implementation of this regulation by strengthening agricultural system resilience, including ensuring water availability, pest control, and capacity building for farmers, particularly to confront the impacts of climate change.

REGULATIONS RELATED TO HEALTH SECTOR

Climate Resilience Development Policy in the health sector aims to support the implementation of Law No. 17 of 2023 on Health. As stated in Article 4 paragraph 1, every individual has the right to protection from health risks and to a healthy environment for achieving optimal health outcomes. This law mandates that both central and regional governments are responsible for planning, administering, and supervising health services that are of high quality, equitable, and accessible to the public. Health services include the prevention and control of communicable and non-communicable diseases, as well as environmental health management. Disease control is intended to reduce social and economic impacts. In line with this objective, PBI actions are formulated to minimize potential losses resulting from climate change. The PBI commits to supporting health objectives as outlined in Articles 4(1), 9, 22(1), 86(1), 88, 89(1-2), and 105 of the Health Law.

Furthermore, Climate Resilience Development seeks to operationalize the Ministry of Health Regulation No. 2 of 2023, which derives from Government Regulation No. 66 of 2014 on Environmental Health. Articles 42 and 43 specify that environmental health management

must consider climate change threats, requiring adaptation and mitigation efforts to protect public health and environmental quality. In addition, Ministry of Health Regulation No. 22 of 2022 on Malaria Control emphasizes the government's responsibility to strengthen surveillance, vector control, and rapid response in endemic areas. By establishing priority locations and risk-based adaptation interventions, CRD provides an evidence-based foundation for targeted malaria control strategies. Similarly, Ministry of Health Regulation No. 82 of 2014 on Communicable Disease Control guides the implementation and reinforcement of early warning systems, which are essential for anticipating increases in dengue fever, diarrhea, and pneumonia cases. Climate Resilience Development supports these regulations by providing climate risk analysis, which informs preparedness measures for diseases influenced by climatic variability.

Regarding pneumonia management, as stipulated in Minister of Health Decree No. HK.01.07/Menkes/2147/2023 on Adult Pneumonia Management Guidelines, healthcare facilities require readiness to address rising cases linked to humidity and

temperature changes. Climate risk analyses under CRD serve as a planning basis to strengthen regional healthcare capacities in anticipation of projected pneumonia incidence. From the environmental health perspective, the Ministry of Public Works and Public Housing Regulation No. 04/PRT/M/2017 on Domestic Wastewater Management Systems (SPALD) mandates the provision of safe and quality SPALD. CRD ensures adequate SPALD implementation to reduce the incidence of diarrhea, dengue, and pneumonia.

Overall, the Climate Resilience Development Policy reinforces health and environmental health regulations through interventions that are adaptive to evolving climate risks. Its implementation ensures that the national health system can respond effectively, measurably, and sustainably to increasing climate-related threats. This role is crucial to safeguarding public health and addressing increasingly complex and dynamic climate risks.

