



Germany

National progress report on the implementation of the Hyogo Framework for Action (2013-2015)

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Strategic Outcome For Goal 1

Outcomes Statement

The German strategy for adaptation to climate change (DAS)

On 17 December 2008 the federal cabinet adopted the DAS, which creates a framework for a national adaptation to the consequences of climate change. It establishes a transparent middle-term process for all actors involved in adaptation and simultaneously represents a guide to determine the required actions with responsible stakeholders, define objectives, determine and solve conflicts and develop and implement adaptation measures. Beyond these tasks reducing vulnerability is one of the most important objectives within the DAS. Thus it seeks to appoint and communicate hazards and risks, rise awareness of stakeholders, provide decision principles for prevention and planning and determine possible actions, coordinate responsibilities and formulate and implement adaptation actions. "The strategy lays the foundation for a medium-term, step-by-step process undertaken in cooperation with the federal Laender and other civil groups and aimed at assessing the risks of climate change, identifying the possible need for action, defining appropriate goals and developing and implementing options for adaptation measures." (see link: BMUB)

On 31st August 2011 the German Federal Cabinet adopted the Adaptation Action Plan of the German Strategy for Adaptation to Climate Change. "This Action Plan fleshes out the objectives and options for action laid down in the German Adaptation Strategy with specific activities to be carried out by the German Federal Government in the years to come, and makes links with other national strategic processes (including the High-Tech Strategy 2020, the National Strategy on Biological Diversity and the National Forest Strategy) explicit. Apart from selected projects undertaken in cooperation with the Laender, the Adaptation Action Plan covers activities in four fields above all:

- Providing knowledge, informing, enabling
- Framework-setting by the German Federal Government
- Activities for which the Federal Government is directly responsible
- International responsibilities" (see link)

A progress report of the federal government scheduled for 2015 will comprise an evaluation report that describes the implementation of the Adaptation Action Plan as well as an updated "Adaptation Action Plan II". This new plan will present future actions of the federal government as well as a concrete time and financing plan.

In the context of DAS the Climate Service Center has been established to provide and disseminate knowledge and to handle networking activities between the involved

stakeholders, institutions and organisations dealing with climate change. Furthermore the “Competence Centre on Climate Impacts and Adaptation” (KomPass) supports the implementation of DAS in professional and organizational way.

Additionally in March 2010 mitigation and adaptation to climate change were integrated into the “Regional Planning Act” in the course of its amendment.

In the course of implementation of the EU flood directive the Water Management Act has been amended in 2009. Due to the new law Federal States has to develop risk management plans for flood prone areas. All water bodies has to be considered including coastlines. The Federal States developed different approaches in creating the risk management plans.

The “Federal Foreign Office” (AA), was actively engaged in the “European Strategy for DRR in Developing Countries” from April 2008.

Since September 2009 a climate-check guideline of the “Federal Ministry for Economic Cooperation and Development” (BMZ) was adopted, which seek to consider climate change in drafted and upcoming development projects and concepts.

The German Development Cooperation, among others, carries out programmes that focus on Disaster Risk Reduction (DRR). Individual activities are integrated and self-contained programmes that support and enhance the various layers of administration in the collaborating countries. These processes lead to interaction of different factors of Disaster Risk Reduction where procedures depend on specific conditions. The following factors can be considered: disaster prevention and disaster preparedness. A continuous objective is to integrate the outcomes into national policies and development policies. Therefore, the BMZ started a new project called Global Initiative on Disaster Risk Management that, in addition to the enhancement of management, administration and civil protection, aims to strengthen the involvement of the private sector in this area.

Related Links:

Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)

<http://www.bmub.bund.de/en/topics/climate-energy/climate/adaptation-to-climate-change/>

Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)

<http://www.bmub.bund.de/en/service/publications/downloads/details/artikel/adaptation-action-plan-of-the-german-strategy-for-adaptation-to-climate-change-1/>

German Association for Water, Wastewater and Waste (DWA) Audit “Flood – how well are we prepared” DWA - <http://shop.dwa.de/dwa/shop/shop.nsf/Produktanzeige?openform&searchhitshow=1&produktid=P-DWAA-8BWVC6>

Strategic Outcome For Goal 2

Outcomes Statement

Some institutions relevant for DRR are active in the context of climate change. These include for example: KomPass the “Competence Centre on Climate Impacts and Adaptation”, which supports the implementation of DAS. Another one is the Climate Service Center (CSC) which provides and disseminates knowledge and handles networking activities. The Climate Agencies (Klimabüros) which deal with DRR relevant topics like floods, extreme weather events and sea level rise amongst others.

Furthermore the “German Joint Information and Situation Centre of the Federal Government and Laender” (GMLZ) became the central information and coordination point in Germany for national, European and international crisis situations. Due to the amendment of the civil protection law GMLZ has obtained new responsibilities. These may be described as follow: “The Centre ensures Laender and organisation wide information and resource management for the Federal government, the Laender and organisations in the event of large-scale damage scenarios or other incidents of national importance. By order of the Ministry of the Interior, the GMLZ is also involved in international requests for help, i.e. above all in the framework of the Mechanism of the European Union for the promotion of an intensified co-operation in international disaster control missions with German participation.” (see link: GMLZ)

In the framework of the German Strategy for Adaptation to Climate Change and the Adaptation Action Plan the topic of disaster management is very important. A special agency cooperation of “German Meteorological Service” (DWD), “Federal Office of Civil Protection and Disaster Assistance” (BBK), “Technical Relief Agency” (THW), “Federal Office for Building and Regional Planning” (BBSR) and the “German Federal Environment Agency” (UBA) deal with the topic of Climate Change and disaster management (for more information see Priority 5 – Core Indicator 1).

National organizations like the “Federal Office of Civil Protection and Disaster Assistance” (BBK) are strengthened more and more by EU programmes like the The European Earth Observation Programme - Copernicus. The Copernicus emergency management service for example provides: “timely and accurate geo-spatial information derived from satellite remote sensing and completed by available in situ or open data sources”.

Related links:

http://www.bbk.bund.de/SharedDocs/Downloads/BBK/EN/booklets_leaflets/Flyer_GMLZ-en.pdf?__blob=publicationFile

Strategic Outcome For Goal 3

Outcomes Statement

The German Insurance Association developed a flyer “Stormy times – preventing

damages and appropriate insuring”. It comprises information on how to insure property against storms, how to protect the own home through constructional measures and about general vulnerability of houses to storm hazards. Furthermore, it explains measures on how to avoid secondary damages, issues of obligations to insure and gives recommendations on preventive maintenance actions (see link – German only).

Related Links:

GDV - Stormy times – preventing damages and appropriate insuring <http://www.gdv.de/2008/11/stuermische-zeiten-schaeden-vorbeugen-und-richtig-versichern-wichtige-tipps-der-deutschen-versicherer-zur-schadenverhuetung/flyer-stuermische-zeiten/?back=%2F2008%2F11%2Fstuermische-zeiten-schaeden-vorbeugen-und-richtig-versichern-wichtige-tipps-der-deutschen-versicherer-zur-schadenverhuetung%2F>

Strategic goals

Strategic Goal Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Strategic Goal Statement 2013-2015

Generally Disaster Risk Reduction (DRR) is a cross-cutting core aspect in various German planning and development strategies, with climate change adaptation issues considered to be strongly related to DRR, and currently the main driver for most developments in this field. DRR composes an important part of the Federal Government's national sustainability strategy in which the German Strategy of Adaptation to Climate Change is integrated.

DAS pursues a double-sided goal; on one hand, this includes redesigning and rearranging the available legal and technical capacities and resources, trying to optimise them with respect to climate change, but also to improve the climate change database to include disasters and extreme weather events, and on the other hand, to develop new methods, tools and frameworks all based on scientific developments to cope with all aspects of climate change. The whole program includes DRR as an aim, however, not in its own right, but as a component part of several other aspects. Concrete measures to achieve DRR touch on many different administrative and organisational areas, therefore requiring multidisciplinary/multistakeholder approaches, making it a cross-cutting issue within DAS. As a result, DRR is to be addressed simultaneously in many diverse political and administrative structures, for that reason, however, posing a major challenge.

The DAS includes an "Action Plan for Adaptation" which was created until March/April 2011.

The Action Plan is a step towards the implementation of the DAS. It consist of the following points:

- Overview of planned federal measures as well as measures of federal departments with other stakeholders (Laender, associations, civil society)
- Overview of measures of other stakeholders
- Approach regarding the prioritisation of adaptation measures
- Financial aspects
- Suggestions for evaluation of measures as well as of DAS itself
- Enhancement of DAS and the definition of next steps

Until the end of 2015 a report will evaluate the German Adaptation Strategy, the Action Plan, and proposals concerning their continuation and further development.

This report will be presented by the Interministerial Working Group and will comprise a "second Action Plan".

Research in the field of climate change is funded by national research programmes through the "Federal Ministry of Education and Research" (BMBF) and others, which is also aimed at enhancing the link between natural and social sciences and stakeholders. BMBF is also funding research and development in civil security. Furthermore, a Research Forum on Public Safety and Security (RFPSS) started in October 2009 and will conclude in March 2015. It is aimed at merging research projects and work of different disciplines and institutions that deal with "Public safety and security. Inter- and transdisciplinary evaluations of the subject will be developed, which will generate recommended procedures for policy, economy and science." (see link: Research Forum on Public Safety and Security)

As part of the European Union, Germany follows European directives concerning strategic adaptation matters in various fields and on different levels. For example, directive 2007/60/EC on the assessment and management of flood risks from November 2007 requires Member States to assess the flood risk of all waterways and coastlines, in order to map the potential extent of damage to both people and assets at risk in these areas and to take adequate and coordinated measures to reduce this risk. Due to the EU Flood Directive the "Federal Water Act" WHG was amended in 2009. According to the new Act the following tasks have to be finalised considering the following deadlines:

- 22.12.2011: temporary assessment of flood risk
- 22.12.2013: development of flood hazard and flood risk maps
- 22.12.2015: development of flood risk management plans

The "Position Paper of the Federal Government on Disaster Reduction in Foreign Countries" recognises DRR as one of the main topics that is effective in the fields of humanitarian aid, development-oriented emergency aid and nearly all areas of development cooperation. This paper defines three main elements: risk analyses, disaster prevention, and preparedness, underlining the so-called "Linking Relief and Development (LRRD)" concept as a guideline for development policies.

The Federal Foreign Office of Germany organized a conference on disaster preparedness on 11 June 2013 in Berlin, Germany. Several points have been elaborated on how to improve preparedness and summarized from a series of workshops in the so called Principles and Recommendations on Preparedness (see link: Principles and Recommendations on Preparedness)

It is an important strategic objective of Federal Government to facilitate national risk assessments. For example, the "Federal Office for Civil Protection and Disaster Response" (BBK) developed a "Method of Risk Assessment for Civil Protection" (Methode zur Risikoanalyse im Bevölkerungsschutz) which enables the Federal State to conduct regional risk assessments. On the other hand there are many activities and initiatives, which deal with risk assessment but also the chances in the context of Climate Change. Here the regional KLIMAATLAS provided by the regional "Climate Agencies", the Climate Service Center (CSC) and the BMBF funded KLIMZUG project can be mentioned.

The “Federal Foreign Office” (AA) (Humanitarian Aid) and the “Federal Ministry for Economic Cooperation and Development” (BMZ) (Development-Oriented Emergency and Transitional Aid) as well as the “Federal Ministry of the Interior” (BMI) (civil protection activities) handle DRR in cooperation with each other, as well as with stakeholders.

The German development cooperation has implemented DRR into its regional and national portfolios in areas at high risk and considers disaster risks in its project planning, implementation and evaluation. This strategy aims at implementing stand-alone DRR-projects and cross-cutting considerations of DRR in other projects, such as sustainable resource management. On the project level different Priorities of the “Hyogo Framework for Action” (HFA) are integrated. Those projects include Early Warning Systems, integration of DRR into school curricula, DRR-sensitive reconstruction and more recently (2012) disaster risk financing.

The programmes of the German Development Cooperation focusing on Disaster Risk Reduction (DRR) aim to integrate Disaster Risk Management in national policies, planning and programming. Regarding the 1st priority of HFA, it is very often not sufficient to work directly with the partner Ministry. Therefore, it is necessary to set higher interventions in order to get the relevant ministries to implement the provided recommendations into their sector specific policies. The challenge is that the responsibility for Disaster Risk Management lies in the hands of civil protection authorities that are sometimes associated with the highest governmental bodies like the President’s Office, or in case of questions related to Climate Change to the Ministry of Environment. Government bodies like civil protection authorities or ministries normally do not have the permission to allocate significant resources or funds, or to convoke inter-ministerial working groups. This means that without having specific information on disaster risk it is almost impossible to work on sector-specific approaches. This makes it difficult to reduce underlying risk factor (Priority 4).

Since September 2009 a climate-check guideline of the “Federal Ministry for Economic Cooperation and Development” (BMZ) came into force. During the initial phase until August 2010 new and drafted projects has to be checked against potential consequences of climate change. Here it is checked which project components are exposed to considerable climate change risks. For this purpose a checklist was developed. Since August 2010 it is furthermore foreseen: 1) to conduct a detailed risk assessment, 2) to prioritize adaptation measures and integrate theses into projects, 3) to monitor and evaluate. The guideline is applicable to the main strategy papers and obligatory for the BMZ as well as for the German implementing Organisations.

The German Red Cross (GRC) DRR and Climate Change Adaptation Mainstreaming activities intend to build communities self-help capacities and strengthen the resilience of particularly vulnerable groups such as women, children and elderly people. GRC is seeking to further maintain DRR/CCA into its development cooperation. GRC has vast experience in supporting long-term community development. The GRC’s overall goal for development cooperation is to reduce vulnerability of those who need it most.

As one can see in this short summary of national strategies, there are, in addition to

the Federal Government, six German Federal Ministries visibly active in DRR:

- “Federal Ministry of the Interior” (Bundesministerium des Inneren: BMI)
- “Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit: BMUB)
- Federal Ministry of Transport and Digital Infrastructure (Bundesministerium für Verkehr und digitale Infrastruktur: BMVI)
- “Federal Ministry of Education and Research” (Bundesministerium für Bildung und Forschung: BMBF)
- “Federal Foreign Office” (Auswärtiges Amt: AA)
- “Federal Ministry for Economic Cooperation and Development” (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung: BMZ)

Supporting self-help capacities is an important task on the national level. Organizations like the Johanniter-Unfall-Hilfe (JUH), German Red Cross (GRC) and the Federal Agency for Technical Relief (THW) provide such services. Of particular importance are the volunteer structures and a logical linking of disaster response services (e.g. rescue service and fire service) with the civil protection authorities. Furthermore, there is the need to identify future hazard scenarios and put more effort in the development of DRR and its funding.

CARE Deutschland-Luxemburg participates as a leading organisation of a consortium in the „RECA project“ of the Global WASH Cluster to secure necessary standards, systems and capacities for a coordinated and coherent humanitarian aid in the area of WASH globally. In this context six „Regional Emergency Cluster Advisors (RECAs)“ support amongst others the national efforts to effectively integrate DRR into the existing WASH programmes and policies. The regional exchange is facilitated in such activities.

A mechanism for climate proofing and disaster risk assessment as well as an internal consultancy mechanism for consideration of disaster risk as a cross cutting issue is institutionalized in all Welthungerhilfe development operations (aprox. 35 countries).

Warnings about extreme weather conditions should follow a Single Voice Approach in order to avoid confusion among the recipients like the operation teams and the population. Since the German Meteorological Service (DWD) has, a legal mandate to publish official warnings it should be the only body providing warnings. This does not affect usual weather forecasts.

Related links:

Principles and Recommendations on Preparedness:

http://www.unisdr.org/files/33663_33663conferenceondisaterpreparednes.pdf

Strategic Goal Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to

Strategic Goal Statement 2013-2015

The multi-level approach, as one of the main standards in the German Development Cooperation, and the inherent Capacity Development of the German Development Cooperation are the main pillars to achieve the strategic goal 2 of the HFA. The programmes related to Disaster Risk Management are currently funded through so called Development-Oriented Emergency and Transitional Aid (ESÜH).

The concrete and active strategies for DRR rely on several institutions, each with its own legal framework. This results in sectoral strategies and efforts to strengthen institutions and capacities for DRR. In 2004 the Federal Government and the Federal States (Laender) agreed on a “New Strategy for the protection of the German population” with a multifaceted institutional improvement of DRR, which proved successful. To implement this strategy and make it effective, the “Federal Office for Civil Protection and Disaster Response” (BBK) was founded, which is currently working on different methods for the protection of critical infrastructure, the national risk mapping (aligned with the EU Green Paper for Sustainable, Competitive and Secure Energy) and networking systems for the variety of actors and authorities in the field of DRR and disaster response. To cover other important fields, additional institutions were activated/founded in order to amend the work of BBK, such as the “German Joint Information and Situation Centre of the Federal Government and Laender” (GMLZ). Together with the foundation of the BBK, the “Academy for Crisis Management, Emergency Planning and Civil Protection” (AKNZ), which was started in 1953 under a different name, became a part of this Federal Office.

Recently, cooperation between federal authorities was strengthened in order to improve DRR-capacities, including efforts of the “Federal Environment Agency” (UBA), the “German Meteorological Service” (DWD), the BBK, and the “Federal Agency for Technical Relief” (THW). Research and development in DRR were partly focussed in the “Competence Center on Global Warming and Adaptation” (KomPass) of the UBA, which has recently been established and is technically in charge of the aforementioned DAS. Other developments comprise the foundation of a “Climate Service Centre” and “Climate Bureaus”, both partly addressing DRR matters.

The “German Meteorological Service” (DWD) enhances its guidance for decision makers in policy, administration and economics with regard to the elaboration of implementation and adaptation actions to climate change in particular to extreme weather events.

The communal authorities have a major task in DRR, because they are responsible for all operational aspects of disaster response and management and a large share of risk reduction through planning issues. This even includes the decision to enlist federal forces such as the THW in disaster response and relief management. Additionally, the local and regional flood emergency alliances and flood management centres have seen a strong push since the last floods.

There is a strong non-governmental contribution to DRR in Germany. This includes the involvement of many individuals in NGOs, such the German Red Cross with

about 0.4 million volunteers in Germany and a centralised coordinating capacity, including the use of high-tech equipment. The fire brigades have a volunteer force of about 1.2 million, adding to the large number of volunteers across Germany. This means that most communities have some disaster response capacity integrated into the population.

