



# COHERENCE

## Coherence as the process of joint and integrated policy making

At the interface of Sustainable Development,  
Adaptation to Climate Change and Disaster Risk Management.  
Lessons learned from Germany.

# Imprint

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# Abbreviations

<b>AA</b>	Federal Foreign Office
<b>BBSR</b>	Urban Affairs and Spatial Development
<b>BBK</b>	Federal Office of Civil Protection and Disaster Assistance
<b>BLAG-KliNa</b>	Federal–Länder Working Group on Climate and Sustainability (BLAG KliNa)
<b>BMG</b>	Federal Ministry of Health
<b>BMI</b>	Federal Ministry of the Interior, Building and Community
<b>BMU</b>	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
<b>BMZ</b>	Federal Ministry for Economic Cooperation and Development
<b>DAS</b>	German Adaptation Strategy
<b>DNS</b>	German Sustainability Strategy
<b>DRM</b>	Disaster Risk Management
<b>DRR</b>	Disaster Risk Reduction
<b>DWD</b>	National Meteorological Service
<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (German Development Cooperation)
<b>GRC</b>	German Red Cross
<b>IMAG-Sendai</b>	Inter-Ministerial Working Group for the Sendai Process
<b>IMA-Adaptation</b>	Inter-Ministerial Working Group on Adaptation to Climate Change
<b>IMK</b>	Standing (Permanent) Conference of the Ministers of the Interior of the Länder
<b>KLAS</b>	Climate Adaptation Strategy Extreme Rain Events Project
<b>NFP</b>	National Focal Point
<b>RENN</b>	Regional Network Units for Sustainability Strategies
<b>SDG</b>	Sustainable Development Goal
<b>SSC</b>	State Secretaries' Committee for Sustainable Development
<b>UBA</b>	German Environment Agency
<b>UAL-AG</b>	Inter-Ministerial Working Group on Sustainable Development
<b>UMK</b>	Environmental Ministers of the Länder
<b>THW</b>	Federal Agency for Technical Relief

# Table of Contents

- 1. Introduction ..... 4**
- 2. Country Context ..... 6**
- 3. Key Policy Processes, Institutional Arrangements, and Cooperation Mechanisms in Germany ..... 7**
  - 3.1 Sustainable Development ..... 9
    - Sustainable Development Related Vertical and Horizontal Cooperation Mechanisms ..... 9
  - 3.2 Disaster Risk Management ..... 12
    - DRM Related Vertical and Horizontal Cooperation Mechanisms ..... 13
  - 3.3 Adaptation to Climate Change ..... 14
    - CCA Related Vertical and Horizontal Coordination Mechanisms ..... 15
- 4. Good Practices and Key Enablers to Enhance Coherence Among Sustainable Development, Adaptation to Climate Change and Disaster Risk Management ..... 18**
- 5. Conclusions ..... 25**
- Glossary ..... 26
- References ..... 27



## Introduction

Sustainable development, disaster risk management (DRM), and climate change adaptation are inextricably linked and interconnected fields. Building strategic linkages and coordinating actions of the three fields could increase the effectiveness of different actions and related goals (Siders, 2016). In 2015, the global community adopted the 2030 Agenda for Sustainable Development, the Paris Agreement and the Sendai Framework on Disaster Risk Reduction, all of which have substantial areas of overlap and clear convergence of objectives related to strengthening resilience, fostering sustainable development, and reducing vulnerability to climate change and disasters (Dazé et al., 2018). The interconnectedness of these objectives is crucial, as they can only be achieved in a sustainable manner together and should not stand on their own. The mentioned agendas offer a useful normative compass for such integration.

Resilience – meaning the capacity of systems to cope with hazardous events, responding in ways to maintain their essential function, while also maintaining the capacity for adaptation, learning and transformation in a sustainable manner – is a central aspect

of the Sendai Framework and individual Sustainable Development Goals (SDGs) of the 2030 Agenda.

SDG 1 (no poverty), SDG 2 (resilient agricultural practice), SDG 9 (industry, innovation, and infrastructure), SDG 11 (sustainable cities and municipalities) and SDG 13 (climate change measures) make reference to strengthening resilience, which is also reflected in the Sendai Framework Monitoring for Objectives A-E. Similarly, the Paris Agreement recognizes the links between climate action and sustainable development while the 2030 Agenda highlights the role of adverse climate change impacts in undermining sustainable development. The goals of limiting the average temperature increase to 2°C (or lower) and adapting to climate change can also be found in SDGs 11 and 13 of the 2030 Agenda. Article 8 of the Paris Agreement addresses loss and damage caused by climate change and weather extremes, which is also a major objective of the Sendai Framework. Similarly, Sendai recognizes climate change as a driver of disaster risk and that disaster risk reduction (DRR) is essential for sustainable development. In addition, all three frameworks have formulated improved cooperation and international

*In a nutshell, we cannot tackle complex topics such as climate change, sustainability or civil protection without comprehensive collaboration across sectors.*

*Susanne Hempen. Manager German Strategy for Adaptation to Climate Change, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).*

support as a common goal (in SDG 17 of the 2030 Agenda and in both the Sendai Framework and Paris Agreement), thereby generating the basis for functional synergies.

Applying a coherent approach to the planning, implementation, and reporting of the three global agendas should therefore be promoted. Pursuing coherence will enable the smart use of resources and improve the quality of planning while strengthening positive synergies in implementation processes and magnifying the impact. It will likely minimize potential conflicts and the counterproductive implementation of measures, achieving joint agenda goals more efficiently and effectively (see Box 1).

While many governments recognize the value of coherence, they struggle to understand what closer horizontal and vertical integration and coherent policy processes look like in practice and how it can be achieved. A systematic approach — continuously called for in the policy discourse — seems to approach system limits in practice and demands an unprecedented level of coordination that is often difficult to implement within the existing structures. As a result, the implementation of international agendas is likely to take place in separate pillars, potentially leading to considerable additional costs and burdens.

To date, the research on good examples of coherent policy processes under the different agendas is lim-

**Coherence** in the context of the global agendas adopted in 2015 can be understood as the process of joint and integrated policy-making. To accomplish this, multiple actors actively seek to identify synergies and co-benefits while avoiding trade-offs among policy processes, financing mechanisms, reporting structures and implementation frameworks to achieve jointly set common goals (both nationally and internationally). Coherence further requires (intentional) coordination, mechanisms, and structures that promote horizontal and vertical cooperation between different levels of government and sectors of society. This will help avoid duplication of efforts and enable effective – and smart – use of financial and human resources.

ited. Further, the research does not provide any practical recommendations and lessons learned on the necessary enabling factors and mechanisms that would help create functional linkages for a coherent approach toward the systematic implementation of the global agendas.

The following in-depth case analysis of Germany aims to contribute to filling this gap by exploring emerging good practices and practical learnings on fostering coherence. This analysis will showcase key mechanisms and enabling factors that contribute to the development of a coherent approach across different levels of governance in Germany. The case study also captures lessons learned and translates them into good practices. These practices can be applied by decision-makers in developed and developing countries as well as emerging economies.