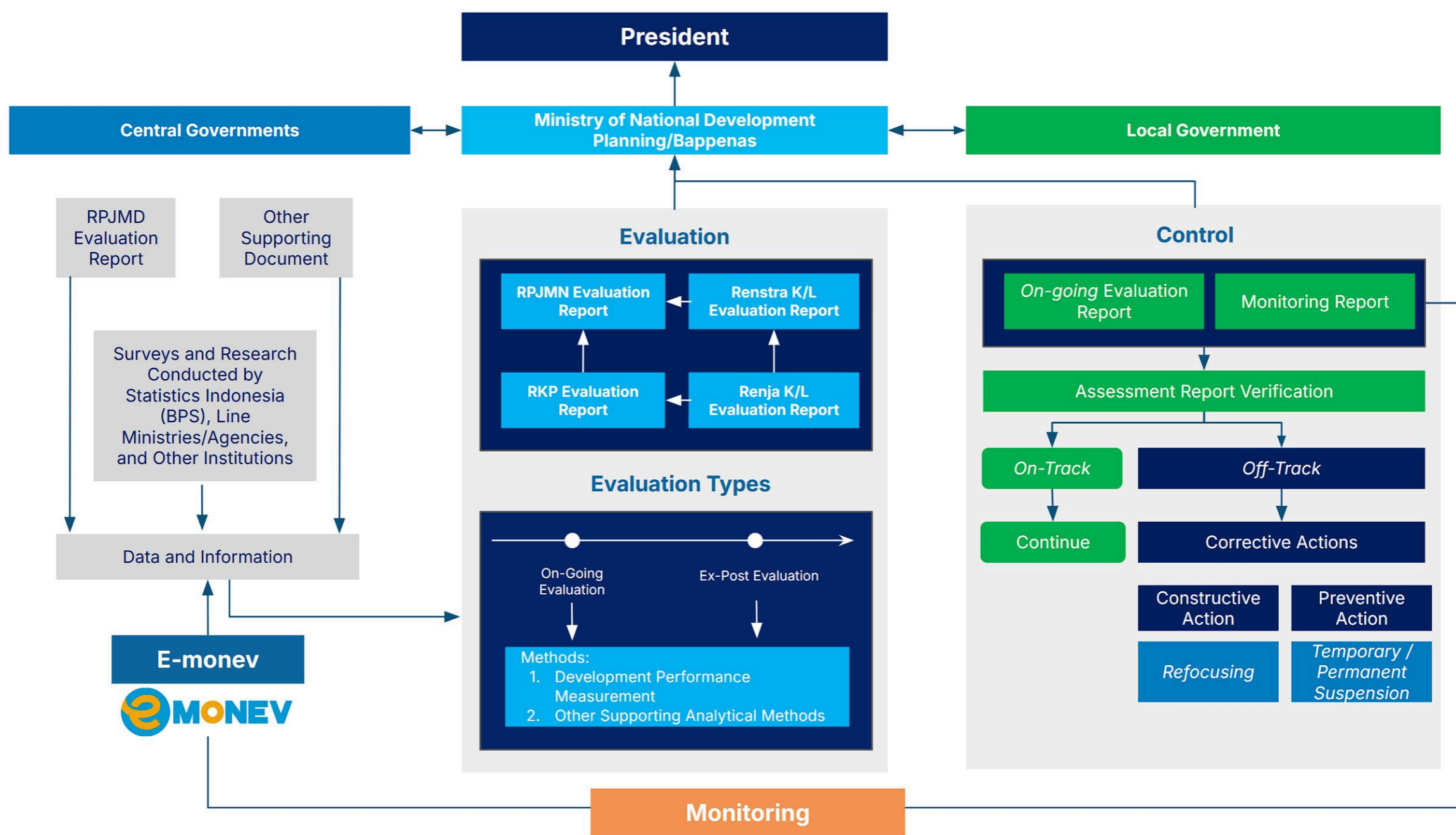


4. PLANNING CONTROL OF THE CLIMATE RESILIENCE DEVELOPMENT POLICY

In the implementation of the Climate Resilience Development Policy (CRD), the Ministry of National Development Planning/Bappenas plays a key role in ensuring the achievement of national development objectives through policy control and evaluation functions. PBI has been incorporated into the National Priorities of the RPJMN since 2020 and continues into the 2025–2029 planning period. Its implementation therefore requires systematic oversight to ensure

alignment with the targets of the National Priorities. Accordingly, the mechanism for controlling and evaluating the outcomes of PBI is conducted using an approach consistent with the monitoring and evaluation of the RPJMN National Priority Programs, as illustrated in Figure 5 and elaborated further in CRD 2.0 Book 5 – Monitoring, Evaluation, and Reporting of Actions.