The “Federal Foreign Office” (AA) supports the improvement of institutions and capacities in partner countries on national, regional and local levels through human resource development and political dialogue, among other methods.

The German development cooperation possesses the capacities and know-how to support mechanisms for resilience at all levels and is currently expanding the DRR knowledge base of its staff. It supports the competence of the different enforcement organisations and their interaction within the LRRD-approach (Linking Relief, Rehabilitation and Development). In almost all countries where the German development cooperation is involved the cooperation begins at the local level. The enforcement organization GIZ follows a multi-level approach in implementing DRR involving local, national and regional levels. This is a common approach for all sectors (e.g. integration of risk analysis as a mandatory element for public investment planning).

The German Red Cross, for example, provides the National Red Cross and Red Crescent Societies with the means and knowledge necessary for community mobilization, community-based disaster mitigation, and necessary structures and hardware for disaster preparedness.

The Johanniter pointing out that it is important to strengthen the institutions through a sustainable involvement of volunteers. Benefits should be created in order to keep and expand those volunteer capacities. Also the modernization of the emergency equipment and its adaptation to future hazards is required (CBRN and natural hazards). Better structural prevention with regard to critical infrastructure, health civil protection, cultural assets and natural hazards. Furthermore, a structured application of social media and a better education can lead to better information. In terms of education for example regular first-aid courses containing self-help contents at schools should be intensified and the participation in and the assessment of warning mechanisms should be established.

In all projects of the international co-operation GRC strives to strengthen the coping mechanisms of disaster prone communities. GRC provides the National Red Cross or Red Crescent Society with means and know-how for community mobilisation, community based disaster mitigation, structures and hardware for disaster preparedness as well as support to develop their managerial capacity to run programmes in disaster mitigation, disaster prevention and disaster response.

Welthungerhilfe strengthens resilience through development operations reducing risk factors: mainly food and nutrition security, natural resource management, and income generation.

Strategic Goal Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Strategic Goal Statement 2013-2015

Based on risk assessments, Public-Private-Partnerships in the area of critical infrastructure, planning issues, building codes and the whole range of emergency response DRR has been indirectly implemented in almost all aspects of emergency preparedness, response and recovery programmes.

Since 2001 the Federal Government has strengthened its emergency services with new equipment and in 2007 the “Standing Conference of Interior Ministers” (IMK) has decided to design and equip emergency management and civil protection units in a modern and more efficient way. After the Elbe Flood in 2002, the Federal Government adopted a Five-Point-Programme to improve preventive flood protection and management. The act to improve preventive flood control, adopted in 2005, adapts the various legal provisions relevant to flood protection at the federal level (e.g., the “Federal Water Act” (WHG), the “Federal Building Code” (BauGB), the “Federal Regional Planning Act” (ROG), the “Federal Waterway Act” (WaStrG) and the Act on the German Meteorological Service (DWD)). A new protective law for floods and high water from May 2005 requires the Federal States (Laender) to define flood plains/areas for all endangered rivers by 2012 on the basis of so-called “100-year flood levels” (see also Priority 4).

Disaster response is organized by the Federal States (Laender) and through extensive, sophisticated cooperation of governmental institutions and authorities, fire brigades (run by the municipalities), non-governmental organizations (e.g., German Red Cross (DRK), the Malteser Germany, the Order of St. John or the Workers` Samaritan Federation Germany (ASB)). The challenge remains, however, that there is almost no comprehensive planning tool/law that includes all sectors, although the German DRR-system has proven to be relatively successful in practice in the past, mainly due to the success and sound design of the individual components, created independently of the DRR framework. The tradition of voluntary services in emergency management and a rather strong reaction system has proven to be a solid base for response and recovery. The overall strategy in this area and also for the “Federal Agency for Technical Relief” (THW) is to broaden the basis for recruitment of new voluntary and salaried forces respectively.

Additionally, several insurance companies are in a process of considering how to motivate their customers to contribute to DRR activities.

The “Federal Foreign Office” (AA) carries out the strengthening of capacities in its strategy for DRR in partner countries through specific precaution at all levels and especially for the self-help of vulnerable individuals.

The German development cooperation implements its development-oriented emergency aid in a sustainable way and includes aspects of long-term DRR. In

practice 15% of the development-oriented emergency aid budget is dedicated to DRR measures. It aims at an integration of prevention and preparedness in rehabilitation and reconstruction through, for example, earthquake resistant rebuilding or the support of local DRR-committees.

The GRC provides assistance all across the globe, with DRR and its elements accounting for a major part into the disaster management. Though activities aimed at DRR and Climate Change Adaptation Mainstreaming play a rather minor role in disaster relief, efforts to improve the linkage between emergency response, reconstruction and rehabilitation phase start as early as possible in the emergency phase. Integrating DRR and Climate Change Adaptation Mainstreaming activities at an early stage into GRC programmes can function as a link in the LRRD approach enhancing the resilience of communities. All program plans in DRR are based on a locally executed Vulnerability and Capacity Analysis (VCA). GRC strengthens its partners in their negotiations with the local, regional and national authorities to incorporate DRR in their plans for disaster response and recovery in order to establish a disaster and climate change resilient infrastructure.

Capacities in the following areas are enhanced by the government, the federal states and the civil protection authorities:

- Crisis Management
- Promotion of volunteering
- CBRN protection
- Health civil protection
- Civil protection
- Critical Infrastructures
- Research & Development
- Technology
- Construction
- Eligibility of national aid at international level (EU & UN mechanisms)

CARE Deutschland-Luxemburg's Regional Emergency Cluster Advisors (RECA) support on demand the national WASH Cluster and coordinating platforms by individual guidance, workshops and trainings and in the context of the preparation of DRR plans. These plans are prepared in line with national regulations like the HFA.

Welthungerhilfe strengthens capacities at community level: local committees, local partners, WHH-teams regarding preparedness for effective response.

Priority for Action 1

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Core indicator 1

National policy and legal framework for disaster risk reduction exists with decentralised responsibilities and capacities at all levels.

Level of Progress achieved? 5

Comprehensive achievement with sustained commitment and capacities at all levels.

Key Questions and Means of Verification

Is disaster risk taken into account in public investment and planning decisions? Yes

National development plan	No
Sector strategies and plans	Yes
Climate change policy and strategy	Yes
German Strategy for Adaptation to Climate Change	
Poverty reduction strategy papers	Yes
CCA/ UNDAF (Common Country Assessment/ UN Development Assistance Framework)	No
Civil defence policy, strategy and contingency planning	No

Have legislative and/or regulatory provisions been made for managing disaster risk?
Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

The German federal system divides the competence for disaster reduction between the Federal Government and the Federal States (Laender), whereas the major tasks lie in the hands of the states (see an overview in the annex below). Additionally, DRR is a cross-sectoral topic and therefore no sole law exists for its regulation, however, for Civil Protection Organisations a number of legal norms are existing in order to achieve sustainable DRR. Rather, the elements of DRR are integrated in both the “non-military” civil protection law of the Federal States (Laender) and the German Security Policy at the national level.

On the national level, the capacities of the Federal State, in particular the “Federal Agency for Technical Relief” (THW) and the “Federal Armed Forces” (Bundeswehr: see link), support the forces of the Laender, such as the emergency organisations and fire brigades. According to article 35 of the German constitution the different authorities of the Federal Government and the Federal States (Laender) have to assist each other in the case of a natural disaster. Therefore, the Laender have the right to demand help from Federal Forces such as the THW. The THW has associations at the county and municipality/community levels and is integrated in the local emergency response. Since 2000 the “Civil Military Cooperation” (CIMIC) or “Zivil-militärische Zusammenarbeit” (ZMZ: see link) of the Bundeswehr has a new structure: each federal state has its federal command and there are more than 400 regional commands for counties, which coordinate and train mainly reservists in disaster preparedness.

Certainly DRR also accounts for an important part of the environmental law/policy and spatial and land use planning. Among other things the national parliament has adopted a new version of the “Regional Planning Act” (“Raumordnungsgesetz”) in July 2008 in which civil protection and critical infrastructure play a more important role. In March 2010 mitigation and adaptation to climate change were integrated into the “Regional Planning Act” in the course of its amendment. After the Elbe Flood in 2002 the “Standing Conference of Interior Ministers” (IMK: see link) agreed on a “New Strategy for the protection of the German population” in which a series of regulations were laid out and research was conducted. A large part of these, such as the “German Joint Information and Situation Centre of the Federal government and Laender” (GMLZ) or the “German Emergency Planning Information System” (deNIS IIplus: see link) will be explained in Priority 2. The Law concerning the “German Meteorological Service” (DWD: see link) defines the duties of the DWD, namely the provision of meteorological services, the meteorological safeguarding of aviation and shipping, the issuing of official warnings in the case of dangerous weather phenomena, short and long-term recording, monitoring, and evaluation of meteorological processes in the atmosphere as well as its structure and composition, the recording of interactions between the atmosphere and other environmental spheres, the forecasting of meteorological processes, the monitoring of the atmosphere for traces of radioactive elements and the forecasting of their dissemination, the operation of the necessary measuring and observation systems and the provision, storage, and documentation of meteorological data and products. The German parliament has adopted a new protective law for floods and high water in May 2005, which obligates the Federal States to define flood plains/areas for all endangered river areas by 2012. Adaptation to climate change is considered a

common strategy of all public authorities and as an integrated approach in all areas.

According to the law for civil protection (Zivilschutzgesetz: see annex) in its version (from 2004), the tasks of DRR have been shared between the Federal Government and the Federal States (Laender), whereby the responsibilities on the county and community level are regulated by the Laender. The Laender are authorised to determine by executive order the jurisdiction of either several municipalities, municipal unions or associations of municipalities in the area of civil protection and management. Integrated in this system are the local authorities and (voluntary) fire brigades (run by the municipalities) with their 1.2 million volunteers as one of the main pillars. But this counts only for disaster response; in the case of wildfires, the forest law at the Laender level holds the owners and forest management services responsible for DRR. The strong NGO-system of the German Red Cross (Deutsches Rotes Kreuz: DRK), the Workers` Samaritan Federation Germany (Arbeiter-Samariter-Bund: ASB), the Malteser Germany, the Order of St. John and the “German Lifeguard Association” (Deutsche Lebens-Rettungs-Gesellschaft: DLRG) (see link) supports these within the framework for civil protection. The flood management centres at the communal level are responsible for local forecasting and warning, while the Federal States are legally responsible for construction in their respective land areas and the communities/municipalities for the preservation, operation and planning.

In April 2009 „Gesetz zur Änderung des Zivilschutzgesetzes – ZSGÄndG“ came into force. The amendment of the act ensures that Federal resources are provided to the Laender in case of natural disaster or other threats making the response capability of the Laender more effective. Furthermore, the amendment of the act enables the Federation for the first time to take over coordination tasks if requested and agreed by Federal State(s). The operational disaster management stays in the responsibility of the Federal States.

Additionally inter-departmental and disaster management trainings involving all Federal States like LÜKEX (Länder-Übergreifende Krisenmanagementübung/Exercise) has been determined as a legal task. Generally the ZSKG provides the Federal Office of Civil Protection and Disaster Assistance (BBK) with a more suitable and effective legal framework.

“The interministerial agreement of 10 November 2011 between the Federal Foreign Office (AA) and the Federal Ministry for Economic Cooperation and Development (BMZ) entered into force on 23 May 2012. The tasks of the two ministries have been reorganized. The responsibility for humanitarian assistance lies with the AA, [...] while the BMZ is responsible – outside the realm of humanitarian assistance – for recovery and rehabilitation. Recovery and rehabilitation is a development cooperation instrument and follows development cooperation principles, for which the BMZ is the lead ministry.” (see link: Guide outlining the tasks of the Federal Foreign Office and the Federal Ministry for Economic Cooperation and Development (BMZ) in the spheres of humanitarian assistance as well as recovery and rehabilitation)

The Strategy for Humanitarian Assistance Abroad (as of November 2012) of the Federal Foreign Office describes the objectives for Germany’s humanitarian

assistance. One of the objectives is: “to achieve preparedness, improving response capabilities before disaster strikes and strengthening local structures.” This strategy highlights the importance of Germany’s DRR approach on the international level.

Here “Within the scope of immediate, ongoing and transitional assistance, the Federal Foreign Office promotes integrated disaster reduction measures geared to the special needs of the recipients. Preparedness measures can help minimize the impact of future crises and natural disasters, alleviate human suffering and reduce material damage.” These include amongst others:

- risk analysis, assessment and management
- early warning
- quick response to early warning through the prompt preparation of humanitarian assistance
- enhanced international and national platforms

(see link: Strategy of the Federal Foreign Office for Humanitarian Assistance Abroad).

On 17 December 2008 the federal cabinet introduced the German strategy for Adaptation to Climate Change (DAS). It creates a framework for a national adaptation to the consequences of climate change. It establishes a transparent middle-term process to:

- determine the required actions with responsible stakeholders
- define objectives
- determine and solve conflicts and to
- develop and implement adaptation measures

Reducing vulnerability is one of the important objectives within the DAS. Thus the following action are foreseen:

- Appoint and communicate hazards and risks
- Awareness rising and sensitisation of stakeholders
- Provide decision principles for prevention and planning
- Appoint possible actions, coordinate responsibilities; formulate and implement adaptation actions

Within the implementation of DAS the “Adaptation Action Plan” was developed until summer 2011 and published in November 2012. “The Adaptation Action Plan mainly sets out activities at the national level and activities undertaken by the Federal Government that are jointly initiated with the Laender. In consequence, the Action Plan is positioned in a broad landscape of German adaptation activities at all levels and, with its strategic, overarching statements, also offers guidance to other actors.” (Adaptation Action Plan: see link) “The objectives of the Action Plan are to promote the concrete application of the DAS, specify priority activities for the Federal Government in the field of adaptation to climate change impacts – including activities undertaken in cooperation with other actors – and lay down future steps for the further development and implementation of the DAS.”. It comprises 4 pillars: Pillar 1: Providing knowledge, informing, enabling and participating. Pillar 2: Framework-setting by the German Federal Government. Pillar 3: Measures for which the German

Federal Government is directly responsible. Pillar 4: International responsibilities. (Adaptation Action Plan: see link). The “Competence Centre on Climate Impacts and Adaptation” (Kompass) of the Federal Environment Agency supports the implementation of the DAS, through policy advice, environmental research, provision of information, networking and participation and “promotes climate change adaptation in Germany and Europe” (Kompass: see link).

“In Germany, sustainable development is a key priority dealt with at the highest political level. Because of its cross-cutting nature and special importance, the National Sustainable Development Strategy is a matter which comes under the competence of the Federal Chancellery. All ministries are involved in shaping and implementing the strategy.” The 2012 Progress Report of the strategy include links to flood prevention and the EU Flood Risk Management Directive but also to risk prevention and adaptation to climate change e.g. DAS and the Adaptation Action Plan (National Sustainable Development Strategy Progress Report 2012: see link)

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

The challenge for German policy is the coordination/adaptation of the different levels in the federal system, which has to be addressed by further efforts.

The general consensus of the German research landscape maintains that there is a need for a legally binding system to accumulate and access data addressing disasters, as there is currently no public mandatory system to collect, process, disseminate, and apply disaster occurrence data. In addition, a transnational (in particular European) policy needs to be established in order to ensure freedom of data access.

On the international level in disaster prone communities the co-operation on the local level and the acceptance of a participatory approach are generally good. The implementation of DRR and Climate Change Adaptation Mainstreaming concepts and programmes for Disaster Prevention, Mitigation, Preparedness is a matter of resources at the different levels of national authorities.

The challenge for GRC is to convince the administration on regional and national level of the priority that DRR and Climate Change Adaptation Mainstreaming activities should have for policy, planning and financing on regional and national level. Inside its DRR and Climate Change Adaptation Mainstreaming programming, GRC works with the national Red Cross and Red Cross Society on local and regional level, supporting advocacy for regional and local DRR and Climate Change Adaptation Mainstreaming planning in countries.

The International Federation of Red Cross and Red Crescent Societies and the

International Committee of the Red Cross are working with different programmes to advocate at national level for the importance of DRR and Climate Change Adaptation as national priority.

From the point of view of the Johanniter it is crucial to keep human volunteer resources in prevention and response and to establish models that stimulate voluntarism in civil protection and DRR. New incentives are required like: allowance, additional retirement benefits, early retirement, discounts in everyday life etc.

Supporting documents:

Adaptation Action Plan http://www.bmub.bund.de/fileadmin/Daten_BMU/Pool/Broschueren/aktionsplan_anpassung_eng_bf.pdf

Guide outlining the tasks of the Federal Foreign Office and the Federal Ministry for Economic Cooperation and Development (BMZ) in the spheres of humanitarian assistance as well as recovery and rehabilitation http://www.auswaertiges-amt.de/cae/servlet/contentblob/635382/publicationFile/177843/130110_Leitfaden_AA_BMZ.pdf
Leitlinien zur Förderung von Maßnahmen der Katastrophenvorsorge im Ausland durch das Auswärtige Amt http://www.preventionweb.net/files/2967_katastrophenvorsorgegrundsatzleitlinien.pdf

Katastrophenvorsorge des Auswärtigen Amtes
http://www.preventionweb.net/files/2967_AA.pdf

National Sustainable Development Strategy
http://www.bundesregierung.de/Content/EN/StatischeSeiten/Schwerpunkte/Nachhaltigkeit/nachhaltigkeit-2012-04-16-fortschrittsberichtsgrundsatzartikel_en.html?nn=393722

Strategy of the Federal Foreign Office for Humanitarian Assistance Abroad http://www.auswaertiges-amt.de/cae/servlet/contentblob/634144/publicationFile/177842/12115_AA-Strategie_humanitaere_hilfe.pdf

Zivilschutz- und Katastrophenhilfegesetz - ZSKG (2009): http://www.bbk.bund.de/cln_027/nn_402322/SharedDocs/Gesetzestexte/Zivilschutz-_20und_20Katastrophenhilfegesetz,templateId=raw,property=publicationFile.pdf/Zivilschutz-%20und%20Katastrophenhilfegesetz.pdf

Zivilschutzgesetz (2004)

http://www.preventionweb.net/files/2967_Zivilschutzgesetz.pdf [PDF 83.58 KB]

Overview Federal Law http://www.preventionweb.net/files/2967_ListeKatSG.pdf [PDF 65.24 KB]

Related links:

ASB <http://www.asb.de/>

BMUB Klimaschutz <http://www.bmu.de/klimaschutz/>

Bundeswehr <http://www.bundeswehr.de/portal/a/bwde>

CIMIC http://www.streitkraeftebasis.de/portal/a/streitkraeftebasis/lut/p/c4/04_SB8K8xLLM9MSSzPy8xBz9CP3I5EyrpHK94uyk-ILMKr3SnNTM4hK9qTyqTP2CbEdFAL7a7iU/

deNIS IIplus http://www.denis.bund.de/ueber_denis/index.html

DLRG <http://www.dlrg.de/>

DRK <http://www.drk.de/>

DWD–Law http://www.dwd.de/bvbw/appmanager/bvbw/dwdwwwDesktop?_nfpb=true

&_pageLabel=dwdwww_aufgabenspektrum&_nfls=false
 Federal Foreign Office (AA) <http://www.auswaertiges-amt.de/diplo/en/Startseite.html>
 GMLZ <http://www.bbk.bund.de>
 IMK <http://www.bundesrat.de>
 Johanniter <http://www.johanniter.de/>
 KomPass <http://www.umweltbundesamt.de/themen/klima-energie/klimafolgen-anpassung/kompass>
 Malteser <http://www.malteser.de/>
 THW <http://www.thw.de>
 UBA <http://www.umweltbundesamt.de>

Core indicator 2

Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

What is the ratio of the budget allocation to risk reduction versus disaster relief and reconstruction?