## Country Context

Germany is a federal republic comprised of 16 states (Länder). Power is distributed between the federal government and the Länder according to specific functions. The Basic Law for the Federal Republic of Germany — Germany’s constitution — governs the division of responsibilities between the federal government and the Länder. The federal level is primarily in charge of policy formulation in the form of law-making, while

the Länder are mainly responsible for the implementation of policies. Executive power is vested in the cabinet formed by the federal chancellor and other ministers. The German parliament is a bicameral legislature that consists of the elected Bundestag (first chamber) and the appointed Bundesrat (second chamber). The Länder participate in federal law-making via the Bundesrat, which is composed of appointed members representing the 16 states of Germany. This shared division of responsibilities requires considerable vertical coordination activities between the federal and Länder levels (Hustedt, 2014).

Responsibilities for environmental protection are shared between the federal and state governments. As for the above-mentioned three agendas the situation is as follows: in 2015, Germany adopted the Sendai Framework for Disaster Risk Reduction and the 2030 Agenda for Sustainable Development and took important first steps towards national implementation. This was followed by the ratification of the Paris Agreement in 2016. All three agendas are to be implemented based on shared responsibility between the federal and state governments.

*We are collaborating [...] to place more attention on the intersection of different topics, and to make our collaboration more systematic and more harmonious.*

*Peter Lauwe, Office of the National Focal Point for the Sendai Framework at the German Federal Office of Civil Protection and Disaster Assistance.*





## Key Policy Processes, Institutional Arrangements, and Cooperation Mechanisms in Germany

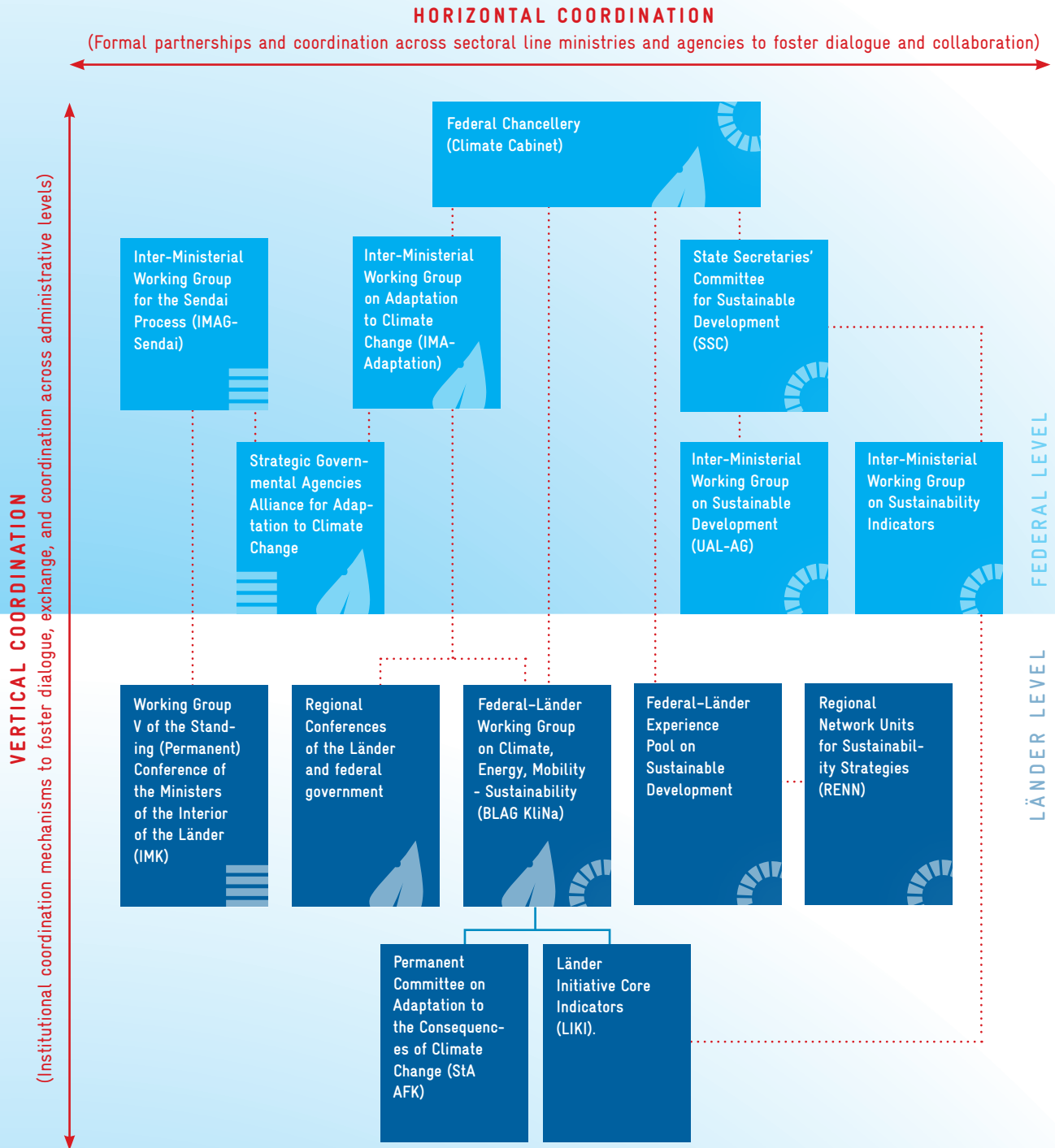
To understand the opportunities and benefits related to coherence, it is important to recognize the institutional arrangements, existing coordination structures, and relevant policy processes. This section provides an overview of the institutional setting and coordination mechanisms that Germany has put in place for DRM, climate change adaptation, and sustainable development. Given the cross-sectoral nature of the global agendas adopted in 2015 — and the strong imperative to localize and integrate them at the sub-national (Länder) and local levels — special attention is paid to horizontal and vertical coordination mechanisms. An overview of the institutional arrangements and respective coordination mechanisms to enhance coherence related to the 2030 Agenda, the Paris Agreement, and the Sendai Framework is described below and visualized in Figure 1.

*Collaboration, coherence and competent institutional settings contribute to successful and efficient implementation of the agendas.*

*For more information on Agenda coherence in Germany, visit the GIZ YouTube Channel.*



Figure 1. Overview of respective coordination mechanisms to enhance horizontal and vertical coherence related to the 2030 Agenda, the Paris Agreement, and the Sendai Framework in Germany



Dotted lines indicate a direct thematic relationship





## 3.1 Sustainable Development

*Due to the integrative and holistic approach of the 2030 Agenda, the singular SDGs are highly interdependent, of equal importance, and indivisible. The 2030 Agenda therefore promotes integrated thinking.*

*(please see p. 9 of the study)*

In January 2017, the federal government approved a new edition of the German National Sustainability Strategy (DNS), as a regular update of the Strategy for Sustainable Development. Since 2002, the federal government had been updating the strategy regularly. The 2016 version has undergone a fundamental reorientation. It is aligned with the 17 SDGs of the 2030 Agenda. With the updating of the DNS the 2030 Agenda has been anchored as a central goal of government action. Both the development of the national strategy and subsequent progress reports were accompanied by broad dialogue and consultation processes with various social groups and key actors. The overarching objectives of the DNS are intergenerational justice, quality of life, social cohesion, and international responsibility. The strategy defines indicators with medium- and long-term targets for these objectives. (Die Bundesregierung, 2019a). The strategy draws strategic links to the federal government's Climate Action Plan 2050 and the German Adaptation Strategy (DAS), identifying them as the main mechanisms to meet the targets of SDG 13 (climate action).