Figure 5.
National Development Control Mechanism



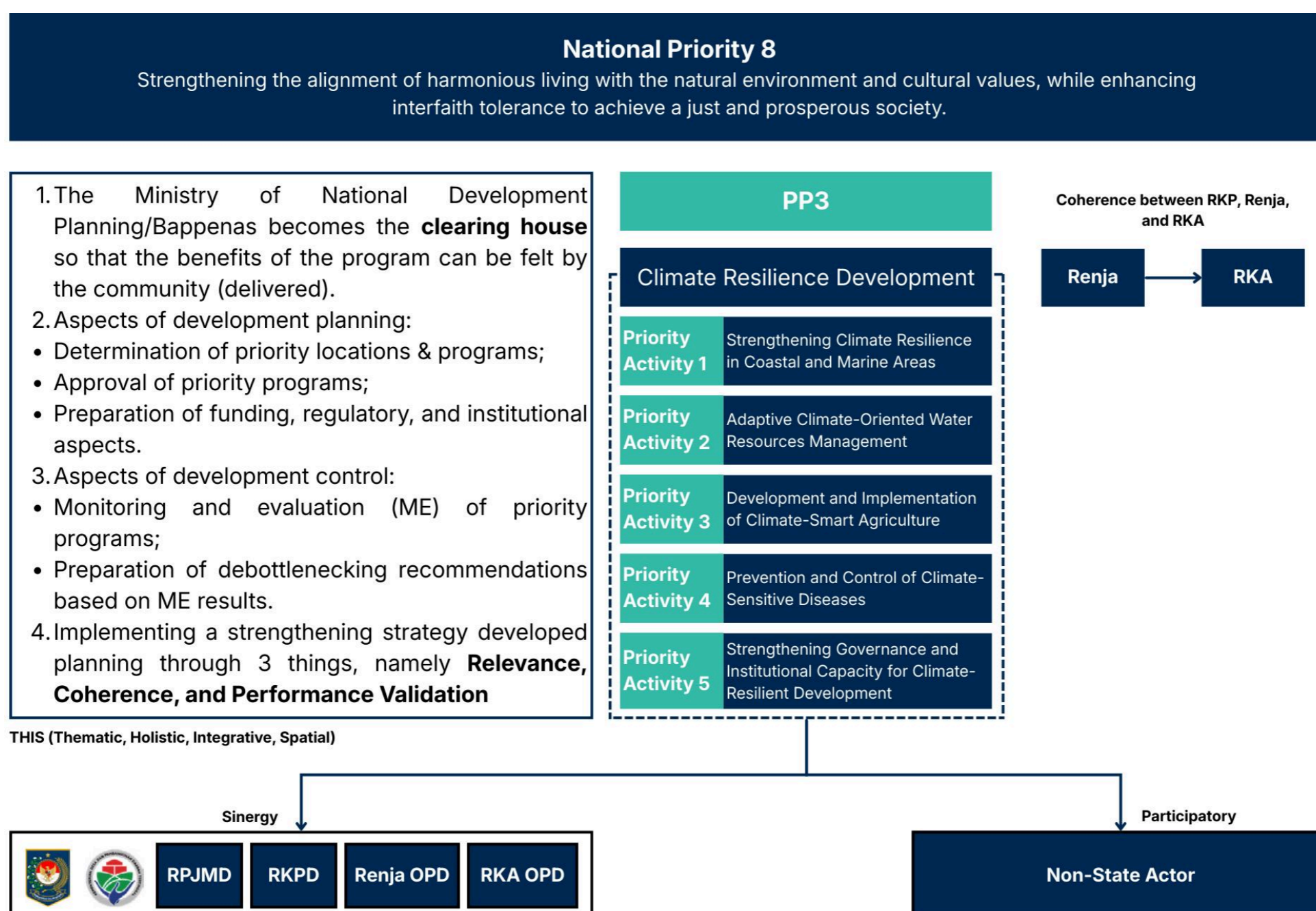
Source: Minister of National Development Planning Regulation (PPN/Bappenas) No. 1 of 2023 on Procedures for Monitoring, Controlling, and Evaluating the Implementation of the Development Plan

5. INSTITUTIONAL COORDINATION MECHANISM IN THE IMPLEMENTATION OF CLIMATE RESILIENCE DEVELOPMENT ACTIONS

Government administration is guided by the National Long-Term Development Plan (RPJPN) 2025–2045 and the Grand Design for Bureaucratic Reform 2025–2045, which serve as the foundation for creating a world-class bureaucracy that supports the vision of Indonesia Emas 2045. The Ministry of National Development Planning/Bappenas carries out its mandate in national development planning to assist the President in achieving development objectives through thematic, holistic, integrative, and spatial approaches, integrated across sectoral and regional planning.

Within the context of Climate Resilience Development, the role of Bappenas is directed toward strengthening coordination and integration across Ministries/ Agencies (K/L) to ensure consistency in policy implementation. In line with the position of the Climate Resilience Development Policy as part of National Priority 8, monitoring and evaluation of plan implementation are conducted in accordance with the RPJMN 2025–2029 to ensure the achievement of development targets.

Figure 6.
Control Mechanism of Climate Resilience Development



6. CONCLUSION

The roles and functions of institutions responsible for implementing Climate Resilience Development actions are clearly articulated in the RPJMN 2025–2029. Identifying these roles is expected to strengthen understanding of each stakeholder’s contribution while promoting coordinated action across all levels of government. This enhanced coordination provides the foundation for a more comprehensive integration of

the Climate Resilience Development Policy, with a focus on priority locations as outlined in **CRD 2.0 Book 1 – List of Locations and Priority Actions**. Accordingly, the implementation of Climate Resilience Development can be carried out in a more targeted, effective, and efficient manner, contributing meaningfully to the reduction of potential economic losses resulting from climate change.



Annex 1.