	Risk reduction / prevention (%)	Relief and reconstruction (%)
National budget		

Decentralised / sub-national budget

USD allocated to hazard proofing sectoral development investments (e.g transport, agriculture, infrastructure)

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's

ranking/ assessment for the indicated level of progress.

Resources for disaster preparedness exist at all levels and timeframes (e.g., long-term measures); communities are responsible for the infrastructure of the communal roads and emergency services on a local level, the Federal States (Laender) for state law and the German State for nationwide disasters.

Civil protection is ensured through the German Constitution and the “law for reorganization of civil defense” (Zivilschutzneuordnungsgesetz: see link) as the responsibility of the Federal States (Laender) and thereby designed differently. In an extreme hazard situation the 16 different institutions of the Federal States (Laender) can receive assistance by demand through the “Federal Ministry of the Interior” (BMI) and the “Federal Agency for Technical Relief” (THW: see link), respectively. Together with the different institutions at the level of the Federal States (Laender) and Communities, the “Federal Office for Civil Protection and Disaster Response” (BBK) (subordinated by the BMI) works continuously to update and adapt the different systems. It works on nationwide disaster reduction plans and provides recommendations for the public on its website (see link).

Because local level actors are responsible for DRR in the first place, the plans and activities are carried out mainly by the fire brigades (or, in terms of risk reduction, by the forest management services and other organizations in cooperation with the landowners), emergency medical services or flood forecasting and management centres (see link). In harbours and airports the fire brigades are responsible (as well as rescue trains for the rail), while the THW is in charge for large disasters. The regional authorities and councils share the responsibility to prepare for large disasters. Altogether the capacities are strong enough to implement the existing rules and supervise their conversion.

The “Federal Foreign Office” (AA: see link) spends up to 10% of its resources for humanitarian assistance with a special focus on disaster reduction with partners such as UN/ISDR, the “German Committee for Disaster Reduction” (DKKV: see link) or the German Red Cross (DRK). Organizations such as the DRK also receive their own funding for disaster reduction (mainly through the German government and the EU) and carry out substantial programmes on the local level in partner countries. Resources from the “Aktion Deutschland Hilft” (German relief coalition) are adequate to reach out to decentralized DRR capacities and responsibilities.

The experience of the Johanniter shows that resources for DRR are available after disasters. However, generally more resources are available for disaster response and reconstruction on the short term from donations and taxes from the federal government or federal states.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be

overcome in the future.

Even though the resources for disaster reduction are manifold in Germany, there are challenges in delineating lines of responsibility and especially in promoting cooperation between the Federal States (Laender) and the Federal Government and even between research programmes, state organs and other actors in disaster reduction.

As long as GRC funds are available for respective DRR programmes and projects of the international co-operation the progress is substantial on the community level. The GRC receives funding from EU and the German government to fund programmes of this kind. On the other hand GRC depends very much on its own private donations to carry out long term DRR and Climate Change Adaptation Mainstreaming programming. More significant funds are needed in this area.

From the perspective of the Johanniter more investments in DRR are required such as reinforcement of exposed infrastructure and protection infrastructure to reduce the losses in response and reconstruction. Reserve funds should be established for such activities.

Related links:

BBK - Recommendations <http://www.bbk.bund.de>

BMI <http://www.en.bmi.bund.de/>

BMUB <http://www.bmub.bund.de/en/>

Deutscher Berufsverband Rettungsdienst (DBRD) <http://www.dbrd.de>

DKKV <http://www.dkkv.org/en/about-us/the-committee.html>

Federal Foreign Office <http://www.auswaertiges-amt.de/diplo/en/Startseite.html>

IMK <http://www.bundesrat.de>

KomPass

http://www.anpassung.net/cln_110/DE/Home/homepage__node.html?__nnn=true

THW <http://www.thw.de>

UBA <http://www.umweltbundesamt.de>

Zivilschutzneuordnungsgesetz <http://archiv.jura.uni-saarland.de/BGBl/TEIL1/1997/19970728.1.HTML#GL20>

Core indicator 3

Community Participation and decentralisation is ensured through the delegation of authority and resources to local levels

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Do local governments have legal responsibility and regular / systematic budget allocations for DRR? Yes

Legislation (Is there a specific legislation for local governments with a mandate for DRR?)	Yes
Regular budget allocations for DRR to local government	Yes
Estimated % of local budget allocation assigned to DRR	0

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

The local level is participating in DRR on a large scale through the German understanding of subsidiarity. Subsidiarity gives priority to communal independence over governmental action. This means that the local authorities and chapters of emergency response forces can receive assistance from above by demand, though only in the case of urgent need. This has to be considered not only in the case of disasters but also with decisions and responsibilities about construction areas, land use etc. on the local/communal level. In the case of disaster response and management, the main actors in Germany include the local fire brigades and police, "Federal Agency for Technical Relief" (THW), as well as private relief/emergency services such as the Red Cross (DRK), Malteser Germany, the Order of St. John or the Workers` Samaritan Federation Germany (ASB). However, local investments are mainly concentrated in education and social protection; therefore funding for DRR remains relatively small.

In the case of a major hazard across federal boundaries or nationwide, the superordinated authorities and organizations such as the "Federal Agency of Technical Relief" (THW: see link) support the various actors on the communal level. Constitutionally, however, DRR and preparedness/prevention are largely a local duty of communities and town districts. Their local fire brigades and emergency medical services (as well as the communal flood protection) provide the foundation of DRR in the population because of their ability to raise awareness and especially through their voluntary engagement. More than 1 million people work in the voluntary fire brigades, another 400,000 in the five volunteer organizations - the DRK, the ASB, the Malteser Germany, the Order of St. John and the "German Lifeguard Association" (Deutsche Lebens-Rettungs-Gesellschaft: DLRG) (see link) - and an additional 80,000 volunteers in the THW. Through the tradition of voluntary work in disaster

relief/assistance, a culture of resilience is developed at a community-based micro level, while the different actors (including the THW) are primarily coordinated by the communal operation administration in the case of an emergency, as the fire brigades are communal and the emergency services are controlled by the district. Therefore, due to the principle of subsidiarity, the regional authorities assume responsibility in the case of larger disasters.

Participatory approaches in DRR are common in Germany. For example involving communities in developing flood hazard, risk maps and the flood risk management plans is required by law (WHG §79 – Information and active participation: see link).

The first High Tech Strategy of the Federal Government aimed at ensuring the social and technical, infrastructure against man-made and natural disasters. It formed a platform for strategic cooperation between economy, administration, science and the end-users. This initiative facilitated the networking of the different fields of research but also the exchange between research and the users and the operators of critical infrastructures and the providers of security solutions.

Strategic objective of the Government was to utilise the knowledge about Climate Change and its implications. A component of the High-Tech Strategy was the Climate Service Centre (CSC), which bundles knowledge, consulting services and hazard risk data in the context of Climate Change for economy, society, policy and science. It is hosted by the Research Center of the Helmholtz Gemeinschaft (GKSS: see link) and officially started its work on 2nd July 2009. Amongst others, important objectives of CSC are: to close the gaps between research and the users of climate change related information, to support decision making processes based on meaningful research results and to prepare useful information for the society.

The GRC is implementing community-based DRR and Climate Change Adaptation Mainstreaming Programs in South Asia, South East Asia, East Africa, Middle and South America with the aim to reduce existing vulnerabilities while building communities' capacity to help themselves. In these DRR and Climate Change Adaptation Mainstreaming programmes vulnerable communities participate in all three main components of DRR: Risk Analysis, Disaster Prevention and Mitigation and Disaster Preparedness. GRC's sustainable long-term DRR and Climate Change Adaptation Mainstreaming programmes are expected to build local DRR capacities, thereby significantly reducing the need for future relief interventions. GRC and its Partner Societies have reached substantial achievements in attaining reduced vulnerability and strengthened resilience of communities.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

The decentralised German system requires structures of responsibility and

knowledge about mechanisms, possibilities and regulations at the local level, which faces the challenge of an potentially inefficient and difficult to manage delegation of tasks and participation of the different actors in disaster and emergency management at the community level.

There are well recognized limitations in capacities and resources in the different DRR and Climate Change Adaptation Mainstreaming activities of GRC. The levels of institutional commitment from the political administration vary enormously from country to country. The commitment of the National Red Cross and Red Crescent Societies is high in these countries, especially on local and regional level and has to be strengthened in the future.

Supporting document:

EU-Consensus on Humanitarian Aid (2008)

http://www.preventionweb.net/files/2967_euconsensusen.pdf

Related links:

ASB <https://www.asb.de/en>

Climate Service Center

http://www.gkss.de/science_and_industrie/klimaberatung/csc/index.html.de

DLRG <http://www.dlrg.de/>

DRK <http://www.drk.de/>

Hightech-Strategie <http://www.hightech-strategie.de>

Johanniter <http://www.johanniter.de/>

Malteser <http://www.malteser.de/>

THW <http://www.thw.bund.de>

WHG: <https://dejure.org/gesetze/WHG/79.html>

Core indicator 4

A national multi sectoral platform for disaster risk reduction is functioning.

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Are civil society organizations, national finance and planning institutions, key economic and development sector organizations represented in the national platform? Yes

civil society members (specify absolute number)	9
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national finance and planning institutions (specify absolute number)	0
sectoral organisations (specify absolute number)	12
private sector (specify absolute number)	5
science and academic institutions (specify absolute number)	30
women's organisations participating in national platform (specify absolute number)	0
other (please specify)	Ministry of Interior of North Rhine-Westphalia, Wether Studio "nd German Television, Federal Agency of Watermanagement, and about 20 experts

Where is the coordinating lead institution for disaster risk reduction located?

In the Prime Minister's/President's Office	No
In a central planning and/or coordinating unit	No
In a civil protection department	No
In an environmental planning ministry	No
In the Ministry of Finance	No
Other (Please specify)	NGO on behalf of Federal Government directly connected to the Federal Foreign Office

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's

ranking/ assessment for the indicated level of progress.

At the end of the International Decade for Natural Disaster Reduction (IDNDR), the UN appealed to member states to establish organizations/platforms for disaster risk reduction or to support those that already exist. As a logical consequence of the clear consensus among all stakeholders in Germany, the “German Committee for Disaster Reduction” (DKKV: see link) continued the work of the German IDNDR Committee.

The “Federal Foreign Office” (AA: see link) ensured its continuing support as the main donor to the work of the German National Platform. Therefore, the Committee was able to continue its activities without interruption and its structure remained the same. The DKKV functions as a competence centre for all questions of national and international disaster reduction, prevention and management and spreads the knowledge of disaster reduction across all levels of the education sector. DKKV also acts as a mediator for international organizations and institutions in the area of disaster reduction and aims to enhance interdisciplinary and transnational cooperation. It works for the implementation of available knowledge and procedures/techniques about disaster reduction in politics, administration and economics and for strategies to strengthen disaster resilience.

The DKKV is a registered association under private law and, therefore, it is not a government authority. It has members and long-term guest from the areas of policy, administration, science, insurance and the humanitarian aid. It is directed by an executive board (the chairperson is Gerold Reichenbach - member of the German parliament) that is supported by a scientific and an operating advisory board. An office with a staff of 6 persons manages ongoing administrative and subject area-related tasks. The Member Assembly is the main body of the association and meets at least once a year. The assembly elects the Board of the Committee and is the decision-making body for long-term strategic decision-making and legally binding agreements. The diversity of backgrounds represented within the Committee, as expressed by the variety of DKKV members with their different mandates and expertise, provides an excellent basis for interdisciplinary approaches that span a wide spectrum of interests. This broad basis of expertise enables the Committee to work on interdisciplinary, multi-sector topics that interlink different scientific disciplines and practitioners.

The German development cooperation and humanitarian aid is actively participating through the “Federal Foreign Office” (AA) and various enforced organizations like the GIZ in DKKV. The “Federal Ministry for Economic Cooperation and Development” (BMZ) is active member of the “Global Facility for Disaster Reduction and Recovery” (GFDRR). BMZ and various enforced organizations are contributing regularly to the Global Platform on Disaster Risk Reduction. The participation of federal government departments in the platform can be optimized.

Core funding for DKKV and its activities is provided by a membership fee. As a key contributor to ISDR processes, the biggest share of project funding is provided by the “Federal Foreign Office” (AA). DKKV also receives various types of financing tied to specific projects and limited in duration and scope. The DKKV is also entitled to

accept tax-deductible donations, as it is a certified non-profit organization.

The national Red Cross / Red Crescent would be in most cases part of such platforms, not only because of their capacities in Disaster Management, but also because of different DRR experiences and linkages to the community based level. In different countries, the National Red Cross Society is an important player, supporting the national government in creation of such platforms.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

The main challenges for DKKV can be seen in the following areas:

- Supporting and initiating inter-disciplinary research
- Interlinking science and practice
- Connecting national and international aspects and initiatives
- Bringing together public sector and private sector structures

DKKV as a non-governmental association is not directly involved in decision-making processes at the governmental level. Therefore, an additional challenge is to convince decision-makers and politicians to reach risk-sensitive decisions by providing sound expertise.

From the international point of view of GRC the challenges are in financing and coordinating such platforms on a regular and long-term basis.

Related links:

Federal Foreign Office (AA) <http://www.auswaertiges-amt.de/diplo/en/Startseite.html>

German Committee for Disaster Reduction (DKKV) <http://www.dkkv.org/en/about-us/the-committee.html>

Priority for Action 2

Identify, assess and monitor disaster risks and enhance early warning

Core indicator 1

National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Is there a national multi-hazard risk assessment with a common methodology available to inform planning and development decisions? No

Multi-hazard risk assessment	No
% of schools and hospitals assessed	0
schools not safe from disasters (specify absolute number)	0
Gender disaggregated vulnerability and capacity assessments	No
Agreed national standards for multi hazard risk assessments	No
Risk assessment held by a central repository (lead institution)	No
Common format for risk assessment	No
Risk assessment format customised by user	No
Is future/probable risk assessed?	No
Please list the sectors that have already used disaster risk assessment as a precondition for sectoral development planning and programming.	--not complete--

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

Since 2010 a nationwide risk analysis for civil protection has been implemented at national level according to § 18 (1) of the Federal Civil Protection and Disaster Assistance Act (ZSKG). The inter-departmental, geoinformation-aided risk analysis aims at compiling a comprehensive comparative overview of nationally relevant hazards and incidents in relation to the probability of occurrence and the extent of damage caused in the event of their onset. It especially considers those potential hazards/incidents that prove to be particularly challenging to deal with for the Federal Government within the scope of its (constitutional and) legal responsibilities. The findings of the national risk analysis serve as basis for information and decision making in order to enable better risk-oriented and needs-based planning for prevention and preparedness in the realm of civil protection and disaster relief. The national risk analysis is done in an abstract and generic manner, and the German approach to risk analysis is in line with the EU-guidelines for risk assessment for disaster management.

The “Method of Risk Assessment for Civil Protection” was published and communicated by the Federal Office of Civil Protection and Disaster Assistance (BBK) to the Laender in 2010. It is currently implemented at different administrative levels of the Federal States (Laender). Additionally, the “Joint Hazard Estimation of the Federal States and the Federal Government” compiles hazards (natural/technological/man-made) exceeding “day-to-day” events/crisis situations of national concern and identifies risk hotspots, required additional/specialised capabilities, means/actions to decrease vulnerability and increase coping capability. This occurs through regular and event-driven updates and a yearly review of results, which is seen as the first step to a national risk overview for the entire Federal Republic of Germany. Since the Federal States (Laender) are responsible for disaster management, these assessments are organized and developed independently of each other, resulting in some challenges for an extensive analysis of both the local and national levels.

Beside the national level, Germany engages actively in the risk analysis/assessment process on European level. According to article 6 of the EU Civil Protection Mechanism the Federal Government and the Federal States are working together on a national risk assessment report for the EU-Commission.

From the federal perspective, the overarching goal is to reduce the impact of extreme events on humans, their natural basis of life, critical infrastructures and other relevant subjects of protection as well as to be better prepared to handle anticipated crises. Concerning critical infrastructure protection BBK has developed a guide, “Critical Infrastructure Protection: Risk and Crisis Management” in cooperation with the private sector, government authorities and a research institute (see link). This guide

offers methods for implementing risk and crisis management and practical tools in the form of examples and checklists. The guide applies to all sectors and is intended for companies and government authorities as a tool for self-analysis. It is separated in five phases: planning, risk assessment, preventive strategies, crisis management and evaluation.

Moreover, BBK has developed guidelines regarding indicators for accessing vulnerability and coping capacities on the community level – using the example of hydrological hazards in urban areas. It provides a scientific, systematic and modular approach for assessing the physical vulnerability at the municipal level to hydrological hazard for the population, critical infrastructures and environment. The results are available as practical and scientific guidelines, for the examples of flood events, heat waves and heavy rainfall (BBK: see link). In addition, the project KritiskAT and its ongoing implementation is developing an applicable set of criteria for the purpose of identifying and assessing critical infrastructures. The set will enable decision makers to prioritise their activities in risk management. Infrastructure failures are considered with regard to population, society, public and private associations.