### Sustainable Development Related Vertical and Horizontal Cooperation Mechanisms

Due to the integrative and holistic approach of the 2030 Agenda, the individual SDGs are highly interdependent, of equal importance, and indivisible. The 2030 Agenda therefore promotes integrated thinking in the implementation of the relevant policy frameworks captured within the SDGs — e.g., the Paris Agreement on Climate Change or the Sendai Framework for DRR. Accordingly, seeking synergies and integrating implementation processes promises to become a key factor for achieving the SDGs as well as the other targets and agendas. Germany's federal structure follows this approach and has set up strong vertical and horizontal mechanisms to ensure proper coordination and cooperation within and across all levels of government.

The German Chancellor Angela Merkel has continuously highlighted Germany's commitment to the 2030 Agenda. Due to its political significance and cross-cutting nature, sustainable development policy resides with the **Federal Chancellery**, thereby promoting policy coherence at the highest level. The Federal Chancellery chairs the **State Secretaries' Committee for Sustainable Development (SSC)**, which comprises state secretaries from all federal ministries that participate in the joint implementation of numerous policy areas affecting sustainability. Its tasks include strategic advice to the German government on sustainability issues, the further development of the strategy, as well as a review of the indicators and their performance. It also acts as a point of contact for the Länder and local umbrella organizations. Representatives of the Länder and municipalities are invited to attend SSC meetings when relevant, with decisions made on a consensus basis (Die Bundesregierung, 2019b). The federal

ministries in Germany share the responsibility for implementing the national strategy and are responsible for their own sector-related contributions. To reflect this commitment (and further improve horizontal integration), each ministry appoints a Ministry Coordinator for Sustainable Development. The coordinator is tasked with strengthening integration within the individual ministry further. Ministry coordinators meet regularly, are involved in interdepartmental and regulatory processes, and act as the central contacts for sustainable development issues within their ministry (OECD, 2018a).

The SSC is supported by the **Inter-Ministerial Working Group on Sustainable Development (UAL-AG)**, which prepares the meetings of the SSC and helps implement and further develop the strategy. It consists of representatives from the deputy general level of each federal ministry. To a certain extent, this working group serves as a background structure to the SSC. The majority of the discussion and agreements are prepared through written circulation procedures, in bilateral and multilateral meetings, and in sub-group working groups. The working group provides a space at the sub-managerial level for fundamental substantive and conceptual discussions among the ministries and sectors as well as for the settling of conflicts before they reach a higher decision-making level (Bornemann, 2014).

Federal ministries share responsibility for implementing the strategy and monitoring the implementation of measures. Hence, an **Inter-Ministerial Working Group on Sustainability Indicators** meets regularly to discuss and prepare work related to the technical monitoring and improvement of the German Sustainability Strategy's sustainability indicators. The working group is led by the BMU with the participation of the Federal Statistical Office. Some of the indicators measure transboundary impacts, which is useful for tracking policy coherence (OECD, 2018a).

Another important mechanism in relation to monitoring and reporting is the **Länder Initiative Core Indicators (LIKI)**. This initiative is a working group of environmental authorities representing the Länder and the federal government for indicator work and has been in place since 2001. On behalf of (and in close cooperation with) the Federal-Länder Working Group on Climate, Energy, Mobility and Sustainability (BLAG KliNa), its task is to develop, maintain, and document a common set of 25 environment-specific sustainability indicators of the federal government and

*We already have an extensive toolbox of policies, instruments and approaches with which we can realize the urgently needed transformation. This toolkit needs to be better implemented and deployed across the board.*

*Svenja Schulze, German Minister of the Environment, Nature Conservation and Nuclear Safety (BMU).*

Länder. These joint environment-specific indicators are divided into four thematic groups: a) Climate and Energy, b) Nature and Landscape, c) Environment and Health and d) Resources and Efficiency. Each thematic group identifies four to nine jointly agreed-upon indicators used by the federal government and Länder (LIKI, 2020). Many of the indicators reported are identical or very similar to the environment-related indicators of the DNS of the federal government and the Länder and therefore contribute to the reporting of the SDGs. Several states, including Berlin and Schleswig-Holstein, are using these indicators to report their progress on the SDGs.

Like the global agenda, the DNS has to be localized. Thus, the Länder must be involved in the implementation of it. At the beginning of 2015, the Bundesrat (Second Chamber) emphasized the importance of the SDGs for the federal states and advocated for a stronger exchange between the federal and state governments in the sense of a structural dialogue. In this regard, the **Federal-Länder Experience Pool on Sustainable Development** offers a space for regular communication between the federal and Länder levels. It is an established cooperation, supported by the Länder and chaired by the Federal Chancellery and one Länder state on a rotating base. Within this exchange, both the Federal Chancellery and the Länder follow the need for coherent and ambitious implementation in all policy areas related to sustainable development and the close engagement and collaboration with the Länder for the further development of the German sustainability strategy (Die Bundesregierung, 2018a). Thirteen out of 16 Länder have drawn up or are currently working on their own sustainable development

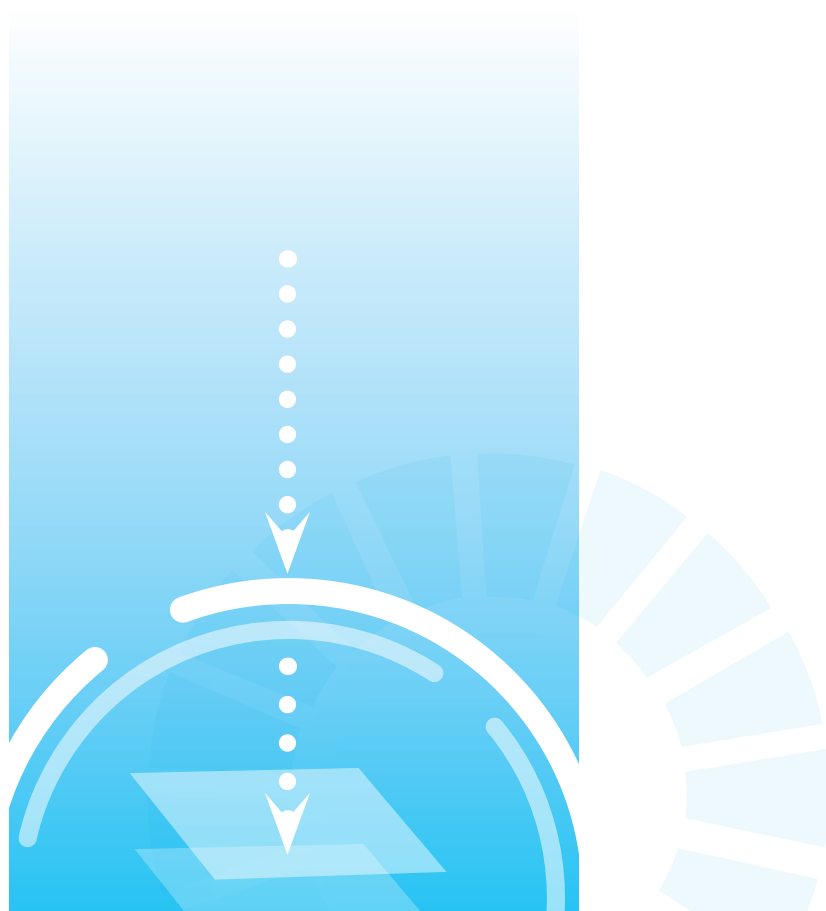
strategies. This ensures greater proximity to citizens and their active involvement, while also accounting for the important role of the Länder in the local economy (Kerkow, 2017).