Mapping of the Main Duties and Functions of Ministries/Agencies (K/L)

Sector	Regulations	Ministries/Agencies (K/L)
Marine and Coastal	<ul style="list-style-type: none"> • Law No. 27 of 2007 on the Management of Coastal Areas and Small Islands • Law No. 1 of 2014 amending Law No. 27 of 2007 on the Management of Coastal Areas and Small Islands • Law No. 32 of 2014 on Marine Affairs • Law No. 66 of 2024 on Shipping • Presidential Regulation No. 193 of 2024 on the Ministry of Marine Affairs and Fisheries • Presidential Regulation No. 173 of 2024 on the Ministry of Transportation 	<p>Key K/L</p> <ul style="list-style-type: none"> • Ministry of Marine Affairs and Fisheries <p>Related K/L</p> <ul style="list-style-type: none"> • Ministry of Transportation • Ministry of Public Works
Water	<ul style="list-style-type: none"> • Law No. 31 of 2009 on Meteorology, Climatology, and Geophysics • Law No. 17 of 2019 on Water Resources • Law No. 37 of 2014 on Soil and Water Conservation • Presidential Regulation No. 37 of 2023 on the National Water Resources Policy • Presidential Regulation No. 12 of 2024 on BMKG (Meteorology, Climatology, and Geophysics Agency) • Presidential Regulation No. 182 of 2024 on the Ministry of Environment • Presidential Regulation No. 183 of 2024 on the Environmental Control Agency • Presidential Regulation No. 170 of 2024 on the Ministry of Public Works • Minister of Environment and Forestry Regulation No. 23 of 2021 on the Implementation of Forest and Land Rehabilitation 	<p>Key K/L</p> <ul style="list-style-type: none"> • BMKG (Meteorology, Climatology, and Geophysics Agency) <p>Related K/L</p> <ul style="list-style-type: none"> • Ministry of Environment / Environmental Control Agency • Ministry of Public Works • Ministry of Forestry
Agriculture	<ul style="list-style-type: none"> • Law No. 22 of 2019 on the Sustainable Agricultural Cultivation System • Presidential Regulation No. 12 of 2024 on BMKG (Meteorology, Climatology, and Geophysics Agency) • Presidential Regulation No. 192 of 2024 on the Ministry of Agriculture • Presidential Regulation No. 170 of 2024 on the Ministry of Public Works • Minister of Agriculture Regulation No. 2 of 2025 on the Organization and Work Procedure of the Ministry of Agriculture • Minister of Agriculture Decree No. 72 of 2018 on National Agricultural Areas • Presidential Instruction No. 2 of 2025 on the Acceleration of Development, Improvement, Rehabilitation, Operation, and Maintenance of Irrigation Networks to Support Food Self-Sufficiency 	<p>Key K/L</p> <ul style="list-style-type: none"> • Ministry of Agriculture <p>Related K/L</p> <ul style="list-style-type: none"> • BMKG (Meteorology, Climatology, and Geophysics Agency) • Ministry of Public Works

Sector	Regulations	Ministries/Agencies (K/L)
Health	<ul style="list-style-type: none"> • Law No. 17 of 2023 on Health • Presidential Regulation No. 161 of 2024 on the Ministry of Health • Presidential Regulation No. 170 of 2024 on the Ministry of Public Works • Minister of Health Regulation No. 2 of 2023 on Government Regulation No. 66 of 2014 concerning Environmental Health 	<p>Key K/L</p> <ul style="list-style-type: none"> • Ministry of Health <p>Related K/L</p> <ul style="list-style-type: none"> • Ministry of Public Works
Cross-Sector	<ul style="list-style-type: none"> • Law No. 25 of 2004 on the National Development Planning System • Law No. 23 of 2014 on Local Government • Law No. 59 of 2024 on the Long-Term National Development Plan (RPJPN) 2025–2045 • Minister of National Development Planning / Head of Bappenas Regulation No. 1 of 2023 • Presidential Regulation No. 110 of 2025 on the Implementation of Carbon Economic Value (NEK) and National Greenhouse Gas Emission Control • Government Regulation No. 17 of 2017 on Synchronization of National Development Planning and Budgeting Processes • Government Regulation No. 8 of 2008 on the Procedures for Preparation, Control, and Evaluation of Regional Development Plans • Government Regulation No. 39 of 2006 on Procedures for Control and Evaluation of Development Implementation • Presidential Regulation No. 194 of 2024 on the Ministry of National Development Planning • Presidential Regulation No. 195 of 2024 on Bappenas • Presidential Regulation No. 12 of 2025 on the Medium-Term National Development Plan (RPJMN) 2025–2029 • Presidential Regulation No. 1 of 2019 on the National Disaster Management Agency (BNPB) • Presidential Regulation No. 29 of 2021 on the Amendment to Presidential Regulation No. 1 of 2019 on BNPB 	





BAPPENAS

Kementerian Perencanaan Pembangunan Nasional/
Badan Perencanaan Pembangunan Nasional



ROLES OF GOVERNMENT INSTITUTIONS

BOOK 2