The development of a concept for risk communication in civil protection is performed by BBK with the following objectives: (a) Developing an overall concept for the communication of risks as part of the Joint Hazard Estimation process of the Laender and the Federal Government (b) Developing a concept for risk communication for the BBK (b 1) Conduct a survey to evaluate the awareness level of the BBK among target groups and to define and establish new means of communication with those target groups: Federal Republic of Germany (BBK, all Laender and communities).

This activity forms the basis for

- a more effective communication during crises
- people's willingness for self help
- people's ability to help themselves in case of major disasters and to undertake private prevention measures
- societal resilience

Results of the vulnerability analysis of the municipalities provide insights for the risk analyses and for the flood management plans in the context of the directive 2007/60 EG. However, the challenge remains to transfer the methodology "Indicators for accessing the vulnerability and coping capacities" to other hazards. This has been done in the KIBEX project, generating methods for the assessment of vulnerability to heat waves and heavy rainfall at a community level (see link).

It is not the task of the Federal Agency for Technical Relief (THW) to develop risk assessments for the national levels. However, the THW compiles damage scenarios. Those scenarios are assessed according to their relevance for the THW work and the probability of occurrence. They are used for the strategic planning of tactical and operational procedures. The THW cooperates with other civil protection organisations and is informed about existing risk assessments.

Based on long-term data, the "German Meteorological Service" (DWD: see link) provides risk maps for the excess of certain extreme weather conditions. The "Center

for Disaster Management and Risk Reduction Technology” (CEDIM), in addition to other scientific institutes, develops national and country-specific risk assessments for natural hazards (see the link to the CEDIM Risk Explorer). They are also regularly in contact with institutions like the “German Association of Cities and Towns” or the “German County Association” in order to achieve the advancement of local assessment mechanisms. In particular, the floods of the last decade have sparked improved co-operation between the Federal States (Laender), the German state and other countries in forecasting floods.

The institutions responsible for fire prevention (land/forest owners, forest management services) and fire response (ministries for the interior, fire services at the level of the communities) are aware of the general current wildfire hazard and its potential increase as a consequence of climate change. However, besides the general awareness that specific tree species/forest types bear a high wildfire risk (e.g., pine forests), systematic risk assessment databases and vulnerability information regarding fires are lacking and a methodology for wildfire risk assessment is not available.

In terms of flood risk management the Leander are obliged to develop flood risk management plans by the end of 2015 with accordance to the directive 2007/60/EG for areas with significant flood risk in order to reduce flood risk along rivers and coasts. The objective of the plans is to inform about risks and to initiate measures leading to reduced flood risks for people, assets, infrastructures and environment. The schedule of the implementation of the flood directive is as follows:

- 22.12.2011: temporary assessment of flood risk
- 22.12.2013: development of flood hazard and flood risk maps
- 22.12.2015: development of flood risk management plans

Between January 2011 and December 2013 the project “Audit: Flood – how well are we prepared?” went through a piloting phase. The project started back in 2009 with the preparation of a comprehensive flood audit for municipalities and other distinct regional administrations aiming at objectively determine the quality of disaster prevention in order to cope with flood hazards and give concrete recommendations for improvements. The rules in order to perform the audit were published in December 2010 by the German Association for Water, Wastewater and Waste (DWA) (see link). The voluntary audit process comprises three main sections: a) status assessment (for selected areas the goals in order to reach an effective and comprehensive flood prevention are ranked and the existing prevention status is documented), b) elaboration of targeted recommendations for flood prevention, c) during a follow-up audit the goals are evaluated with respect to the outcomes.

During the time of piloting phase all in all 21 communities were audited with great success. Among these where the following municipalities and Associations in response of water resources management: Au am Rhein, Bergisch-Rheinischer Wasserverband, Braunschweig, Cloppenburg, Cologne, Dresden, Hilden, Neuburg an der Donau, Osnabrück, Straubing, Torgau, Wupperverband, Wuppertal. These to name a range of regional authorities covering as little inhabitants as 3.000 in Au am Rhein to 1 million inhabitants in Cologne. The knowledge received in the piloting

phase is now available in the audits, which form part of the services of the DWA (for further information see link).

The German insurance industry has sophisticated and detailed methods for risk assessment, including the “NATural Hazards Assessment Network” (NATHAN: see link) of the “Munich Re Group”.

Munich Re revised its CD “World of Natural Hazards” which was published 2009 as a DVD “Globe of Natural Hazards”. Beyond the distribution of the different natural hazards and their intensities the DVD presents additional information about global change – climate change inclusively. For each point on globe a local hazard assessment can be displayed considering all hazards.

The German development cooperation supports risk assessments in its partner countries depending on the level at which the cooperation takes place. These assessments include hazard data and vulnerability information to incorporate DRR-measures into the development plans.

The German scientific landscape and other actors have also begun implementing these methods with international partners, such as the “German Indonesian Tsunami Early Warning System”, for example (GITEWS: see link).

GRC enables communities exposed to disasters to develop future prospects even for the long term. A Vulnerability & Capacity Assessment (VCA) on site is usually the starting point of genuine DRR and Climate Change Adaptation Mainstreaming programmes at GRC. In this context, the GRC has, for many years, been using a participatory methodology by which local communities are enabled to recognize their vulnerability to existing natural hazards as well as their current capacity to help themselves. Hazard maps are used to identify high-risk zones and safe places in each targeted community. At the end of the assessment, communities agree on a joint plan of action designed to reduce disaster risk. Local knowledge of natural hazards and pre-established structures such as evacuation routes, safe refuges or functioning village committees are taken into account and incorporated into the programme design.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

National risk assessments are available, with a focus on risk identification and characterisation, in which critical infrastructure is currently identified as the main problem. Additionally, the “Joint Hazard Estimation of the Federal States (Laender) and the Federal Government” aims to compile hazards (natural/technological/man-made) exceeding “day-to-day” hazards/crisis situations of national concern, as well as to identify risk hotspots, required additional/specialised capabilities, means/actions to decrease vulnerability and increase coping capability. This occurs through regular

and event-driven updates and a yearly review of results, which is seen as the first step to a national risk map for the entire Federal Republic of Germany. Since the Federal States (Laender) are responsible for disaster management, these assessments are organized and developed independently of each other, resulting in some challenges for an extensive analysis of both the local and national levels.

An exhaustive examination and compilation of all available meteorological information has taken place only partly. Increasingly, additional data like in-situ observations, radar and remote sensing data and re-analysis of models are increasingly provided to the user. The DWD aims to increase its ability in some areas, such as the forecasting of precipitation to assure the projection of floods before they occur.

The rather general classification of forests subjected to relatively high wildfire risk and the infrequent and rare occurrence of disastrous wildfires in the country have resulted in neglecting a more systematic risk assessment. Since responsibilities for fire management (prevention and suppression responsibilities) are splitted up by different agencies and land owners, a systematic approach for joint inter-agency methodology and procedures for wildfire risk and vulnerability assessment is required.

Since the Federal States (Laender) are responsible for disaster management, these assessments are organized and developed independently of each other, resulting in some challenges for an extensive analysis of both the local and national levels. Since responsibilities for fire management (prevention and suppression responsibilities) are divided between different agencies and land owners, a systematic approach for joint inter-agency methodology and procedures for wildfire risk and vulnerability assessment is required and has been initiated by the German Meteorological Service (DWD) and the “Global Fire Monitoring Centre” (GFMC: [see link](#)). The rather general classification of forests subjected to relatively high wildfire risk and the infrequent and rare occurrence of disastrous wildfires in the country have resulted in neglecting a more systematic risk assessment. Since responsibilities for fire management (prevention and suppression responsibilities) are splitted up by different agencies and land owners, a systematic approach for joint inter-agency methodology and procedures for wildfire risk and vulnerability assessment is required.

An exhaustive examination and compilation of all available meteorological information has taken place only partly. Increasingly, additional data like in-situ observations, radar and remote sensing data and re-analysis of models are increasingly provided. The “German Meteorological Service“ (DWD) aims to increase its ability in some areas, such as the forecasting of precipitation to assure the projection of floods before they occur. The development of numerical models as well as applications is driven mainly by the performance of the forecasting systems for the precipitation and the wind storm forecasts both for the regional and the local scale (thunderstorms and flash floods).

The German development cooperation recognizes the integration of climate change risks into risk assessments as one of the largest challenges because data for the local level is lacking, among other examples.

From the perspective of the KfW information including climate risk, vulnerability and

climate change adaptation analyses are extremely important for the development, planning and implementation of financial cooperation (mandatory climate check) but in the most cases are not or only incompletely available. In most cases the information is available “only” at national levels but the local level would be desirable. The robustness of data, methodological transparency and agreed national standards are major aspects. Furthermore, the information should be understandable and usable for project managers and decision makers.

GRC’s VCAs will only make sense and be helpful if resulting in tangible activities that will reduce the risks and continue developing the available capacities. The aim is to succeed in designing and implementing DRR and Climate Change Adaptation Mainstreaming activities, which are adapted to needs, based on existing capacities and meaningfully integrated into provincial and national civil protection or disaster management schemes. The focus on technical solutions for early warning system usually ignore the communication lines to those communities most affected by disasters – warning systems, dissemination and communication need more attention from donor agencies and political decision makers. Management of programmes for disaster preparedness also needs more support.

Related links:

BBK http://www.bbk.bund.de/cIn_027/DE/00__Home/homepage__node.html

BBK - Vulnerability Assessment of Municipalities to Floods. Practice in Civil Protection. Publication series 4. Bonn http://www.bbk.bund.de/SharedDocs/Downloads/BBK/DE/Publikationen/Praxis_Bevoelkerungsschutz/Band_4_Praxis_BS_Hochwasser-Kommuna-Ebene.html

BBK - Indicators for accessing the vulnerability and coping capacities using the example of flood hazards in urban areas. Science in Civil Protection. Publication series 13. Bonn

http://www.bbk.bund.de/SharedDocs/Downloads/BBK/DE/Publikationen/PublikationenForschung/FiB_Band13.html

CEDIM Risk Explorer <http://dc108.gfz-potsdam.de/website/riskexp/viewer.htm>

Critical Infrastructure Protection: Risk and Crisis Management (2005) http://www.preventionweb.net/files/2967_ProtectionofCriticalInfrastructuresBaselineProtectionConcept.pdf

Deutsches Zentrum fuer Luft- und Raumfahrt (DLR) <http://www.dlr.de/>

CEDIM <http://www.cedim.de/>

DWD <http://www.dwd.de/bvbw/appmanager/bvbw/dwdwwwDesktop>

DWA - <http://www.dwa.de>

GITEWS <http://www.gitews.de/>

Global Fire Monitoring Center (GFMC) <http://www.fire.uni-freiburg.de/>

<http://www.munichre.com/de/reinsurance/business/non-life/georisks/nathan/default.aspx>

KIBEX - <http://www.ehs.unu.edu/article/read/kibex>

KIBEX Leaflet - http://www.bbk.bund.de/SharedDocs/Downloads/BBK/EN/booklets_Leaflets/Assessing_Vulnerability_to_Heat_Waves.html

Schutz Kritischer Infrastrukturen - Risiko- und Krisenmanagement (2008)

http://www.preventionweb.net/files/2967_LeitfadenSchutzKritis.pdf

Waldbrandgefahrenindex des DWD
http://www.dwd.de/bvbw/appmanager/bvbw/dwdwwwDesktop?_nfpb=true&_pageLabel=_dwdwww_spezielle_nutzer_landwirtschaft_agrarwetter

Core indicator 2

Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Are disaster losses and hazards systematically reported, monitored and analyzed?
No

Disaster loss databases exist and are regularly updated	No
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Reports generated and used in planning by finance, planning and sectoral line ministries (from the disaster databases/ information systems)	No
--	----

Hazards are consistently monitored across localities and territorial boundaries	No
--	----

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

The BBK runs a “German Emergency Planning Information System” (deNIS IIplus: see link) together with various partners from all areas of disaster management. It includes information about several hazards (natural, man-made), vulnerabilities and risks. It does not address long term risks, like climate change or the change of the earth magnetic field. In its current version - deNIS IIplus - it also delivers information for civil protection/disaster management (see detailed description in Priority 5).

Organisation like for example the Johanniter run their own coordination and operation centers on national and international levels.

The “German Meteorological Service“ (DWD) provides extensive weather forecasts and seeks to warn the public and the relevant authorities in case of an extreme weather event. Therefore, the DWD has reached an administrative agreement with the Federal States (Laender) and several national aid organizations for a wide range of warning situations (wind storms, continuous rain, thunderstorms, snowfall / snowdrift etc.) and water management. The prediction and consultation headquarters (Vorhersage- und Beratungszentrale: VBZ) in Offenbach is responsible for nationwide information, while the regional headquarters in Essen, Hamburg, Leipzig, Munich, Potsdam and Stuttgart each handle regional warnings.

The DWD is currently working on a national warning centre to be established by 2016.

The DWD also provides special data and software for the civil protection. Both data and the software can be integrated into the civil protection authorities systems. In cooperation with the research institutes, DWD contributes to the development of innovative, operational information systems for the public. Furthermore, DWD prepares for changing user requirements like the use of mobile devices.

The “Federal Environment Agency” (UBA: see link) and its “Competence Centre on Climate Impacts and Adaptation” (KomPass: see link), aim to identify future regional impacts of climate change and proactive adaptation to mitigate or at least minimize future losses.

Forest fire statistics are available for the whole country, although under the jurisdiction of the Federal States (Laender). At federal level the statistics are compiled by the Federal Agency for Agriculture and Food (Bundesanstalt für Landwirtschaft und Ernährung) and distributed to key agencies and are publicly available on the website of the Global Fire Monitoring Center (GFMC). In some states, forest fire defense maps have been developed. However, the use and utility of statistics and fire defense maps to reduce wildfire risk are limited.

The NatCatSERVICE of the “Munich Re Group” (see link), with more than 34.000 data set entries, is one of the world’s largest damage databases for natural disasters. Between 700 and 900 events are detected and analyzed annually. As a direct result, magnitude and intensity of single damage events can be documented in different regions of the globe and be approached for regional and global danger analyses as well as to examine trends. Within the NatCatSERVICE damages are normalized. That means that damages are linked to values in the associated country at the time of the disaster. This allows to compare the severity of the events occurring at different times.

The “Helmholtz Research Network” (see link) also provides competences and data on natural disasters in its “Natural Disasters Networking Platform” (NaDiNe: see link).

Various projects implemented by the GIZ (see link) concluded or will conclude during 2011 and 2012. This include early warning projects in Mosambik and Tadschikistan, which were evaluated very positively. The Mosambik project strongly related to

Climate Change Adaptation implements a cost-efficient and easy to install flood early warning system. The system has been installed together with local DRR-committees.

German financial cooperation (FC) projects with developing countries undergo a systematic climate check in order to make sure that climate variability and change are taken into account during planning and implementation. For this climate mainstreaming and for the planning of specific climate change adaptation or mitigation projects, information on climate variability and projected changes is needed. For this purpose, project managers use climate information portals on the internet and specific climate fact sheets that have been elaborated for most of the FC partner countries. On the basis of this climate information, risk assessments are carried out and – if necessary – risk reduction measures implemented.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

The “German Meteorological Service” (DWD) plans to establish a national warning center in the headquarters in Offenbach as mentioned above. This requires an increased optimisation and automatisisation of forecasts.

The cooperation with the civil protection authorities is continuously intensified. New forecast methods (probabilistic forecasts, uncertainties) are provided to the civil protection authorities and applications are developed. In terms of the impacts of storms, further efforts are required among all stakeholders in order to achieve a comprehensive and joint assessment. This is complicated due to the federal structure of Germany.

Furthermore, the precipitation forecasts of DWD are being continuously improved to be able to provide enhanced high water predictions and secure early warnings. A special focus is on the provision of information on the forecast uncertainty based on ensemble predictions. The use and utility of statistics and fire defence maps to reduce wildfire risk has to be improved, and an open access rule for providing stakeholders with data needed for adaptation has to be established.

One of the DRR and Climate Change Adaptation Mainstreaming activities of GRC is to ensure effective early warning on the community level (community based early warning). Therefore, GRC and its partner National Red Cross / Red Crescent Society are training local emergency committees on early warning and distributing early warning equipment. Furthermore, the Red Cross movement concentrates on linking community based emergency committees with governmental officials, who are responsible for observing natural hazards (Meteorological Department, National Disaster Management Office). This linkage is essential to ensure effective local warnings.

Related links:

deNIS II plus Deutsches Notfallvorsorge Informationssystem
http://www.denis.bund.de/ueber_denis/index.html
 DWD <http://www.dwd.de>
 GIZ Worldwide projects and programmes <http://www.giz.de>
 Global Fire Monitoring Center (GFMC) <http://www.fire.uni-freiburg.de/>
 Helmholtz Gemeinschaft <http://www.helmholtz.de/>
 Kompetenzzentrum Klimafolgen und Anpassung
http://www.anpassung.net/clin_046/DE/Home/homepage__node.html?__nnn=true
 Muenchener Rueck <http://www.munichre.com/en/homepage/default.aspx>
 NaDiNe <http://www.zki.dlr.de/de/project/996>
 Umweltbundesamt (UBA) <http://www.umweltbundesamt.de>
 THW <http://www.thw.de/>

Core indicator 3

Early warning systems are in place for all major hazards, with outreach to communities.