In general, the concept of “sustainability” is understood multidimensionally by the state governments and communicated accordingly. It often covers climate and DRM. Although the states’ thematic priorities differ within their sustainability strategies, great importance is given to energy and climate. The Bavarian State Ministry for the Environment and Health, for example, sees sustainable development as a challenge “for politics, business and society,” which “in addition to preserving the ecological, economic, and social foundations, also secures the opportunities for present and future generations.” According to the Ministry of the Environment, Climate and Energy of Baden-Württemberg, “the sustainability strategy is not intended to replace the individual sectoral policies, but to provide an instrumental and organizational framework for issues that require interdepartmental cooperation and the involvement of social actors” (Kerkow, 2017, p. 11, author translation). This indicates that the Länder understand that achieving the SDGs requires coherent and cross-sectoral government action.

Many initiatives and projects have been established regarding sustainable development across Germany’s regions. To promote dissemination and networking, the federal government funded and proposed four **Regional Network Units for Sustainability Strategies (RENNs)**, allowing for horizontal exchanges within a region but also across all the Länder. This network links established and “new” sustainability actors facilitating cross-cutting exchange across different administrative levels. It provides a space for knowledge sharing and discourses for a variety of actors and target groups involved in sustainability activities and strategies at different administrative levels. This allows for a flow of information between players from all levels of government and civil society to strengthen policy coherence and integration (RENN, 2019).

*COVID-19 is making it more important than ever, and demonstrating the interconnected nature of the challenges we face.*

*António Guterres.  
United Nations Secretary General.*





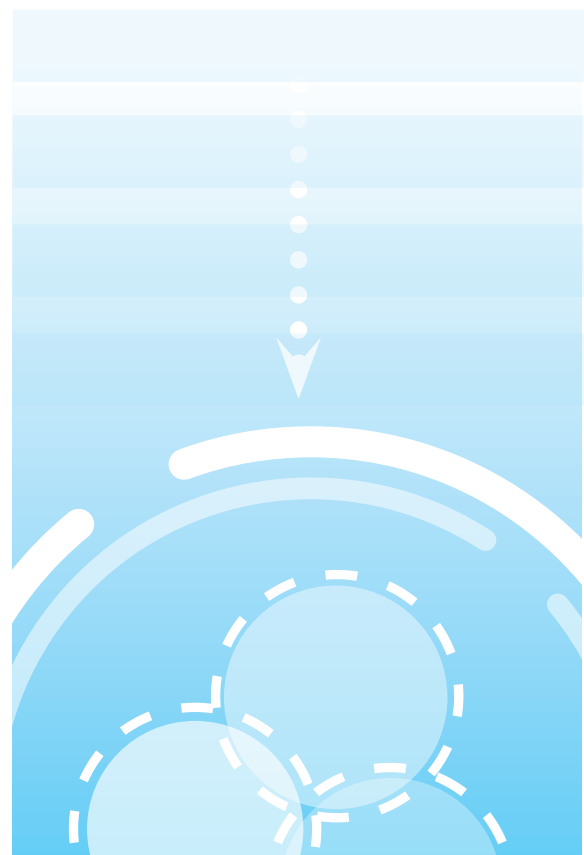
## 3.2 Disaster Risk Management

Germany has a unique institutional architecture in relation to disaster risk management. Germany's constitution, the Basic Law, distributes DRM-related tasks between different governance levels. The federal government is responsible for "civil protection" (Bevölkerungsschutz) and disaster assistance. Civil protection encompasses protection of the population against all kinds of natural and human-made hazards (including war), while disaster assistance refers to the federal government's task of providing disaster management support to the Länder in case of any major disasters. On behalf of the federal government, the Federal Ministry of the Interior, Building and Community (BMI) and its executive agency, the Federal Office of Civil Protection and Disaster Assistance (BBK) and the Federal Agency for Technical Relief (THW) are responsible for matters related to civil protection and disaster assistance. They thus play a central role in managing crises within the country. Support is primarily provided in the form of operational forces, information-sharing, coordination, managing limited resources, and crisis management training (BMI, 2019a). The BBK also carries out national risk analyses, development of standards, frameworks, and warning systems along with support for municipalities. Many of the activities of the BBK directly target vertical cooperation. The BMI plays a vital coordinating role between the federal government and the Länder and also provides advice to political actors (German Committee for Disaster Reduction [DKKV], 2017).

The Länder are responsible for disaster management and disaster relief, including legislation on disaster management, implementing activities, plans, and preparation for disaster. However, the federal and the Länder levels are closely interlinked and under cer-

tain conditions can call upon each other's resources and create a crisis task force. The Länder further provide support to municipalities and local authorities in relation to overall coordination in the event of large-scale hazards or disasters (DKKV, 2017).

The New Strategy for the Protection of the Population in Germany is the overarching national DRM strategy, which aims to strengthen the collaboration between the federal government and Länder and emphasizes the joint responsibility in situations that threaten serious damage to the welfare of the nation. The strategy also aims to prepare and renew the system of civil protection in response to current and new challenges and makes direct reference to human-made hazards such as climate change (DKKV, 2017). Since the New Strategy for the Protection of the Population



in Germany passed in 2002, there is much closer cooperation between the federal government and states to make effective use of personnel, equipment and other resources.

In response to the adoption of the Sendai Framework, Germany has established the National Focal Point for the Sendai Framework (NFP) to coordinate its implementation and monitoring. The NFP is tasked with establishing a national strategy of disaster resilience. Based at the BBK, the Focal Point can draw on the technical expertise of subordinate authorities and institutions to carry out its tasks. The coordination office supports the national implementation of the Sendai Framework and associated activities in networking, public relations, and administration (BBK, n.d.). Moreover, the NFP is embedded in the Inter-Ministerial Working Group for the Sendai Process (IMAG-Sendai). Through the IMAG-Sendai, the NFP gains the legitimacy to act on behalf of the German federal government. Collaboration between the ministries aims to place more attention on the intersections and interlinkages of DRM, climate change, and sustainable development while making collaboration more systematic and concerted (Deutsche Gesellschaft für Internationale Zusammenarbeit [GIZ], 2019).

### DRM Related Vertical and Horizontal Cooperation Mechanisms

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The German federal government has progressively established a number of vertical and horizontal mechanisms to enable necessary coordination with other ministries and levels of government around DRM, disaster management, and disaster relief. Several mechanisms directly underpinning horizontal and vertical cooperation have been developed; two of them are highlighted below.

**Inter-Ministerial Working Group for the Sendai Process.** The IMAG-Sendai is an institutionalized body that has the task of strategically steering and coordinating the implementation process of the Sendai Framework horizontally within the federal government. It coordinates closely and actively with relevant actors, exchanging information and addressing relevant issues while supporting policy-makers at federal and state levels, science, civil society, and business with implementation. This process is based on the coherence concept

*Once and for all, we need to overcome the predominance of a reactive focus on disasters and adopt a strategy that integrates disaster risk reduction into the very DNA of development initiatives.*

*Mami Mizutori, the United Nations Secretary-General's Special Representative for Disaster Risk Reduction.*

of the Sendai Framework and on the shared allocation of responsibilities of the existing German federal and state DRM system. Accordingly, the IMAG-Sendai was created as a round table for different ministries and agencies to discuss jointly how the objectives of the Sendai Framework in Germany can be interlinked with the DAS and the DNS. The federal working group consists of the Federal Foreign Office (AA), the Federal Ministry for Economic Cooperation and Development (BMZ), the BMI, the Federal Ministry of Health (BMG) and the BMU as well as the BBK, the GIZ, and the German Red Cross (GRC) (BBK, n.d.). The IMAG-Sendai allows for the exchange of different specialized perspectives and ensures that measures under different national strategies do not contradict the objectives of the other agendas. It ultimately reduces duplication of structures and work — leading to a better understanding of coherent solutions that can further benefit subnational planning levels.

**The Standing (Permanent) Conference of the Ministers of the Interior of the Länder (IMK)** is a regular forum between the Federal Ministry of the Interior and the Länder with a rotating presidency among the Länder. It serves as a key forum to foster vertical coordination of domestic policy issues and related harmonization and coherence among the Länder (IMK, 2019). Within the IMK, working group V focuses on DRM and brings together experts and policy-makers to discuss how civil protection and climate change adaptation can be planned and implemented in a coherent way (DKK, 2019).



### 3.3 Adaptation to Climate Change

Germany's climate change response is guided by the federally appointed Climate Cabinet, a high-level committee that is tasked with the legally binding implementation of Germany's Climate Protection Plan 2050. While the Climate Protection Plan 2050 references adaptation, it focuses foremost on mitigation of climate change.<sup>1</sup> All ministers responsible for climate-relevant policy areas are represented in the Climate Cabinet. This means that, in addition to the Federal Chancellor, the Vice-Chancellor, and the environment minister, the minister of construction, the minister of economic affairs, the minister of agriculture, and the minister of transport are all represented.

Germany has a number of coordination mechanisms dealing with either mitigation of or adaptation to climate change. For the purpose of this paper, the following section will refer only to the architecture and mechanisms related to climate change adaptation. However, it should be mentioned here that the Climate Cabinet—as a high-level committee that deals with questions of both mitigation and adaptation—could potentially play a key role mediating between adaptation and mitigation coordination mechanisms.

The DAS is a good example of a coherent approach to implementing global agendas that intertwines the national, subnational, and local levels. In order to address the impacts of climate change, the federal cabinet, under the leadership of the BMU developed and adopted the DAS in 2008. The DAS was developed in close cooperation with the federal states by a working group comprised of representatives from most of the federal ministries (BMU, 2017). The objective of the DAS is to “reduce the vulnerability of natural, social and economic systems and to maintain and improve their capacity to adapt to the inevitable impacts of global climate change” (Bundesregierung, 2008, p. 5, author translation). The strategy highlights areas and regions that will likely be affected by climate change and is divided into 15 fields of action, including cross-cutting issues such as civil protection and disaster control. Importantly, the DAS outlines the adaptation strategy as a contribution to sustainable development in Germany. To supplement the DAS, Adaptation Action Plans I and II were developed. Both action plans underpin the overall strategy with specific objectives and activities, which fall under the responsibility of the federal government and identify specific links with other national strategy processes (BMU, 2017). In particular, the action plans mention activities in other strategies that have integrated climate change and are thus contributing to adaptation. It refers to the DNS, the Strategy on Biological Diversity, Germany's National Forest Strategy, High-Tech Strategy 2020 as well as strategies related to planning, coastal management, and protection of the seas while emphasizing the importance of integrating current and future national strategies that are relevant to climate change (Bundesregierung, 2011).

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<sup>1</sup> The Climate Cabinet recently adopted the Climate Protection Law. The law applies a budget approach to reduce greenhouse gas emissions by allocating specific reduction targets and responsibilities for different sectors (e.g. traffic, buildings), which are stipulated in the law itself (Die Bundesregierung, 2019c).



## CCA Related Vertical and Horizontal Coordination Mechanisms

Climate change adaptation requires strong cooperation among different ministries and regional authorities. This is reflected in the various coordination mechanisms that have been set up.

The DAS promotes the horizontal integration of adaptation to climate change into the responsible federal ministries. This process was institutionalized by the federal government by setting up the **Inter-Ministerial Working Group on Adaptation to Climate Change (IMA Adaptation)** with representation from all relevant ministries (German Federal Foreign Office, Federal Chancellery, Ministry of Finance, Ministry of Defence, Ministry of the Interior, Ministry of Labour and Social Affairs, Ministry of Education and Research, Ministry of Families, Seniors, Women and Youth, Ministry of Health, Ministry of Transport and Digital Infrastructure, Ministry of Economy and Energy, Ministry of Economic Development and Cooperation, the Press and Information Office of the Federal Government of Germany and the German Environment Agency) under the direction of the BMU. The group is responsible for policy advice, drafting the adapta-

tion strategy, steering the participation of stakeholders, preparing the adaptation action plans, and cross-departmental coordination. Germany pursues a “network mode of governance”, which means that the ministries work together on a voluntary basis and decisions of the working group are not negotiated and decided hierarchically but by consensus (Vetter et al., 2016). The DAS recognizes that without comprehensive collaboration across sectors, the complexity of climate change, sustainable development, and civil protection cannot be addressed.

**The Permanent Committee on Adaptation to the Consequences of Climate Change (StA AFK)** is part of the BLAG KliNa and places special emphasis on the requirement for vertical integration of adaptation policy. One of its main tasks is to provide information to the federal government and the Länder as well as coordinating and linking their respective

*Together with the federal states of Germany, we have created regional conferences as a format for generating dialogue about local adjustments with the concerned stakeholders.*

*Susanne Hempen. Manager German Strategy for Adaptation to Climate Change, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).*

climate adaptation activities. This includes, for example, monitoring and indicator systems and climate impact studies along with the evaluation of adaptation measures and political processes (BLAG KLiNa, n.d.). Because the committee is part of a larger cross-sectoral and multi-level governance working group, opportunities exist to exploit synergies and cooperation in the implementation of other relevant national strategies.