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Do risk prone communities receive timely and understandable warnings of impending hazard events? Yes

Early warnings acted on effectively	Yes
Local level preparedness	Yes
Communication systems and protocols used and applied	Yes
Active involvement of media in early warning dissemination	Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

The “German Meteorological Service” (DWD: see link “Weather + Warnings”) has a multi-level warning system of three pillars: “Early Warning”, “Forecast/Premonition” and specific “County Warnings” which improve gradually in chronological and geographic sophistication. “Early Warning” as on week prognosis of risky weather events enfolds spacious areas like entire Federal States (Laender), while the “County Warnings” work as accurately as possible to allow the emergency management facilities an early planning tool. The sophistication of the delivered information is adapted to the user needs. The DWD delivers information directly to facilities like fire fighters, police or civil protection and even to special users like the energy industry or water management services (see link DWD Special Users). The public weather forecast and the storm and thunderstorm warnings of DWD are provided through the media, internet, email, SMS, and push technologies for mobile devices (see link). Since 2005 the DWD has been running a steadily improving “Heat Warning System” (HWS), which is based on the “Health Related Assessment of the Thermal Environment” (HeRATE). A Forest Fire Danger Index and a Grassland Fire Danger Index have been developed by the “German Meteorological Service” (DWD), which is accessible on the internet and provides the weather-based prognosis of fire danger for the current day and the next 4 days. During periods of high fire danger this index is published / broadcasted systematically by the media. During times of high meteorological fire danger the daily index maps are attached to the daily Situation Reports of the German Joint Information and Situation Centre (Gemeinsames Melde- und Lagezentrum von Bund und Ländern - GMLZ), which are distributed to a recipient list of Federal and State authorities. Furthermore the Germany-based Global Fire Monitoring Center (GFMC) provides jointly with the Canadian Forest Service a “Global Early Warning System for Wildland Fires”, which provides various global fire danger indices for the current and the next six days (see link).

Most Federal States (Laender) have their own flood management centres that deliver local information and are integrated into local emergency services (see for example the centre in Cologne in the link below that even conducts risk assessment for private properties). On the one hand, these are organized through their relevant ministries in the “Working Group on Water Issues” (LAWA: see link) for all water-related concerns, while the different international river commissions (see ICPR, ICPO, ICPDR and ICPEP in the following Core Indicator), on the other hand, simultaneously manage such issues. The flood management centres have different early warning systems in place because there is no central regulation, rather outreach at the community level.

Baden-Wuerttemberg, Bavaria, Hesse, North Rhine-Westphalia, Rhineland-Palatinate and Saxony each has its own seismological service and earthquake early warning system, also organized in the “Federal Institute for Geosciences and Natural Resources - Seismic Data Analysis Centre” (SDAC: see link). For single communities in the alpine area, avalanche warning systems exist.

The GFZ Helmholtz Centre in Potsdam (see link) is engaged in different early warning systems worldwide, including the “German Indonesian Tsunami Early Warning System” (GI-TEWS) mentioned above or the earthquake information service GEOFON (see link). The GEOFON Global Seismic Monitor works as an ongoing information platform and “Early Warning” system, which informs stakeholders in real-

time after an earthquake.

The “Federal Foreign Office” (AA) and the “Federal Ministry for Economic Cooperation and Development” (BMZ: see link), support the development and extension of early warning systems worldwide. These people-centred early warnings aim to accumulate data through communities, analyse them centrally and disseminate the warnings back through the local authorities. In 2006 the German Government hosted the “Third International Early Warning Conference” (EWC III) in Bonn, which resulted in a checklist of actions and a catalogue of early warning projects (see link for conclusions from the conference).

The GTZ (now known as GIZ) and the Munich Re Foundation, for example, have supported local early warning systems in a Public Private Partnership (PPP) for the Buzi river in Mozambique since 2005. This people-centred early warning system integrated the communities in data collection and dissemination of warnings. The GTZ (now known as GIZ) was also engaged in the GI-TEWS by implementing effective communication structures, public campaigns and consulting. Further German actors in this project were InWEnt, the “Federal Institute for Geosciences and Natural Resources” (BGR) and the United Nations University (UNU-EHS) (see link).

Since 2008, the International Climate Initiative (IKI) of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) finances climate and biodiversity projects in developing and newly industrialising countries, as well as in countries in transition. (IKI: see link). Among other areas, the initiative funds projects in the area of adapting to the impacts of climate change. Setting up local early warning systems has become particularly important during recent years inside GRC DRR and Climate Change Adaptation Mainstreaming programming. The GRC, in collaboration with "Federal Ministry for Economic Cooperation and Development" (BMZ) is implementing projects in Togo and Uganda focusing on early warning systems providing the local population with local and seasonal forecasts.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

The “German Meteorological Service” (DWD) aims to take a Single Voice Approach because it usually has, as a federal state authority, the sole duty to warn the public.

The DWD plans to improve early warnings particularly by including the prediction tools of other nations and new statistical procedures (ensemble calculations), but altogether data access across national boundaries is complicated, time consuming and at times impossible, as individual data owners must be addressed in each country. Therefore, new international agreements (but also between the Federal

States (Laender)) need to be reached, based on the aforementioned examples of the GFZ or the BBK.

The precipitation prediction capacity of the DWD is on the raise to be able to provide improved high water predictions and secure early warnings. Moreover, a large-scale or Federal State coverage area must be further developed to guarantee national early warning capabilities.

The DWD will deliver warning information tailored to the users need (e.g. forecast for single town districts or river catchments). A new generic approach in warning will cover different requirements of the users of different disciplines.

The Forest Fire Danger Index and the Grassland Fire Danger Index do not yet offer forecasts beyond one + four days. The “German Meteorological Service” (DWD) should receive the necessary financial support to develop medium-term (1 to 2 weeks) fire-danger forecast capability.

Experiences from the 2013 flood response show, that social media play an important role by mobilizing volunteers and informing affected communities.

The GRC takes great care to ensure that the communication chain effectively reaches the community level and that no link is missing. Early warning will effectively contribute towards DRR and Climate Change Adaptation Mainstreaming only if it reaches the threatened people on time and people understand the warning message and are able to act accordingly.

Related links:

Auswaertiges Amt <http://www.auswaertiges-amt.de/diplo/en/Startseite.html>

BGR <http://www.bgr.bund.de>

BMZ <http://www.bmz.de/en/index.html>

Bund/Laender Arbeitsgemeinschaft Wasser (LAWA) <http://www.lawa.de/>

DWD Special Users http://www.dwd.de/bvbw/appmanager/bvbw/dwdwwwDesktop?_nfpb=true&_pageLabel=dwdwww_spezielle_nutzer&_nfls=false

DWD Warnings <http://www.wettergefahren.de/>

DWD Weather Warnings http://www.dwd.de/bvbw/appmanager/bvbw/dwdwwwDesktop?_nfpb=true&_pageLabel=dwdwww_wetter_warnungen&_nfls=false

Earthquake Information System (GEOFON) <http://geofon.gfz-potsdam.de/>

GFZ-Potsdam <http://www.gfz-potsdam.de/portal>

GITEWS <http://www.gitews.de/>

Global Early WarningSystem for Wildland Fires <http://www.fire.uni-freiburg.de/gwfews/index.html>

GTZ-Tsunami <http://www.giz.de/>

Hochwasserschutzzentrale Koeln <http://www.steb-koeln.de/hochwasser.html>

InWEnt http://www.bmz.de/de/was_wir_machen/wege/bilaterale_ez/akteure_ez/einzelakteure/inwent/index.html

MeteoMedia Unwetterzentrale <http://www.unwetterzentrale.de/uwz/index.html>

Munich Re Foundation <http://www.munichre-foundation.org/StiftungsWebsite/>

PPEW <http://www.unisdr.org/ppew/ppew-index.htm>

UNU EHS <http://www.ehs.unu.edu/>

Waldbrandgefahrenindex-DWD http://www.dwd.de/bvbw/appmanager/bvbw/dwdwwwDesktop?_nfpb=true&_pageLabel=_dwdwww_spezielle_nutzer_landwirtschaft_agrar

Core indicator 4

National and local risk assessments take account of regional / trans boundary risks, with a view to regional cooperation on risk reduction.

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Does your country participate in regional or sub-regional actions to reduce disaster risk? Yes

Establishing and maintaining regional hazard monitoring	No
Regional or sub-regional risk assessment	No
Regional or sub-regional early warning	No
Establishing and implementing protocols for transboundary information sharing	No
Establishing and resourcing regional and sub-regional strategies and frameworks	No

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

In the case of the "Federal Agency of Technical Relief" (THW: see link) it is well integrated into a domestic and international network of those making requests and those partners offering cooperation. Networks are continuously broadened, further developed, and expanded on all levels, from local to international. In terms of efficient cooperation, several cooperation agreements and Memoranda of Understandings

were concluded between THW and various partners.

One of the most important transboundary collaborations includes the international river commissions: Prevalent German examples include the “International Commission for the Protection of the Rhine” (ICPR: see the links below), the “IC for the Protection of the Danube (Donau) River” (ICPDR), the “ICP of the Elbe River” (ICPER), the “ICP of the Odra River” (ICPO) and the “Internationale Kommissionen zum Schutz der Mosel und der Saar” (IKSMS), which all carry out flood risk assessment appendages to ensure flood control and management in an cooperative approach. On the Rhine, for example, an action plan exists which contains all riparian states. “The plan is conceived in phases and will be implemented as part of “Rhine 2020” by all Rhine bordering countries by 2020, entailing expenses of 12 billion Euros.” (Action Plan on Floods: see link) “The flood risk management approach already included into the Action Plan on Floods will be resolutely continued when drafting the flood risk management plan for the Rhine according to the EU Floods Directive (FD) to be presented by 2015.” (Survey of „Rhine 2020“ in the field of flood risk management (1995-2005) – Action Plan on Floods: see link).

For storm and thunderstorm warnings the weather services use supra-regional information. Continuous global exchange of weather information, forecasts and warning makes sure that cross-border hazards are recognized timely. The warning system “Meteoalarm” provides EU-wide cross-border warnings. The national meteorological services work together in “The Network of European Meteorological Services” (EUMETNET: see link). The EC runs operational flood and wildfire forecasting systems (EFAS and EFFIS), that are used by the member states.

The GFZ and other German research institutes and universities were partners in the “Seismic eArly warning For EuRope” (SAFER: see link). The current OECD program “Global Earthquake Model” (GEM: see link) aims to interlink the different projects and actors and provide a uniform, independent standard to calculate and communicate earthquake risk worldwide.

In the case of wildfire response, the authorities of the most wildfire-prone Federal State of Brandenburg and the neighbouring province of Poland have signed a bilateral mutual assistance agreement, while mutual visits and cooperative forest fire research have been conducted between Germany and Poland.

In its Strategy of Humanitarian Aid Abroad of November 2012 the Federal Foreign Office underlines that “Risk analysis and management are just as essential as the quick availability of assistance in the case of acute need, while coordinated cooperation with national, regional and international partners is vital.” (Strategy of the Federal Foreign Office for Humanitarian Assistance Abroad)

The German development cooperation supports concrete regional measures within the flood management programme „Mekong River Commission“ (Laos, Thailand, Cambodia, Vietnam), in Central Asia (Armenia, Azerbaijan) and in the Caribbean (Haiti, Dominican Republic).

Since the GRC is currently working in more than 50 countries, it depends on the country if transboundary risks and cooperation are taken into account. GRC is focusing on local risks assessments as a part of VCAs conducted in targeted communities. Local knowledge of natural hazards and pre-established structures such as evacuation routes, safe refuges or functioning village committees are taken into account and incorporated into the programme design.

VCAs help people on site and the GRC to identify key risks. In addition, VCAs provide information on existing capacities that can be used to eliminate or reduce these risks. And finally, the hazard maps produced in this context imply the identification of high-risk zones and safe spots in the respective area.

In the last couple of years the GRC and local National Red Cross Red Crescent Societies and in cooperation with local climatologists and meteorologists, have undertaken climate risk assessments as well. The results of the climate risk assessments are then fed into project planning and implementation.

GRC is supporting the national headquarters of the respective National Red Cross and Red Crescent Societies to carry out this kind of climate risk assessments at provincial and national level to support the governmental authorities in the identification of climate change related risks.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

Data access across national boundaries is complicated, time consuming and partly impossible, as individual data owners must be addressed in each country. Although there is strong national coordination with respect to disaster response and protective systems, in the field of critical infrastructure the cooperation is less pronounced, as this industry is largely run by the private sector. The “German Meteorological Service” (DWD) stresses that the comparability of warnings across Europe is challenging due to different thresholds and statistical analysis. In future, an intensified international cooperation is planned with GEOSS, Copernicus and WMO.

In the case of wildfire DRR common terminology, training and incident command systems have been proposed that would provide the basis for interoperability and thus increase efficiency of cooperative wildfire response action across national borders. Experience of border-crossing firefighting assistance between Germany and Belgium and joint capacity building between Germany and Poland in forest fire fighting and the use of prescribed fire reveal the readiness of transboundary cooperation. However, there are no binding protocols in place. This was one of the reasons why in 2013-14 the German Government sponsored the “UNECE/FAO Regional Forum on Cross-Boundary Fire Management”, which resulted in the development of the “International Wildfire Preparedness Mechanism” (IWPM), which

aims at enhancing fire management capacity by exchange of expertise between countries. While the IWPM is a voluntary instrument it is suggested to develop legal protocols for transboundary cooperation in wildfire disaster risk reduction.

The Competency-based EuroFire training standards have been developed by the Germany-based Global Fire Monitoring Center (GFMC), which are aimed at enhancing capabilities of European fire services in the field of forest fire management and provide standardized training materials which could be used by all countries members of the EU and other countries globally. By end of 2013 the EuroFire competency standards are available in 10 languages (see link Euro-Fire). GFMC is also offering templates for developing protocols / agreements for border-crossing assistance in wild fire emergency situations. The use of the Incident Command System (ICS) as a common incident management tool if two or more nations are working together in a wildfire emergency situation is proposed.

Initiated and financed by the German Federal Ministry for Food and Agriculture, the GFMC and the United Nations Economic Commission for Europe (UNECE/FAO Forestry and Timber Section) organized the UNECE/FAO Regional Forum on Cross-boundary Fire Management (UN Geneva, November 2013). The Forum recommended action for enhancing fire management capabilities of UNECE member states and globally. The final recommendations will be available by mid 2014 (GFMC: see link).

Regional cooperation is developing, especially within the EU. Due to the floods of the Oder (1990) and Elbe (2002, 2013) rivers, regional flood management cooperation is increasing and has provided the systems with crucial improvements. In May 2014 for example the Federal State of Bavaria and the Federal State of Upper Austria signed an agreement on transboundary flood protection. Within the cooperation for example a study on retention areas is planned for the rivers Danube, Inn and Salzach. Moreover, it is planned to use expert teams that will find solutions for transboundary flood protection and challenges in case of a flood (Bavarian State Ministry of the Environment and Consumer Protection: see link)

As well as the already-mentioned weather forecast and warning systems, a further increase in international cooperation is already taking place, e.g., in European Earth observation programme Copernicus formerly known as the "Global Monitoring for Environment and Security" (Copernicus: see link) or within the WMO.

From the point of view of the Johanniter there is the need to further develop cross-border cooperation within the civil protection. In particular in terms of prevention and risk analysis (e.g. dike construction, cross-border risk analysis and risk reduction, joint projects and exchange).

Action Plan on Flood Defence for the Rhine River

<http://www.iksr.org/index.php?id=123&L=3>

Bavarian State Ministry of the Environment and Consumer Protection <http://www.stmuv.bayern.de/aktuell/presse/detailansicht.htm?ID=BTB5ZwrxX0jaTZF0DfJYeg%3D%3D>

Copernicus <http://www.copernicus.eu/>
EUMETNET <http://www.eumetnet.eu/>
Euro-Fire <http://www.euro-fire.eu/>
GEM <http://www.globalquakemodel.org/>
GFMC <http://www.fire.uni-freiburg.de/intro/team.html>
ICEPR <http://www.ikse-mkol.org/index.php?id=1&L=2>
ICPDR <http://www.icpdr.org/icpdr-pages/home.htm>
ICPO <http://www.mkoo.pl/>
ICPR <http://www.iksr.org>
IKSMS <http://www.iksms-cipms.org/servlet/is/391/>
Meteoalarm <http://www.meteoalarm.eu/>
SAFER <http://www.saferproject.net/doc/partnership.htm>
SETRIC <http://www.setric.org/>
Survey of „Rhine 2020“ in the field of flood risk management (1995-2005) – Action
Plan on Floods
[http://www.iksr.org/index.php?id=164&L=3&ignoreMobile=1%3Ftx_ttnew%60s%5Btt
_news%5D%3D865](http://www.iksr.org/index.php?id=164&L=3&ignoreMobile=1%3Ftx_ttnew%60s%5Btt_news%5D%3D865)
THW <http://www.thw.de>

Priority for Action 3

Use knowledge, innovation and education to build a culture of safety and resilience at all levels

Core indicator 1

Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems etc)

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Is there a national disaster information system publicly available? Yes

Information is proactively disseminated	No
Established mechanisms for access / dissemination (internet, public information broadcasts - radio, TV,)	No
Information is provided with proactive guidance to manage disaster risk	No

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

The “Federal Office for Civil Protection and Disaster Assistance” (BBK: see the links below) provides in its “German Emergency Planning Information System” (deNIS II plus) an extensive information and communications system for the disaster management. It comprises different information that can be accessed real time e.g. losses, critical infrastructures, available resources for assistance, hazard maps, warnings and measurements of different systems. For additional information on climate change, the “Federal Environment Agency” (UBA: see link) and other public authorities cooperate extensively to provide information to all stakeholders.

On the Federal States level, the “Crisis Management and Disaster Relief Centre” of the BBK operates the “German Joint Information and Situation Centre of the Federal Government and Laender” (GMLZ: see link), which provides information for the Federal States (Laender) and Government as well as organisations in large-area damage situations or other circumstances of national importance. By order of the Ministry of the Interior, the GMLZ is also involved in the EU collective procedure on intensified cooperation in international disaster control (see Priority 2).

The “German Meteorological Service” (DWD: see link) provides meteorological services, short and long-term recording, monitoring, and evaluation of meteorological processes in the atmosphere as well as its structure and composition, the recording of interactions between the atmosphere and other environmental spheres, the forecasting of meteorological processes, the operation of the necessary observation systems and the provision, storage, and documentation of meteorological data and products. It circulates this information through multiple channels (see link). An emerging focus are consulting and advice activities for national crisis units, disaster management and aid organizations.

The “Helmholtz Research Network” provides scientific experts with information and data on natural disasters through its network in its “Natural Disasters Networking Platform” (NaDiNe: see link) for the press and the public. The insurance industry has the systems and publications such as the yearly review of the Munich Re Group, its NatCat Service (see link) and its Knowledge Series – Natural Hazards (see link). The “German Committee for Disaster Reduction” (DKKV) provides extensive information about all kinds of disasters in its publications and on its website (see link).