Germany's geography is quite diverse, and each region faces unique challenges regarding development patterns and climate adaptation. The DAS therefore stipulated the **Regional Conferences of the Länder and Federal Government** to pursue the objective that adaptation is a place-based issue; hence, the federal strategy must be known and lived at all local levels. Regional conferences are jointly organized by several Länder and the federal government, represented by BMU, and other interested federal ministries, depending on the issue. The aim of the regional conferences is to provide a format for generating dialogue within a region, discuss shared challenges, and search for solutions with concerned stakeholders from different sectors. The Länder have an important role to play in assessing regional climate change vulnerabilities and adaptation options (and ultimately the implementation of the Paris Agreement). For the conferences, organizers take a regional perspective rather than focusing on the federal state to emphasize challenges that occur in a (coherent) area defined by the same degree of concern or similar affectedness, e.g., coastal areas, the Alps, low mountain ranges, the East German dry region and the

Rhine Rift Valley. The federal government considers the regional conferences as a dialogue and participation process for the national adaptation strategy, to discuss the action plan locally, and thereby further develop the DAS via Federal-Länder Working Groups – a bottom-up approach (Bundesregierung, 2011). By now, all federal states are active in climate change adaptation. Many have developed their own Länder strategies and programs of adaptation measures, which are often framed under the umbrella of sustainable development to simultaneously ensure that regions retain their attractiveness as livelihoods for people, their natural resources and their economic function for current and future generations (see Box 2).

The formation of the **Strategic Governmental Agencies Alliance for adaptation to climate change (Strategische Behördenallianz)** has been motivated by the increasing number of extreme weather events and the necessity to discuss appropriate measures and corresponding policy recommendations with all relevant actors. Members include the BBK, the Federal Agency for Technical Relief (THW), Germany's National Meteorological Service (DWD), the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) and the German Environment Agency (UBA). The Agencies Alliance supports the federal government in identifying and implementing strategies, instruments, and measures to reduce vulnerability to climate change and increase adaptability. Its aim is to cooperate toward a more coherent approach in dealing with climate change and its consequences for civil protection (including disaster prevention) regarding foresight planning, strategic orientation, and operational interventions (Umweltbundesamt, 2014). It presents an important example of how DRM and climate adaptation planning can be approached in a synergistic way at the ministerial level but also in cooperation with implementing agencies.

## The City of Bremen – Integrating adaptation, risk management and sustainable development (KLAS Project)

At the local level, the agendas are translated into concrete measures. The City of Bremen has reacted to its challenges in an exemplary manner. It is located in a low-gradient region and is exposed to the risk of flooding in low-lying urban areas due to extreme rain and storm events. According to various climate projections, an increase in intensity and frequency of extreme weather events such as heat days, storm events, and heavy rainfall are likely to increasingly affect Bremen in the future.

Heavy rain events have occurred in the past. In 2011, Bremen was hit by two heavy rain events that caused considerable damage. In need of a better heavy rain precautionary system, the city initiated the KLAS project (Climate Adaptation Strategy Extreme Rain Events). As a municipal good practice project, it was initially co-financed by the federal and municipal funds in equal measure. Many different stakeholders are concerned with risk management, and the City of Bremen quickly realized that the extreme rain events pose a challenge for Bremen's further development. However, they cannot be tackled solely by one department; they require an integrated strategy and actions by all relevant actors of urban planning and infrastructure and environmental management. Because of the cross-sectoral nature of the issue and shared responsibilities, it was important to capture different perspectives of the various actors to develop a solid plan – an exercise that required persuasion and time but aimed to avoid silo thinking and duplication of work.

With different project groups and a steering committee, an institutional structure was gradually developed to establish a common working framework. The first steps involved analyzing the state of Bremen's DRM system holistically and critically and developing a climate change adaptation strategy. This process brought together different departments concerned with urban drainage, urban planning and development, health, economy, environment, transport, landscape and open space planning. It also brought on board various professional groups and important institutions involved in DRM, including the police, fire brigade, and disaster relief organizations – the main ones affected by the strategy (Freie Hansestadt Bremen, n.d.).

As a result, many new measures are being carried out. They include the creation of guidelines for new buildings, financial aid for the guidelines' implementation, restoration of parts of the sewage system, and the launch of an online rainwater portal. These measures and tools are tackling the climate and disaster risk challenges and ensuring sustainable development in Bremen. Thanks to the KLAS project, the importance of heavy rainfall risk management is well established, and the issue is considered proactively as a major planning question across different sectors (particularly in all infrastructure projects) in Bremen. The city is much more resilient and prepared for the consequences of climate change and extreme rainfall in the future.



### LESSONS LEARNED

For coherent climate and disaster risk management, it is important to include actors from all relevant administrative levels and all sectors. This can only be effective if sectoral boundaries are overcome and the right people talk to each other and are willing to change and work together to find solutions. The different sectors' commitment to collaboration and understanding of the cross-sectoral nature of adaptation and disaster management were the basis for the development and implementation of suitable measures. The KLAS project further reiterates the importance of localizing climate adaptation planning and implementation from the national to the local level and the provision of resources for subnational and local actors.



## Good Practices and Key Enablers to Enhance Coherence among Sustainable Development, Adaptation to Climate Change and Disaster Risk Management

*Agenda coherence does not happen automatically. It is a political choice by governments to take specific steps and actions to promote higher degrees of coherence.*

*(please see p. 18 of the study)*

Agenda coherence does not happen automatically. It is a political choice by governments to take specific steps and actions to promote higher degrees of coherence. While there is no one-size-fits-all approach to enhancing institutional and policy coherence, this section identifies six good practices based on the German case study. The practices offer valuable insights into what enables post-2015 agenda coherence. There is no particular sequencing of these good practices, but a combination of them appears to accelerate the results and seems essential to promoting coherence.



*Be committed from top to bottom.*

**Ensure high-level political commitment and promote collective responsibility and commitment to implementing the post-2015 global agendas.**

Greater coherence begins with clear and publicly expressed – and substantiated – political commitment, in which all ministries are required to support high-level decisions. Political commitment is essential for prioritizing policy objectives and must be matched with resources and additional capacity. Further, promoting collective responsibility and incentives for planning and implementation will ensure ministries are aware of their share of responsibility rather than shifting decisions and tasks onto others. It is essential that high-level goals are underpinned by political consensus and a clear allocation of quantifiable responsibilities for different ministries that spell out measures and sub-goals that contribute to the agreed collective goal. Consideration should also be given to legal obligations to meet the goals and employ accountability mechanisms, specifying procedures for non-compliance.

## Example From Germany

Germany has publicly expressed a strong political commitment with the establishment of its high-level cross-ministerial climate cabinet as well as the country's commitment to the 2030 Agenda, calling on all federal institutions to contribute to achieving the targets. The DNS references attempts to use the 2030 Agenda as an opportunity to increase its efforts for policy coherence in light of systemic interdependencies (Die Bundesregierung, 2018b).

The public endorsement and acknowledgment of the co-responsibility of the German Länder to implement the SDGs can be partially attributed to a strong high-level political commitment at the national level as well as the strong involvement of the Länder in the development and updates of the DNS. This is vital given the legislative and enforcement powers the Länder have, to translate national obligations into coherent and concrete measures at the subnational and local levels. Similarly, Germany's Climate Protection Law applies a budget approach to reducing greenhouse gas emission by allocating specific reduction targets and responsibilities for different sectors (e.g. traffic, buildings), which are stipulated in the law itself. Reliability can be created through effective and efficient processes and the definition of responsibilities in the law so that the desired goals are actually achieved (Die Bundesregierung, 2019c).



## *Connect the dots.*

**Identify and strengthen linkages and synergies between adaptation, disaster risk management, and sustainable development strategies to maximize impact, avoid duplication, and prevent policies from undermining each other.**

Horizontal policy integration is a prerequisite for systematically tackling complex challenges. Policy compatibility and integration entails creating consistencies and linkages between relevant policies. The formation of inter-ministerial working groups and Federal-Länder exchange groups is crucial to supporting a systematic approach between administrative units and levels.



## Example From Germany

In Germany, relevant national policy strategies and plans acknowledge, reference, and aim to take other policies into account. The German Adaptation Strategy references the cross-cutting nature of climate change with civil protection and vice versa, sending important signals for collaboration and integration that have led to the formation of specific working groups (i.e. Strategic Governmental Agencies Alliance for adaptation to climate change, Inter-Ministerial Working Group for the Sendai Process) to elaborate coordinated action. For example, the KLAS project in Bremen demonstrated the importance of how actors from all relevant administrative levels were invited to jointly collaborate and overcome sectoral boundaries to develop and implement suitable measures that address adaptation and DRM.

Specifically referring – and committing – to mainstreaming and integrating relevant national sectoral policies and frameworks into national strategies requires an overview of existing policies, strategies, and corresponding linkages. Therefore, policy mapping can be an efficient way to identify synergies and powerful points for leveraging impacts and preventing policies from undermining each other. Translating coherence into policies relies on individual and institutional mandates, along with the capacity and clear understanding about joint and sector respective narratives.



## *Translate between the communities.*

**Establish a strong mandate for government ministries and agencies to address cross-sectoral policy problems and establish functional coordination mechanisms to facilitate dialogue, increase mutual understanding, and establish joint processes.**

Functional coordination and joint processes are crucial for promoting coherence. Constraints to coherence often include hierarchical structures, cultural differences between spending and regulatory departments, sector-specific technical jargon and sectoral self-interest.

### **Example From Germany**

In Germany, efforts to promote coherence focused on establishing inter-ministerial working groups to overcome established sector divisions and facilitate cross-sectoral collaboration between relevant ministries that all need to be engaged by virtue of competence. A clear mandate that defines the role of the working group – and calls on ministries and government bodies to resolve policy differences arising from differing sectoral interests – is essential.

Actors involved in these working groups must build a trustful and enabling work environment. This cannot be ordered, nor can it just be established. It is an ongoing process that takes time and input from every member of the group. So-called “ambassadors” or “champions” who bring the right people to the table are important for building mutual understanding and facilitating dialogue. Finding common ground and consensus often requires a profound understanding of group dynamics and leadership to engage every actor and promote joint narratives that bridge different sector-specific views that often divide the different silos from each other. Besides, different actors often use different terms and language, and it is thus important to ensure that group members understand each other. It often requires translation of messages into respective contexts to achieve a common understanding. The entire process requires additional work, additional communication, and collaboration efforts that have to be acknowledged by individual ministries and government bodies. It simply takes time until such working groups are able to deliver according to expectations.

New partnerships – like the Strategic Governmental Agencies Alliance – between governmental actors but also between the government, private sector, academia, and civil society – should be established to promote dialogue among all stakeholders. Such a dialogue can help to identify and manage institutional hurdles and support better coordination.



## *Overcome sectoral boundaries.*

**Adopt a multi-level coordination approach, create incentives, and build capacity to strengthen cross-sectoral collaboration and coherent outputs.**

Establishing a formal body for coordination does not necessarily guarantee inclusive and cohesive collaboration among ministries. To change dominant paradigms, multiple efforts need to be undertaken. Aside from the assignment of a clear mandate for cross-sectoral and inter-ministerial collaboration, coordination and exchange need to be multi-level and incentivized. These form the basis for continued integrated policy development processes and cross-departmental work.



### **Example From Germany**

The inter-ministerial working groups in Germany show that, in order to prevent different policies from undermining each other (and actors reverting to their usual roles), inter-ministerial working groups ideally allocate joint responsibilities – as opposed to one ministry taking the lead responsibility – likely leading to a higher-quality mode of negotiation and more coherent outputs (Radtke et al., 2016). The KLAS project emphasizes the importance of involving different actors (and collaboration between them) to address cross-sectoral issues like adaptation and DRM, leading to an efficient use of resources and ensuring sustainable development in Bremen.

Moreover, capacity-building initiatives as well as management incentives for collaboration play an important role, setting joint goals for the staff of different divisions, across departments and institutions. Building awareness and attention about new issues (i.e., global agendas, adaptation to climate change) inside ministries and promoting coherence via procedures, structures, and routines allowing for such coordination and dialogue are critical to creating coherent policy outputs. For example, the RENN presents a capacity-building initiative promoting the exchange of experiences and discourses for a variety of actors and target groups working on sustainability activities and strategies at different administrative levels. The initiative allows for a flow of information between actors at all levels, building awareness while strengthening policy coherence and integration. Another incentive to overcome widespread departmentalism could be the allocation of budgets to fund joint projects among ministries.





## *Top-down and bottom-up: Vertical integration to ensure the involvement of all stakeholders at all levels.*

**Strongly engage all levels of governance in the planning, implementation, and reporting of the global agendas adopted in 2015.**

Coherence of the global agendas adopted in 2015 (and related policy processes) is often driven by national-level governments; however, subnational and local actors play essential roles because firm, decisive local actions are key for the successful implementation of the global agendas. For example, the DNS references adaptation to climate change as a common challenge for federal, state, and local authorities. Strong engagement is required whereby national governments design a common working framework and coordinate closely with lower levels of authority to identify common challenges, set priorities, align policies and actions, and – ideally – mobilize and pool resources.



### **Example From Germany**

For this purpose, Germany has created several mechanisms for coordination between the levels of government, aiming to take action in those policy areas where joint planning and implementation is essential, given the nature of the issue and shared responsibility between the federal and state governments. Specific examples include the Federal-Länder Experience Pool, the Standing Committee on "Climate Change Adaptation," and the Inter-Ministerial Coordination Group of the German Government and the German States. These mechanisms focus on coordination and consultation between the German Länder and the federal level. For vertical integration to function well, subnational authorities need to be firmly involved and supported. Implementation of policies needs political buy-in by all stakeholders to support the implementation of corresponding actions and achievement of targets. The Regional Conferences of the Länder and Federal Government thus present an important mechanism for dialogue – and a participative process between levels of government to discuss the DAS (and its subsequent action plans), share challenges, and search for solutions with concerned stakeholders from different administrative levels and sectors.