The “Federal Ministry of Education and Research” (BMBF) finances research for civil security. From 2009 to March 2015 the “Research Forum on Public Safety and Security (RFPSS) was established, which aimed at the cooperation and synergies of the interdisciplinary cooperation regarding public safety. Inter- and transdisciplinary evaluations of the subject will be developed, which will generate recommended procedures for policy, economy and science.

The Climate Service Center was an initiative developed by the German Federal Government, initiated in 2009, based at Helmholtz-Zentrum Geesthacht (HZG). Starting in June 2014, the Center was institutionalized in the Helmholtz Association, renamed Climate Service Center 2.0. The mission of the Climate Service Center 2.0 is to offer “products, advisory services and decision-relevant knowledge based on sound scientific knowledge in order to support government, administration and business in their efforts to adapt to climate change.” (CSC: see link)

In the context of climate change four regional Regional Climate Offices of the Helmholtz Association (see link) are active of which two are relevant in the context of DRR. Each of them focuses on different aspects of climate change and bundle the research results about regional climate change. The Southern German agency provides expertise on extreme events like torrential rains and floods. In contrast, the Northern German climate agency focuses on storms and storm surges amongst others. Information about regional climate change are provided on the homepages of

the climate agencies and are accessible interactively. Different climate projections for different parameters are available by these KLIMAATLAS (see link). The North German Climate Office published in March 2014 the North German Klimamonitor which presents how climate changed during the last 60 years.

In the framework of The International Climate Initiative (Internationale Klimaschutzinitiative IKI) international adaptation projects like the "Global and Regional Adaptation Support Platform (CI: GRASP) are implemented. The project aims at improving availability of information for developing and newly industrializing countries in the context of climate change. Data about sea level rising, intense rain and implications of climate change are accessible through a web-based application.

RELKIM (see link) - a consortium of eight Helmholtz research centers conducted research activities in seven different climate related topics in the time period 2009-2013. In the course of these activities past and future climate scenarios were investigated including the future trends for storms, intense rain, heat waves, floods and droughts. Since 2014 eight topics are addressed by REKLIM which are in-line with the general objective to develop fully coupled earth system models at the regional scale, including the interactions between atmosphere, ocean, cryosphere, biosphere, land surface and soils. Beside other DRR related topics, topic 6: Extreme weather events - storms, heavy precipitation, floods and droughts seeks to answer the question "How will the severity and frequency of extreme weather events change in a future climate?"

The county and community/municipality authorities as well as the emergency services and fire brigades have institutionalised a network of preparedness on the local level, which exchanges information but not necessarily in a systematic or centralised manner. The flood forecasting, management centres and different national authorities (see overview in the link "Hochwasserzentralen") offer information on water levels and flood risk

In the case of international cooperation by German actors, providing advice and assistance in circulating relevant information about disasters at all levels have been implemented, for example, through country profiles with information about disaster risks. It contributes to an international exchange of experiences through publications, events, conferences and dialogue boards. In Cooperation with the Global Facility for Disaster Reduction and Recovery (GFDRR) the GIZ implements a pilot project in order to enhance disaster risk country profiles involving various actors.

In the regions in South Asia, East Africa and South America where GRC and its partner National Red Cross / Red Crescent Societies are working, substantial achievement has been attained - with recognized limitations in capacities and resources. The GRC as part of the International Federation of the Red Cross and Red Crescent supports networks and information sharing networks such as Disaster Management Information System (DMIS) (see link) and the Global Disaster Preparedness Center (GDPC) (see link) and its partners in building a Global Community where people can share knowledge and work together to help communities around the world prepare for disasters.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

The DKKV attempts to tighten the links and networks of its members (from all areas of disaster reduction and management) through its daily work, activities and events. DKKV has the essential position to bring actors in risk management together, enable strategic discussions between all involved parties (public, NGO, and private), and thus contribute essentially to relevant national and international strategies.

The BBK also pursues the goal of distributing information to all levels of actors and the public.

While science is generally broadly involved in Disaster Information Research and Education, it would be important to ensure that higher education institutes of the government and public administration include disaster risk reduction as part of the curriculum (see link: Bundesverband Deutscher Verwaltungs- und Wirtschafts-Akademien).

From the point of view of GRC propagating the lessons learnt in the pilot projects countrywide, using them for a national strategy and developing national guidelines for implementation remain the challenges in the near future.

Related links:

BBK <http://www.bbk.bund.de>

Bundesverband Deutscher Verwaltungs- und Wirtschafts-Akademien

http://vwa.de/vwa_organisation/bundesverband

Climate Offices (Klimabüros) <http://www.klimabuero.de/>

CSC <http://www.climate-service-center.de/index.html.en>

deNIS IIplus http://www.denis.bund.de/ueber_denis/index.html

DMIS https://www-secure.ifrc.org/DMISII/Pages/00_Home/login.aspx

DKKV <http://www.dkkv.org/en/about-us/the-committee.html>

DWD http://www.dwd.de/bvbw/appmanager/bvbw/dwdwwwDesktop?_nfpb=true&_windowLabel=dwdwww_main_book&switchLang=en&_pageLabel=dwdwww_start

Flood Early Warning Baden-Wuerttemberg <http://www.hvz.baden-wuerttemberg.de/>

GDFPC <http://preparecenter.org/>

GMLZ http://www.bbk.bund.de/DE/AufgabenundAusstattung/Krisenmanagement/GMLZ/GMLZ_einstieg.html

Hich-Tech Strategy <http://www.hightech-strategie.de/de/167.php>

Hochwasserzentralen <http://www.hochwasserzentralen.de/>

InWEnt Disaster Prevention and Management http://www.bmz.de/en/what_we_do/approaches/bilateral_development_cooperation/players/selection/inwent/index.html?follow=adword

KLIMAATLAS <http://www.norddeutscher-klimaatlas.de/> and <http://www.regionaler-klimaatlas.de/>

Klimamonitor- <http://www.norddeutscher-klimamonitor.de/>
 KLIMZUG <http://www.klimzug.de/>
 Klimazwei <http://www.klimazwei.de/>
 Munich Re - Knowledge Series – Natural Hazards <http://www.munichre.com/de/reinsurance/magazine/publications/knowledge-series/natural-hazards/severe-weather-in-north-america/index.html>
 NaDiNe <http://www.zki.dlr.de/de/project/996>
 NatCat Service <http://www.munichre.com/de/reinsurance/business/non-life/georisks/natcatservice/default.aspx>
 Publications of the Munich Re-Group
<http://www.munichre.com/en/reinsurance/magazine/publications/default.aspx>
 RELKIM <http://www.reklim.de>
 Umweltbundesamt (UBA) English <http://www.umweltbundesamt.de/unwetter.de> <http://www.unwetter.de/index.php>

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved? 3

Institutional commitment attained, but achievements are neither comprehensive nor substantial.

Key Questions and Means of Verification

Is DRR included in the national educational curriculum? Yes

primary school curriculum	No
secondary school curriculum	No
university curriculum	Yes
professional DRR education programmes	Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

The German scientific and university landscape offers a wide range of relevant study

programmes (BSc, MSc and PhD) and is at the moment especially developing its number of Master's Degree programmes, such as the Master's in "Security and Danger Prevention" in Magdeburg, "Rescue Engineering" in Cologne or the old-established "European Master of Humanitarian Assistance" in Bochum as part of the "NOHA International Association of Universities" (see link). On the academy for human sciences - AKKON (see link) the bachelor course "Emergency Practitioner" started 2009, with focus on disaster prevention and management. The BBK and the University of Bonn established a Master's program in "Master of Disaster Management and Risk Governance" (KaVoMa) in 2006 (see link). The program is designed as an on-the-job correspondence course while the monthly attendance takes place in the "Academy for Crisis Management, Emergency Planning and Civil Protection" (Akademie für Krisenmanagement, Notfallplanung und Zivilschutz (AKNZ): see link) of the BBK. With regard to the KaVoMa's objective to educate executive officers for the position of national agencies and private sector first achievements can be observed. The AKNZ also releases publications and provides learning/study programmes in various forms to the public. Altogether there has recently been a strengthening in higher education programmes on all levels. The DKKV provides a collection of all relevant study programmes in Germany (see link: DKKV).

Together with Siemens Business Services, the BBK develops the "European Virtual Academy 4 Civil Protection" (EVA4CP: see link) on behalf of the EU. The Virtual Academy aims to implement an Internet-based platform and content management system for target groups, work on areas of common interest and exchange of experience, knowledge and best practice by the schools and training centres for Civil Protection, as well as develop the pedagogical and methodological concept for an e-learning module. There is also a number of appropriate school material from different actors such as the insurance industry, the "Federal Agency for Civic Education" (BpB: see link) and the DKKV (see link).

In addition, with the conscious inclusion and involvement of citizens, especially young citizens, in disaster protection and management (such as in the "Federal Agency for Technical Relief" (THW: see link) or the voluntary fire brigades), the German state is actively working to cultivate an existing partnership between the state, its organs, and its citizens. This partnership continuously demands the awareness of the reasonable and feasible responsibility of citizens for themselves and others.

After the development of a modular virtual training platform for the staff of the GMLZ (German Joint Information and Situation Centre of the Federal Government and Laender) by 2013 in order to prepare staff for common situations and evaluate training implementation, an evaluation of the program and development of further modules in order to cover a wider variety of scenarios is continuing.

Currently BBK implements various activities. These activities are listed below:

- BBK develops the concept "Psychosocial Crisis Management for CBRN situations". Implementation of guidelines and drills for psychosocial crisis management for managers and civil protection forces (see link).
- BBK implements until the beginning of 2016 a "Research project on intercultural capacity in civil protection" through the University of Greifswald. Until 2015 guidelines

for trainings sessions for lecturers will be available.

- BBK developed until 2013 a psychosocial conversation guide for the crisis hotline. This guideline summarizes the recent scientific results and analyzed experiences and gives practical recommendations. It is used by the AKNZ, during other events and in particular by District Offices. A second issue of the guidelines is planned.

- BBK implements until 2013 a project to compile psychological emergency care guidelines for major incidents. Amongst others it will enable the assessment of psychosocial crisis support in a standardized way, identify good practices, secure the quality of psychosocial activities. In addition, BBK developed a national curricula for psychosocial crisis managers including a scientific evaluation, train-the-trainer sessions at the premises of the AKNZ and training sessions at the federal state levels. Further training sessions are planned for 2015 and 2016. Guidelines for managers were developed between 2013-2016 and scientifically supported by the university Jena. Furthermore, an annual symposium on quality control in psychosocial crisis support takes place.

- BBK provides information to people affected by adverse events and their relatives. In this context a flyer was developed in 14 languages. It is planned to update the flyer during the year 2015.

- BBK launched an educational website for children of the age of seven to twelve. The websites www.max-und-flocke-helferland.de (see link) conveys knowledge on how to deal with hazards and raises the awareness of the importance of volunteers work in the civil protection. In this context workshop with teachers take place and events with children are organized. It is planned to introduce the Max and Flocke program on the European level.

- BBK developed a flyer on how to behave during exceptional hazards. It informs the population on options how to act during hazardous events. It contains information on prevention and options on how to cope with certain damage scenarios (e.g. fire, explosion, burying, etc.). Furthermore, it gives information on treating injuries and general advices for behavior during hazardous or terroristic events.

First-aid-courses for primary schools are temporarily established. These courses are being funded by the government and implemented by the civil protection authorities. Civil protection authorities provide trainings for DRR and civil protection practitioners. Information about DRR and rescue concepts are provided by websites and flyers through the Federal Office of Civil Protection and Disaster Assistance (BBK) and the relevant ministries.

The German international development cooperation considers the education sector as one of the most important tools for integrated Disaster Risk Reduction. As a result, it supports the integration of DRR in school curricula, education material and training for the employees of development cooperation themselves in various partner countries. In advanced trainings adjusted to the needs of actors in DRR, the concept of disaster risk reduction is elucidated, showing starting points for the integration of DRR into the respective field of work.

In many countries in South Asia, East Africa and South America, the GRC and its Partner National Red Cross / Red Crescent Societies are working with local schools and governments to advocate for the integration of DRR and Climate Change

Adaptation Mainstreaming activities into the national school curricula. In addition, the GRC is conducting trainings and practical drills in disaster mitigation and preparedness with the pupils and teachers. Those activities have raised the level of knowledge, awareness and commitment of the targeted communities substantially.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

Although there are many relevant study programmes, there are challenges in three areas: (1) There is still no exclusive study program for disaster medicine, (2) disaster protection/management is not integrated enough in the studies of spatial and land use planning, (3) there is no systematic approach to incorporate relevant, disaster-related curricula into existing study programmes. For example, courses of study such as architecture, engineering, chemistry, economics and many others do not generally discuss the elements of the respective field relevant to disasters. This has been initiated, but by far not yet accomplished. Developments in reforming school education in this regard is slow, likely due to the current lack of necessity and equally slow systemic development. The DKKV acts here as reminder and supporter, for example, with school materials.

In most countries, there is little awareness of the importance of DRR at national level. The school curricula often do not integrate DRR, natural hazards and climate change. The Ministries of Education have to be more involved in DRR and Climate Change Adaptation Mainstreaming programming at national level.

The Johanniter highlight the importance of DRR and rescue concept trainings for all pupils in primary schools. Regular exercises ensure comprehensive knowledge and sustain the DRR awareness of the entire community.

Related links:

AKKON <http://www.akkon-hochschule.de/>

AKNZ http://www.bbk.bund.de/DE/AufgabenundAusstattung/AKNZ/aknz_node.html

BpB <http://www.bpb.de/themen/VD037C,0,0,Umweltpolitik.html>

DKKV <http://www.dkkv.org/en/about-us/the-committee.html>

EVA4CP Flyer http://www.bbk.bund.de/SharedDocs/Downloads/BBK/DE/Downloads/Sonstiges/Flyer_EVA4CP.pdf?__blob=publicationFile

German study programmes DKKV <http://www.dkkv.org/en/about-us/the-committee.html>

Humanitarian Assistance Bochum <http://www.uv.rub.de/pvz-planung/i3v/00000700/00716722.htm#menu2>

Master of Disaster Management and Risk Governance <http://www.kavoma.de>

Max-und-Flocke-Children-Website <http://www.max-und-flocke-helferland.de>

NOHA <http://www.nohanet.org/>

Psychosocial Crisis Management for CBRN situations <http://www.bbk.bund.de/Share>

dDocs/Downloads/BBK/DE/Publikationen/Praxis_Bevoelkerungsschutz/Band_6_Psyc
hoz_KM_CBRN_Lage.pdf?__blob=publicationFile
Rescue Engineering Cologne <http://www.studium.fh-koeln.de/service/studienangebot/u/02766.php>
Security and Danger Prevention Magdeburg http://www.hs-magdeburg.de/studium/s-studienangebot/master/m_sicherheit
THW <http://www.thw.de>

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Is DRR included in the national scientific applied-research agenda/budget? Yes

Research programmes and projects	Yes
Research outputs, products or studies are applied / used by public and private institutions	Yes
Studies on the economic costs and benefits of DRR	No

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

There is a sophisticated research structure in Germany and many research projects are granted by the different national and European authorities. One example, the “Center for Disaster Management and Risk Reduction Technology” (CEDIM: see link) deals since many years with the subject of multi-risk assessments and analysis. Its “Synopsis of Natural Hazards” for example involves the development of probability or scenario-based deterministic methods to compare different types of risks. Additionally, the “CEDIM RiskExplorer Germany” is a web-based map viewer that

interactively presents the results of the CEDIM project "Riskmap Germany" and allows the user to retrieve maps of datasets including natural and man-made hazards, vulnerability and risk, as well as assets (elements at risk) (see link). This attempt has kicked off the establishment of a multi-risk-disaster-management-system at the local level (ORTIS). Some municipalities began to introduce multi-risk disaster managements systems like ORTIS. Multi-risk assessments are more and more an important research activity in the European Union and for the DRR research community.

Together with the UBA (its "Competence Centre on Climate Impacts and Adaptation" (KomPass) and its professional information system (see link) the BBK centrally generates data of federal agencies/departments, countries, institutes and international institutions, providing them in a revised form to users of deNIS IIplus. Contents of this data include not only information about personnel, material and infrastructural assistance potential, but also information on the locations of risk-afflicted facilities.

In its LUEKEX (Länderübergreifendes Krisenmanagement Exercise) the BBK trains different actors at all levels in various situations of disaster management, in particular the crisis squads of the upper administration levels.

The German insurance industry has sophisticated methods such as the databases of the Munich Re Group, e.g., the MRNatCat or MRNathan (see link). MRNathan is an Internet-based tool that helps to develop risk profiles as a basis for risk assessments and rating of natural hazards. Even the direct insurers in Germany use local risk assessments such as ZÜRS to rate the risk for insured facilities.

The German development cooperation aims to enhance its approaches for multi-risk analyses through the promotion of research at all levels. At the World Conference on Disaster Reduction in Kobe 2005 the GTZ presented a concept for "Cost-Benefit Analysis for Disaster Risk Management" (see page 16 in the annex).

Since 2012 the GIZ in cooperation with the Global Facility for Disaster Reduction and Recovery (GFDRR) develops guidance notes and checklists for Early Recovery and Rehabilitation in the context of Climate Change Adaptation.

GRCs programming on DRR including risks assessments always involves the local authorities, but depending on the country some achievements are neither comprehensive nor substantial at the moment. In other regions substantial achievement has been attained.

From the perspective of the Johanniter all stakeholders involved in disaster reduction are regularly participating in research projects funded by the government or externally. The results, products and studies of the research project are applied.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be

overcome in the future.

Germany has sophisticated research tools for multi-risk assessments, however, there still remain some basic deficits, such as a lack of quality control/oversight mechanisms as well as publicly accessible disaster databases. Generally, with the exception of the insurance industry, cost-benefit analyses are not integrated in the assessments and parts of the research are frequently just research without enough practical application or implementation.

While automatic fire detection systems have been installed in the most fire-prone Federal States (Laender) and a fire-danger rating system with 1-day forecast capability has been implemented nationwide, an advanced fire spread modelling system as well as training/capacity building for utilizing this information is not yet in place. Starting in 2008, a joint initiative of the “Global Fire Monitoring Centre” (GFMC: see link), a professional fire service and forestry school, is building a model for capacity building (Wildland Fire Training Academy), inter-agency cooperation, and integrated fire management in the State of Hesse, to serve as model for the other 15 Federal States (Laender).