## *Avoid duplication – Build common approaches for monitoring and reporting.*

**Take advantage of existing reporting synergies between the global agendas and aim to build a common approach to data and information collection involving all levels of governance.**

Each agenda includes specific requirements to regularly monitor and report on the progress toward achieving the individual goals and objectives. Given that different ministries hold the key responsibility for different agendas, it is important not to approach the task of monitoring and reporting in isolation. This poses a risk of widespread duplication of effort, double counting, and consumption of large amounts of resources (IIED, 2018).

There are important benefits to developing a synergetic and common approach to data and information requirements for the implementation of the three global agendas at the national level. Of course, subnational levels need to be involved in developing and executing the approach.

### **Example From Germany**

For example, the German Federal Statistical Office annually transmits, publishes, and coordinates data on Germany's progress related to the SDGs (Voluntary National Review) using a unified national reporting platform. The office also co-leads the federal Inter-Ministerial Working Group on Sustainability Indicators, allowing for regular interaction and dialogue related to indicators and reporting with all ministries. While this is not yet the case, the German Federal Statistical Office could function as a lead agency for data collection and analysis, likely strengthening coherent reporting. A jointly used database based on common parameter definitions for reporting could also greatly improve coherence.

Further, the German example stresses the importance of applying a multi-level governance approach and the fact that data complementary to the federal level can also be collected at the Länder level. The Länder are closely involved in the development of the goals and indicators of the DNS, further strengthening their joint cooperation with the federal government. The Länder are increasingly orienting themselves towards indicators at the federal level (Brunkhorst & Obenland, 2017). The Initiative Core Indicators (LIKI) are an important contribution to this. The working group of environmental authorities bundles the competencies of the Länder and the federal government for indicator work to develop a shared set of 25 environment-related sustainability indicators of the federal government and the Länder. Given the similarity of the indicators with the SDGs, the Länder are increasingly using them to report their progress on the SDGs (LIKI, 2020).



## Conclusions

*Coherence saves lives and ensures sustainable development and safe living conditions for future generations. And coherence saves money.*

The German experience highlights the fact that coherence will not occur automatically, even if coordination mechanisms and institutional settings are in place to allow for it. It is a complicated process that is often influenced by power dynamics and political conflicts of interest.

Coherence is an ongoing negotiating process requiring patience, persistence, high-level political commitment, and a mandate for active participation, clear responsibilities and a spirit of collaboration among different ministries. The case study of Germany highlights examples of mechanisms and approaches that seek to address these challenges while advancing coherent policy formulation and implementation.

The case study also emphasizes the importance of identifying functional linkages as a foundation for policy

and institutional coherence as well as a critical step to maximize synergies. Understanding the cross-sectoral nature of issues like adaptation to climate change, DRM, and sustainable development is the basis for establishing a common working framework while also developing and implementing suitable measures that magnify the impact and prevent policies from undermining each other.

The German case also underscores the fact that coherence involves considering all administrative levels. Successful implementation of the global agendas is most often driven by designated ministries at the national level while implementation and data collection for reporting are often carried out at the subnational and local levels — where one and the same actor is often responsible for the implementation of several agendas. National governments must be cognizant of this and pursue coherence and collaboration between federal ministries and subnational levels to reduce the burden and maximize resources. The weaker the coordination at the national level and between levels of governance, the greater the effort at the local level. Coherence involves close coordination, combined resources, and engagement of all levels of governance and a commitment that the knowledge, respective goals, and obligations of the different agendas reach all administrative levels and geographical regions.

It is also important to recognize that pursuing coherent policy planning, implementation, and reporting may involve higher initial costs and time to overcome existing barriers and break down silos. However, the potential benefits of coherence and improvements in outcomes likely make this a worthwhile investment of time and resources. The coordination mechanisms described in this paper and the City of Bremen's example demonstrate that coherence can lead to reduced costs, stronger commitments, and smoother implementation. They further emphasize that identifying synergies and minimizing trade-offs is key to policy coherence.

Nonetheless, the current status of implementation of all three agendas shows that progress is lagging. To achieve the objectives, we must accelerate the pace of implementation. The importance of using a systemic approach has also been promulgated by the *Global Sustainable Development Report 2019*.

**If we are to reach the goals and objectives set out in the global agenda, implementation must be more ambitious. Promoting and pursuing coherence has the potential to maximize efficiency and effectiveness through identified synergies and minimized trade-offs.**

## Glossary

**Climate change adaptation:** “The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or to exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects” (IPCC, 2014, p. 118).

**Climate risks:** The probability of harmful consequences or expected loss (e.g., death, injury, loss of livelihoods, reduced economic productivity, environmental damage) resulting from interactions between climate hazards, exposure to these hazards, and vulnerable conditions (UNISDR, 2009).

**Disaster risk governance:** The system of institutions, mechanisms, policy and legal frameworks and other arrangements to guide, coordinate and oversee disaster risk reduction and related areas of policy. Good governance needs to be transparent, inclusive, collective and efficient to reduce existing disaster risks and avoid creating new ones (UNGA, 2016, p. 15).

**Disaster risk management (DRM):** DRM is the “application of disaster risk reduction policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk, contributing to the strengthening of resilience and reduction of disaster losses . . . Disaster risk management actions can be distinguished between prospective disaster risk management, corrective disaster risk management and compensatory disaster risk management, also called residual risk management” (UNGA, 2016, p. 15).

**Disaster risk reduction (DRR):** DRR “is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development. . . . Disaster risk reduction is the policy objective of disaster risk management, and its goals and objectives are defined in disaster risk reduction strategies and plans” (UNGA, 2016, p. 16).

**Global Sustainable Development Report 2019 (GSDR):** The GSDR originated in the Rio + 20 outcome, when Member States were laying the ground-

work for the 2030 Agenda and the SDGs. Written by an independent group of scientists, the report reflects the universal, indivisible and integrated nature of the 2030 Agenda for Sustainable Development. (UN DESA; Independent Group of Scientists, 2019).

**Paris Agreement:** An agreement adopted at the Conference of Parties 21st session under the United Nations Framework Convention on Climate Change that requires parties to address climate change impacts through Nationally Determined Contributions to limit warming to well below 2°C, adaptation actions to enhance climate resilience, and finance mobilization for low emission and climate-resilient development for developing country parties (adapted from UNFCCC, 2015).

**Resilience:** “The capacity of social, economic and environmental systems to cope with a hazardous event, trend, or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure, while also maintaining the capacity for adaptation, learning and transformation” (IPCC, 2014, p. 127).

**Sendai Framework for Disaster Risk Reduction:** A framework adopted at the Third United Nations World Conference on Disaster Risk Reduction to help countries build resilience through disaster risk management under four priorities for action. It builds on the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters (adapted from UNDRR, 2015).

**Sustainable Development Goals (SDGs):** The SDGs were adopted under the 2030 Agenda for Sustainable Development to end poverty, protect the planet, and promote prosperity and peace through the Global Partnership for Sustainable Development. There are 17 integrated goals with 169 targets to be achieved by 2030 (adapted from UNGA, 2015).

**Vulnerability:** The “degree to which a system is susceptible to, or unable to cope with, the adverse effects of climate change, including climate variability and extremes” (IPCC, 2007, p. 6). Vulnerability to climate change is determined by three elements: exposure, sensitivity, and adaptive capacity.

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