Supporting document:

GTZ - Cost-Benefit Analysis http://www.preventionweb.net/files/2967_DKKVKobe.pdf

Related links:

CEDIM <http://www.cedim.de/english/index.php>

CEDIM Research <http://www.cedim.de/english/14.php>

CEDIM Risk Explorer <https://www.cedim.de/riskexplorer.php>

CEDIM Synopsis of Natural Hazards <http://www.cedim.de/english/1020.php>

German Research Network on Natural Disasters <http://bib.gfz-potsdam.de/pub/str0401/0401.pdf>

Global Fire Monitoring Center <http://www.fire.uni-freiburg.de/>

MRNathan <http://www.munichre.com>

UBA-KomPass UBA-KomPass <http://www.umweltbundesamt.de/en/topics/climate-energy/climate-change-adaptation/adaptation-tools/project-catalog/kompass-competence-centre-on-climate-impacts>

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Do public education campaigns for risk-prone communities and local authorities include disaster risk? Yes

Public education campaigns for enhanced awareness of risk.	Yes
Training of local government	Yes
Disaster management (preparedness and emergency response)	No
Preventative risk management (risk and vulnerability)	No
Guidance for risk reduction	No
Availability of information on DRR practices at the community level	Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

Many parts of this question have been addressed in the last three Core Indicators. Additionally, however, the DKKV has the official mandate to inform the public and build awareness for disaster reduction through campaigns, educational programmes, events, informational brochures and much more (see extensive information in the link below). Through its members from all areas of disaster reduction, management and education, the DKKV multiplies its approaches at all levels. The BBK, the UBA, other national authorities, as well as the German insurers work in a similar way by distributing information to the public through publications. All of these actors, especially the DKKV, circulate flyers about natural hazards and possible disasters to inform and sensitise the public. The continuous activities of the DKKV, such as its yearly forum for disaster reduction, aim to inform the broader public.

Most of the research facilities have their own division for the press, public and even for educational campaigns, conferences or school visits. The German press landscape (even the mass media) has had a larger focus on natural disasters and the impacts of climate change, at the latest since the Elbe Flood in 2002, 2013 and the Tsunami in 2004.

The THW and other actors in disaster management such as the German Red Cross regularly participate in a variety of different activities to increase citizens' awareness

of their focus and profile through exhibitions, dialogue with citizens, and outdoor activities in public places, among others.

The German development cooperation supports the improvement of public awareness in partner countries through campaigns and participative risk analyses at all levels. Through this work it also contributes to increased awareness in Germany. The improvement of resilience to disasters is one of the main approaches of the development cooperation agencies.

The GIZ initiated a self-financed action called “Disaster management in urban agglomerations”. This action will address the challenge of urbanisation, the related risks and potentials of disaster risk reduction strategies. The new sector project “Transition Aid for Strengthening the Resilience” will deal with disaster resilience beginning from October 2012.

Public information on wildfire risk in generally is sufficiently broadcasted. A national wildfire prevention symbol exists since several decades and is used by State Forest Services and NGOs (e.g., German Forest Protection Association). National Red Cross and Red Crescent Societies with a high profile in DRR, like in Indonesia, Bangladesh and India engage in national awareness campaigns and programmes and want to do more.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

Nonetheless, public awareness for DRR is developing slowly, likely because of the current lack of urgency. With the exception of incidents, such as the flood events in Germany in 2013 or Hurricane Kyrill in January 2007, the German public is seldom confronted with major natural hazards with far-reaching effects, therefore making permanent awareness more difficult. Therefore, there is a need to raise sustainably the awareness of the population to the risks of natural hazards. In particular, to integrate broadly natural hazards into school education is reasonable.

Countrywide public educational programmes for DRR do not exist. There are only regular first-aid-courses but without a focus on DRR. Municipalities have trained participants in DRR and prepared staff for disastrous events. There are regular exercises. Resources and infrastructure are prepared in terms of DRR.

In terms of forest protection there is general well developed perception of the need to protect forests. However, the general public does not understand why the role and the capabilities of the State Forest Services are declining as a consequence of dramatic reduction in forest services personnel and thus in physical presence and control in private and public forest lands.

Related links:

AA http://www.auswaertiges-amt.de/EN/Startseite_node.html

DKKV <http://www.dkkv.org/en/about-us/the-committee.html>

GFZ Potsdam <http://www.gfz-potsdam.de/startseite/>

Priority for Action 4

Reduce the underlying risk factors

Core indicator 1

Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change.

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Is there a mechanism in place to protect and restore regulatory ecosystem services? (associated with wet lands, mangroves, forests etc) Yes

Protected areas legislation	Yes
Payment for ecosystem services (PES)	Yes
Integrated planning (for example coastal zone management)	Yes
Environmental impacts assessments (EIAs)	Yes
Climate change adaptation projects and programmes	Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

As mentioned in Priority 1 Core Indicator 1, DRR accounts for an important part of the environmental law/policy, as well as spatial and land use planning. The “Competence Centre on Climate Impacts and Adaptation” (KomPass) of the “Federal Environment Agency” (UBA), and the “Federal Office for Civil Protection and Disaster Response” (BBK) of the “Federal Ministry of the Interior” (BMI) with “German Committee for Disaster Reduction” (DKKV) worked out an official German Strategy

for Adaptation to Climate Change (DAS). The DAS has been introduced by the federal cabinet on 17. December 2008.

The “Competence Centre on Climate Impacts and Adaptation” (KomPass) supports the implementation of DAS in professional and organizational way. As an interface between Climate Change research, Climate Change Adaptation policy and society it detects vulnerable sectors and regions, assesses consequences and risks of Climate Change and works out its chances. Furthermore it implements Climate Change related tools and projects like “Klimalotse” and “System of Indicators - Climate consequences and adaptation in Germany”. In the framework of Klimalotse a decision support system for municipalities and business companies is developed with the objective to improve their management capabilities. The outcome of the project will be guidelines targeting municipalities and medium-sized companies, presenting possibilities how to better adapt to climate change. The project “System of Indicators - Climate consequences and adaptation in Germany” will provide UBA a professional basis to the Action Plan for Adaptation II as a part of the Progress Report scheduled for 2015.

In 2011 BBK published a brochure “Climate Change – Challenge for the Civil Protection”. The brochure gives an overview and contains background information about climate change, options for adaptation to the civil protection authorities. The results were used in the context of the German Strategy for Adaptation to Climate Change (DAS).

Besides earthquakes and volcanic eruptions, weather catastrophes have by far the greatest societal effect of all natural disasters in terms of civil damages. Therefore, changes in the climatic extremes are definitely one of the most important aspects of climate change. An alliance of German Federal Agencies comprising the Federal Environment Agency (UBA), the Federal Office of Civil Protection and Disaster Assistance (BBK), the Federal Agency for Technical Relief (THW), and the National Meteorological Service (DWD) and The Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) has recently finished a research project aiming to analyze regional climate projections for Germany focusing on weather extremes and their changes (see link: Strategic Agency Alliance - Climate Change Adaptation).

From 2009-2014 the “Federal Ministry of Education and Research” (BMBF) financed the initiative KLIMZUG to facilitate innovative approaches to adaptation to climate change. KLIMZUG focused on the regional aspect of adaptation. It comprised 7 projects: DynAKlim, INKA BB, KLIMZUG-NORD, KLIMZUG Nordhessen, nordwest2050, RADOST und REGKLAM which were responsible for the regional implementation of adaptation and the assessment of climate change chances and risks. KLIMZUG led to an increased knowledge about the consequences and possibilities to adapt to Climate Change. The results are summarised in the publication „Wege zur Anpassung an den Klimawandel - Regionale Netzwerke, Strategien und Maßnahmen“ (see link)

The BMBF funded „klimazwei” programme concluded in 2009 with a publication of its

results. The projects within klimazwei focused on the development of practical strategies for mitigation and adaptation. Some of the projects were strongly related to DRR:

1. Regional risk of convective extreme events: User-oriented concepts for assessing the trends and adaptation (Regionales Risiko konvektiver Extremereignisse: Anwenderorientierte Konzepte zur Trendbewertung und –anpassung)
2. SAFE – Sensor-Actor-aided early warning system for extreme weather (SAFE – Sensor-Aktor-gestütztes Frühwarnsystem bei Extremwetter)
3. Network for sustainable adaption of regional Urban Water Resources to climate trends and extreme weather (Netzwerk für eine nachhaltige Anpassung der regionalen Siedlungswasserwirtschaft an Klimatrends und Extremwetter)

In the case of land use planning the national parliament has passed a version of the “Regional Planning Act” (Raumordnungsgesetz) in July 2008 in which civil protection and critical infrastructure play a more important role. In March 2010 mitigation and adaptation to climate change were integrated into the “Regional Planning Act” in the course of its amendment.

In the course of implementation of the EU flood directive the Water Management Act has been amended in 2009. According to the amendment, areas with significant flood risk has to be denoted as areas of risk (risk management plans). This progress may be regarded as an important step towards a more effective flood risk management. The implementation of this regulation will contribute to the Priority 2 of the HFA. This regulation includes all water bodies, thus also coastlines. The Federal States have different approaches in developing the required risk management plans. The “Working Group on Water Issues” (LAWA: see link) formulated a draft strategy for the implementation of a flood risk management guideline.

DRR takes an integrated approach to all policies because of its overlapping importance, but especially in environmental policies and plans. Besides climate policy, for example, DRR is active in agriculture policy through flood resistant coverage areas or in a more sustainable (heat and storm resistant) forestation through the conservation of resources. Especially in forest management practices, traditional measures are included for the prevention and spread of wildfires. The consequences of altered forest management practices and land-use change (abandonment of agricultural and pasture lands) are resulting in an increase of wildfire hazards in some regions of the country.

The German development cooperation promotes synergy effects between DRR and the management of natural resources. Therefore, aspects of DRR are already integrated in some partner countries in terms of the relevant development cooperation measures. Environmental programmes in Madagascar and the Philippines (like climate action strategies) integrate DRR elements. For the KfW as the world’s leading financier for environment and climate, DRR is increasingly important, if it comes to the climate change adaptation and climate induced disaster (severe weather), slow onset disasters, like droughts, floods, sea level raise and the link to loss and damage. In 2012 the total expenses for new climate change projects amounted to €695 million.

In the framework of the special energy and climate fund of the government the KfW implements climate change adaptation projects, which partly include DRR. For example setting-up of hydrological measurement networks, coastal and flood protection, early warning systems and other preventive measures amongst others also actions taken in urban contexts.

The KfW as an implementing agency of the federal government contributed to the publication of the German Ministry for Economic Cooperation and Development "Disaster risk management and adaptation to climate change - Experience from German development cooperation". The KfW is continuously in contact with the sector projects of the government related to the topic of climate.

Welthungerhilfe implements actions related to water shed management, buffer zone management, (co-)management of protected areas, reforestation/conservation of forest (REDD+ initiatives).

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

There is a lack of incentives both at national and EU level to halt or reduce rural exodus and / or address the consequences of rural land-use abandonment. At the same time an increasing lack of young work force / volunteers to be recruited by the volunteer fire services and shut-downs of volunteer rural fire brigades is reducing the capability to respond timely and efficiently to wildfires.

From the GRC's point of view, adaptation to climate change is closely linked to DRR. As climate change is already happening and its impact is set to increase, especially where vulnerable communities in developing countries are concerned, it is paramount to support communities in these countries adapting as effectively as possible to the implications of climate change that are no longer avoidable. The wide range of experience and approaches used in DRR is key to designing effective Climate Change Adaptation. The focus is on adapting strategies used in the past to the changing extreme weather events.

The major challenges in Germany concerning weather extremes and their projected changes are adaptation to potential higher frequency occurrences of heat waves, droughts and heavy precipitation events leading to floods or low water respectively.

Links:

KLIMZUG Wege zur Anpassung an den Klimawandel - Regionale Netzwerke, Strategien und Maßnahmen (in German only) <http://www.klimzug.de/de/1548.php>
Strategic Agency Alliance - Climate Change Adaptation http://www.umweltbundesamt.de/sites/default/files/medien/364/dokumente/flyer_behoerdenallianz_0328.pdf (in

German only)

Core indicator 2

Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.

Level of Progress achieved? 5

Comprehensive achievement with sustained commitment and capacities at all levels.

Key Questions and Means of Verification

Do social safety nets exist to increase the resilience of risk prone households and communities? Yes

Crop and property insurance	Yes
Temporary employment guarantee schemes	No
Conditional and unconditional cash transfers	No
Micro finance (savings, loans, etc.)	Yes
Micro insurance	Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

In the case of Germany, this question must be addressed from the perspective of an industrialised nation, as changes in vulnerability and effects of natural hazards have occurred through social development, urbanization and the accompanying changes in agriculture and forestry (see Core Indicator 1). There are, however, social safety nets in place that can absorb parts of the aftermath. For example, destroyed crops “only” hit market prices and do not affect food security itself, while the public health system is well equipped and able to react quickly and efficiently in the case of a natural disaster.

Protection of critical infrastructure has become one of the key activities in DRR, for example, for the BBK (see Priority 2 Indicator 1 or the next Core Indicator). Additionally, risk sharing takes place by legal obligation to insure property against

hazards, while insurance products and even public aid is made available to insure against flooding. Moreover, the education system can be counted amongst social policy (see Priority 3 Indicator 2) and other areas, as explained in the Priorities above.

Concerning social development, the German development cooperation particularly promotes the integration of DRR in the educational sector, but also within the scope of political participation and Good Governance. Education projects are, among others, located in Sri Lanka, Indonesia and Mozambique. Beside this, the participation of affected persons, especially of susceptible population groups (the poor, children, elderly, indigenous groups, women) is explicitly promoted. The GTZ (now GIZ) and DKKV have developed a study “Linking Poverty Reduction and Disaster Risk Management” (see annex).

Welthungerhilfe implements actions related to micro-(crop) insurance initiatives.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

The challenges mentioned in the last Core Indicator are also appropriate in this case. Through the change in structures and mobility of the population, the willingness of workers to commit themselves longer to voluntary services are also applicable here. The voluntary fire brigades have therefore changed their strategy of membership promotion and education, to provide one example.

Progress in the integration of DRR in the respective sector strategies of the German development cooperation have been made. The GRC is seeking to further mainstream DRR and Climate Change Adaptation into development cooperation. The GRC has wide experience in supporting long-term community development, with activities focused mainly on health, including water, sanitation and hygiene, as well as food security.

In the absence of a common resilience framework across humanitarian and development actors, the GRC has now generated a resilience logframe to be used as a reference for its community resilience programming. It aims at covering all programme phases (emergency, rehabilitation, development) to eventually arrive at linking relief, rehabilitation and development in a contiguous approach.

The GRC's overall goal for development cooperation is – as in DRR and Climate Change Adaptation Mainstreaming activities to reduce the vulnerability of those who need it most. Improving people's health or nutritional status will help relieve poverty and contribute to sustainable development, thereby also decreasing vulnerability.

Supporting document:

AA - Leitlinien [http://www.preventionweb.net/files/2967_katastrophenvorsorgegrunds_aetzeleitlinien\[1\].pdf](http://www.preventionweb.net/files/2967_katastrophenvorsorgegrunds_aetzeleitlinien[1].pdf)

AA - Katastrophenvorsorge [http://www.preventionweb.net/files/2967_AA\[1\].pdf](http://www.preventionweb.net/files/2967_AA[1].pdf)

Linking Poverty Reduction and Disaster Risk Management (2005) http://www.preventionweb.net/files/2967_LinkingPovertyReductionDisasterRiskManagement.pdf

Core indicator 3

Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities

Level of Progress achieved? 3

Institutional commitment attained, but achievements are neither comprehensive nor substantial.

Key Questions and Means of Verification

Are the costs and benefits of DRR incorporated into the planning of public investment? No

National and sectoral public investment systems incorporating DRR.	No
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Please provide specific examples: e.g. public infrastructure, transport and communication, economic and productive assets

Investments in retrofitting infrastructures including schools and hospitals	No
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Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

One of the main points in reducing vulnerability of economic activities is the planning and construction of human settlements and establishment of building codes such as described in the next Core Indicator.

In the case of economic policy, critical infrastructure (see Priority 2 Indicator 2) is one of the main challenges which has been recognized by the "Federal Ministry of the Interior" (BMI) and the "Federal Office for Civil Protection and Disaster Response"

(BBK: see the links below). The BBK has developed a guide, “Protecting Critical Infrastructures: Risk and Crisis Management” in cooperation with the private sector, government authorities and a research institute, as well as a “Baseline Protection Concept” (see link). In the definition of the BBK, as one can see in the first link provided, critical economic infrastructure consists of the following main sectors:

- Energy
- Health
- Information Technology and Telecommunication
- Transport and Traffic
- Media and Culture
- Water
- Finance and Insurance
- Food
- State and Administration

To avoid the exclusive concentration on response and disaster management, the guide from the BBK aims to sensitize these actors in the areas of risk assessment and disaster reduction.

With the help of federal and state authorities, associations, companies and scientists, the Federal Environmental Agency (UBA) is currently developing a system of indicators. In a multi-stage process, indicators for the 15 fields of action of the German Adaptation Strategy (DAS) are developed. These indicators demonstrate how Germany is affected by climate change and where adaptation measures have already been taken. The indicator system for the DAS is primarily an instrument of the state, which is meant to accompany the process of implementing the DAS.

Furthermore the enterprises/industries in Germany are mostly insured against natural hazards/disasters and the insurance industry is well positioned. Indeed, there are areas in which insurance coverage is not enough to prevent businesses from having financial difficulties. This is mainly in the case of small and medium-sized businesses in the primary sector. For these businesses there is a basic protection against bankruptcy through disaster by reconstruction credits from the Federal States banks and the “KfW Mittelstandsbank” (see link), however not everyone can receive these credits. The large-scale industries typically have their own protective measures in the form of either financial reserves or through their own plant protective forces.

The German development cooperation recognizes the importance of supporting economic and productivity politics and planning in its DRR-Cooperation. This includes public investment planning on the one hand and instruments of risk transfer on the other hand. Additionally, the German development cooperation is active at different levels: At the local level (e.g., in Bolivia and Peru) economic susceptibility factors are already accounted for in risk analysis. Building upon this data, DRR measures are identified that also serve to protect income possibilities. These measures become absorbed by the local development plans and budgets. In Peru, for example, risk analysis could additionally be integrated into public investment planning.

First experiences with financial instruments and methodologies has been made by the GIZ in a project in Peru. An insurance system for climate change adaptation has been developed and implemented.

Welthungerhilfe implements actions to reduce the vulnerability: (1) food and nutrition security: protection of agricultural land, slope protection, erosion control, climate adapted varieties and soil management, reduction of post harvest losses caused by extreme weather events, availability of efficient house hold (cooking) energy; (2) local economic development, income generation, value chains.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

Altogether the vulnerability of the German economy has been reduced in recent years, though challenges remain through the complex interdependency of cross-border activities, especially in the energy sector. The "EU Green Paper for Sustainable, Competitive and Secure Energy" attempts to adapt and unify the different systems. Private actors (and also cities) still too often react only in the case of damages and do not focus enough on disaster reduction and prevention. National authorities and the EU are attempting to develop mechanisms and guidelines to improve this situation.

Elements of a progress report of the federal government in the context of the DAS are an evaluation report that describes the implementation of the Adaptation Action Plan as well as an updated APA, the "Adaptation Action Plan II". This plan will present future actions of the federal government as well as a concrete time and financing plan.

Related links:

BBK - Critical Infrastructure Protection http://www.bmi.bund.de/SharedDocs/Downloads/EN/Broschueren/Leitfaden_Schutz_kritischer_Infrastrukturen_en.pdf?__blob=publicationFile

BBK – Definition Critical Infrastructure http://www.bbk.bund.de/SharedDocs/Downloads/BBK/DE/Downloads/Kritis/CI_Sectors_Subsectors.pdf?__blob=publicationFile

BMI http://www.bmi.bund.de/DE/Home/startseite_node.html

BMI - Baseline Protection Concept http://www.preventionweb.net/files/2967_ProtectionofCriticalInfrastructuresBaselineProtectionConcept.pdf

KfW - Mittelstandsbank <https://www.kfw.de/kfw.de-2.html>

Core indicator 4

Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Is there investment to reduce the risk of vulnerable urban settlements? Yes

Investment in drainage infrastructure in flood prone areas	Yes
Slope stabilisation in landslide prone areas	Yes
Training of masons on safe construction technology	Yes
Provision of safe land and housing for low income households and communities	No
Risk sensitive regulation in land zoning and private real estate development	Yes
Regulated provision of land titling	No

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

The German building law consists of two parts: the private building law under the “Baugesetzbuch” (BauGB) and the public building law which consists again of two extra parts, the “Bauplanungsrecht” under the BauGB and “Raumplanungsgesetz” (RPG), as well as the “Bauordnungsrecht” under the building laws of the Federal States aligned with the national sample building law (“Muster-Bauordnung and “Muster-Industriebaurichtlinie”) (see links below for an overview). For example, paragraph 1, article 5 of BauGB states that it should serve to protect and develop the human environment and natural resources, also responsible for general climate protection. For the spatial and land use planning of the “Regional Planning Act” (Raumordnungsgesetz: ROG), the draft for a new version from July 2008 includes the protection of critical infrastructure and civil protection. The urban land use planning (“Bauleitplanung”) considers civil protection as one of the main objectives in paragraph 1, article 6. Under paragraph 50 of the “Bundesimmissionsschutzgesetz” (BImSCHG: see link), land use planning is to be regulated in a way that casualties

and disasters in industrial areas do not affect residential areas.

Nationwide legislation refers to norms such as DIN and Eurocodes (DIN EN), which are flexible to adapt to changing situations. DIN 1055 and DIN EN 1991 regulate the national requirement for actions on structures like wind and snow, depending on the location. Regarding earthquake safety in Germany the national earthquake building code DIN 4149 regulates the seismic design and construction of usual buildings and civil engineering works. In the course of a harmonisation of European codes, the German national code committee has prepared national annexes for the European seismic design code Eurocode 8 (DIN EN 1998), part 1-6. Part 1 (General rules, Seismic actions and rules for buildings) is currently under revision, because new seismic hazard maps are under preparation.

For nuclear power plants a site specific hazard assessment has to be completed, based on the national regulation "KTA 2201" from the national reactor safety commission and according to the knowledge of science and technology. KTA 2201 consists of 6 parts that have been revised in the last years. Parts 1 to 4 are already approved and parts 5 and 6 are expected to be approved within the the year 2015.

For industrial facilities an own national code does not exist, but the technical regulation VCI from 2012 supplements the national codes DIN 4149 and DIN EN 1998 according to theses facilities.

For dams, the national building code DIN 19700 (from July 2004) provides the legal basis, which claims longer earthquake recurrence periods and higher safety standards for design earthquakes.

In general, the Federal States are responsible for regulations regarding DRR in their specific "Bauordnungsrecht". For flood preparedness, local communities are responsible. They use the expertise of consultants to identify building areas or flood protection plains. The builder/owner of a private building is responsible for its own safety against floods, thereby necessitating private precaution through architectural means as well as insurance. The already mentioned ORTIS attempts here to establish a multi-risk disaster management system at the local level to help communities and private citizens plan their DRR.

The implementation of the EU Flood Directive requires to develop hazard and risk maps and to establish flood risk management plans focused on prevention, protection and preparedness by 2015. The revision of such plans is due in every sixth year. Concrete activities for the land-use planning and construction in flood prone areas are developed.

Settlement planning and construction specifications are relevant for the German development cooperation especially within the scope of rehabilitation and reconstruction. A guide for building activities after disasters and conflict was developed (see link in the next Core Indicator - Building Codes). Construction plans within the scope of financial cooperation consider DRR systematically.

The impacts of climate change in urbanized areas will be of particular concern due to the high population fraction living in cities and due to peculiarities of urban climate,

such as elevated temperature and heat load extremes (urban heat island) and enhanced likelihood of flooding (extended surface sealing). The “German Meteorological Service” DWD provides consultancy for cities, authorities, and policy makers about the expected changes in urban climate and about effective options for climate adaptation and climate resilient urban planning. The consultancy work is based on climate monitoring (indicators for urban climate change) and computer-based climate modelling (downscaling of climate projections to the urban scale, modelling impacts of urban development and climate adaptation measures).

GRC was getting active in human settlement planning for example after the Tsunami 2004 and incorporating DRR elements, such as earthquake and flood resistant housing, livelihood support, DRR trainings to communities is playing a major role in GRC reconstruction processes (building back better).

The IFRC uses a Participatory Approach to Safe Shelter Awareness (PASSA). PASSA can be used as a participatory methodology for disaster risk reduction in the shelter sector, and can also be used in a post - disaster context to identify priority needs and build capacity within the community enabling them to plan for change within their wider neighbourhood and specific shelter practices. Recently PASSA was used in the Philippines after Taifun Haiyan.

Welthungerhilfe implements action related to (1) slope protection, stabilization of river bank and bridges, (2) hurricane proofed greenhouses, stores, schools etc. (3) risk mapping for land use planning.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

The German building codes provide assurance for the most dangerous hazards through norms for wind, snow and earthquakes. However, for industrial facilities there is currently no compulsory standard. The German scientific community continuously reminds us that stronger legislation for DRR is recommended.

The principle of subsidiarity has to be strengthened at the community level, especially the dimension of private precaution through better clarification of possible dangers and sensitization to individual responsibilities. The builders and scientific researchers take this a step further and have developed safer building techniques and are constantly exploring new possibilities. The main challenge is to persuade the builders that this is necessary.

Related links:

Bau- und Planungsrecht <http://www.umwelt-online.de/recht/bau/uete.htm>

Baurecht <http://www.baurecht.de/>

BImSchG <http://www.gesetze-im-internet.de/bimschg/index.html>

DIN 19700-11:2004-07: Dam plants, part 1-6 (in German)
 DIN 4149:2005-04: Buildings in german earthquake areas - Design loads, analysis and structural design of buildings (in German).
 EN 1998: Eurocode 8: Design of structures for earthquake resistance - part 1-6 (in German and English), European Committee for Standardization, Brussels.
 KTA 2201, Part 1-6: Design of Nuclear Power Plants against Seismic Events (in German and English), German Nuclear Safety Standards Commission.
 Overview Building Law <http://www.bauordnungen.de/html/deutschland.html>
 VCI 2009: Leitfaden zur Anwendung der DIN 4149:2005 auf Tragwerke und Komponenten in der chemischen Industrie, Verband der chemischen Industrie e.V.
 VCI 2012: Leitfaden – Der Lastfall Erdbeben im Anlagenbau. Entwurf, Bemessung und Konstruktion von Tragwerken und Komponenten in der chemischen Industrie in Anlehnung an die DIN EN 1998-1, Erstellt von: Lehrstuhl für Baustatik und Baudynamik der RWTH Aachen & Verband der chemischen Industrie e.V., Oktober 2012.

Core indicator 5

Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes

Level of Progress achieved? 3

Institutional commitment attained, but achievements are neither comprehensive nor substantial.

Key Questions and Means of Verification

Do post-disaster programmes explicitly incorporate and budget for DRR for resilient recovery? Yes

% of recovery and reconstruction funds assigned to DRR	0
DRR capacities of local authorities for response and recovery strengthened	No
Risk assessment undertaken in pre- and post-disaster recovery and reconstruction planning	No
Measures taken to address gender based issues in recovery	No

Provide description and constraints for the overall core indicator

(not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

DRR is certainly an important component of recovery processes, but the main responsibility lies in the communities and individuals because the same norms and codes are obligatory (as in the Core Indicator before), also for the rebuilding of destroyed property. Therefore more DRR-standards have to be considered in the case of recovery, simply because new construction projects and repairs have to maintain the latest technical standards. As mentioned in Core Indicator 2 or in the Priority below, Germany has social safety nets in place that can absorb parts of the aftermath of a natural disaster, but there is no law or policy, besides the building norms from the Core Indicators 1 and 4, for the Integration of DRR in recovery processes.

Humanitarian assistance and development-oriented emergency aid certainly include DRR in recovery and rehabilitation processes: The goal is clearly to integrate DRR and preventive activities into emergency aid to strengthen the preparedness of vulnerable societies.

GRC works within the policies of the International Federation of Red Cross and Red Crescent Societies and its own DRR policy. DRR is a main determining factor for all processes in recovery and rehabilitation. The necessary data collection will already be included in the guidelines for the fact finding missions right after a disaster in order to plan rehabilitation according to DRR measures.

DRR can be integrated early to function as a link in the Linking Relief, Rehabilitation and Development approach. In the GRC's view, the sustainable DRR activities are particularly well suited to put the LRRD approach into practice by acting as an efficient link between emergency aid, reconstruction and subsequent development.

After Taifun Haiyan hit the Philippines in November 2013 the Resilience Approach was followed, integrating DRR measures in the construction of shelters.

Based on the the linking relief, rehabilitation and development approach (LRRD), in principle Welthungerhilfe takes into consideration DRR as a cross cutting issue in all post-emergency operations (rehabilitation and development).

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

The challenges concerning this point are certainly broad. The communities and individuals have their own responsibilities with DRR in terms of recovery, such as adhering to the building norms above. As has been previously mentioned, there are

laws for fire, wind and earthquake safety for private properties, but not for floods, for example. The challenges for the communities and the state itself therefore lie in the realm of raising awareness and sensitising the population to risk.

Supporting document:
Building Codes http://www.preventionweb.net/files/2967_degtzbauhandreichung.pdf

Core indicator 6

Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.

Level of Progress achieved? 3

Institutional commitment attained, but achievements are neither comprehensive nor substantial.

Key Questions and Means of Verification

Are the impacts of disaster risk that are created by major development projects assessed? Yes

Are cost/benefits of disaster risk taken into account in the design and operation of major development projects? No

Impacts of disaster risk taken account in Environment Impact Assessment (EIA)	No
By national and sub-national authorities and institutions	No
By international development actors	No

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

For the “Federal Ministry of Transport and Digital Infrastructure (BMVI) (see link: BMVI), the waterways are critical, as well as shipping and air traffic. Risk assessment for projects related to the construction of waterways and dikes are standard and specified in DIN-Norms. DIN 1055-9 contains principals for assessing risk during the

development of construction projects, while at the same time considering the interdependency of building projects in the area of shipping traffic. Similar assessments have to be accomplished in air traffic.

Globalization, changes in technology, demography and climate as well as the strong increase in freight traffic are fundamental challenges to the reinforcement of systems in place and the planning of future transport corridors. Among all modes of transport, inland and coastal navigation excels by its energy efficiency and is thus making a contribution to the protection of the present climate. However, the efficiency of goods and passenger transport on waterways may be severely impaired by consequences of climate change in the future. The purpose of the research programme KLIWAS (Impacts of climate change on waterways and navigation - Searching for options of adaptation) is the assessment of climate-induced changes of flows and water levels in navigable inland waterways.

In order to avoid imbalances in the supply of vital goods to people as well as to prevent negative impacts on road traffic it is essential to know present and future threats to roads. Within the Conference of European Directors of Roads (CEDR), CliPDaR (Climate Projection Data base for Roads) focuses on parts of the European road network.

In the case of the railway system, wildfire risk assessments are in place because German infrastructure and economic activities are at a high risk of being affected by railway-caused wildfires. This network includes German Railway operations and infrastructure, adjoining industrial and private infrastructure, forests and cultivated lands. Therefore the implementation of vegetation management alongside railroad tracks aimed at reducing wildfire hazards, however, is often in conflict with nature conservation goals.

The often-cited guide, “Critical Infrastructure Protection: Risk and Crisis Management” and other projects for the protection of critical infrastructures from the “Federal Office for Civil Protection and Disaster Response” (BBK: see link) aim to conduct risk assessments for infrastructure. The “Competence Center on Climate Impacts and Adaptation” (KomPass) of the “Federal Environment Agency” (UBA: see link) provides guidance for first approaches to risk assessment concerning climate change.

The global programme DIPECHO funded by the European Commission Humanitarian Aid aims at reducing disaster risk in developing countries. The Federal Government has contributed to the “EU Strategy for Supporting Disaster Risk Reduction in Developing Countries”.

Since September 2009 a climate-check guideline of the “Federal Ministry for Economic Cooperation and Development” (BMZ) came into force. During the initial phase until August 2010 new and drafted projects has to be checked against potential consequences of climate change. Here it is checked which project components are exposed to considerable climate change risks. For this purpose a checklist was developed. Since August 2010 it is furthermore foreseen: 1) to conduct a detailed risk assessment, 2) to prioritize adaptation measures and integrate these

into projects, 3) to monitor and evaluate. The guideline is applicable to the main strategy papers and obligatory for the BMZ as well as for the German implementing Organisations.

The “KfW Entwicklungsbank” (see link) conducts an environmental and social compatibility assessment for each of its projects.

Many humanitarian organizations are committed to DRR and develop own capacities in order to integrate the results of risk-analysis and context-analysis into their projects.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

The challenges for German policy with regard to DRR in development projects are similar to those in the previous Core Indicators. Changing land-use patterns and diversified responsibilities bring forth challenges for the Federal Government, the Federal States and the communities as well as private individuals. There are approaches to conducting assessments in critical infrastructure and the most endangered development projects but not on every level. In the case of road construction there are risk assessments and norms concerning pavement, fixation, safety, etc., but DRR is only a matter in endangered areas such as mountains and not applicable for the whole country. The official environmental impact assessment contains the effects of major development projects on nature, but there is no specific risk assessment for the impact of large projects on the disaster risk.

The Federal Ministry of Transport and Digital Infrastructure (BMVI) commissioned its four subordinated research institution BfG (the Federal Institute of Hydrology), BSH (the Federal Maritime and Hydrographic Agency), DWD (German Meteorological Service), and BAW (the Federal Waterways Engineering and Research Institute) to analyze the potential consequences of climate change for navigation on inland and coastal waterways. (see link: bfg)

Related links:

BBK - Critical Infrastructure Protection http://www.bmi.bund.de/SharedDocs/Downloads/EN/Broschueren/Leitfaden_Schutz_kritischer_Infrastrukturen_en.pdf?__blob=publicationFile

Bfg http://www.bafg.de/EN/02_FieldsOfActivity/04_Interdisciplinary/kliwas.html

BMVI <http://www.bmvi.de>

EU Strategy Supporting DRR in Developing Countries (2009): <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0084:FIN:EN:PDF>

KfW - Entwicklungsbank http://www.kfw-entwicklungsbank.de/EN_Home/index.jsp

KomPass http://www.anpassung.net/cIn_110/sid_898FE92E8D323C42F8038057C9DF1E46/DE/Home/homepage__node.html?__nnn=true

UBA <http://www.umweltbundesamt.de>

Priority for Action 5

Strengthen disaster preparedness for effective response at all levels

Core indicator 1

Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place.

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Are there national programmes or policies for disaster preparedness, contingency planning and response? Yes

DRR incorporated in these programmes and policies

No

The institutional mechanisms exist for the rapid mobilisation of resources in a disaster, utilising civil society and the private sector; in addition to public sector support.

No

Are there national programmes or policies to make schools and health facilities safe in emergencies? No

Policies and programmes for school and hospital safety

Yes

Training and mock drills in school and hospitals for emergency preparedness

No

Are future disaster risks anticipated through scenario development and aligned preparedness planning? No

Potential risk scenarios are developed taking into account climate change projections

No

Preparedness plans are regularly updated based on future risk scenarios

Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

The “Federal Office for Civil Protection and Disaster Response” (BBK: see link) has equipped hospitals in various locations with medical supplies for large disaster situations and carries out maintenance nationwide based on legal standards. Actually 5 Federal States and 19 hospitals participate in this activity. At the pilot locations the equipment has been revised and changed according to new lists.

Additionally, it has developed a federal framework for the decontamination of injured people, provides recommendations for companies and has developed a concept for responding to mass catastrophes. The handbook for hospital emergency planning has been redesigned. It provides a federal guidance for the preparedness of hospitals to large quantities of injured and infected people but also for internal and external hazards. The programme is supported by medical associations and experts. The Analytical Task Force (ATF) provides advice for the relief/action units on the spot with regard to chemical incidents. The ATF activity is continuously upgraded and yearly over 180 operations has been deployed.

In river flood areas embedded and mobile prevention elements are used and the Flood Management Centres have detailed action plans similar to other emergency services and civil protection organizations and authorities (see challenges).

The emergency services, civil protection and official authorities are well equipped and strongly prepared. The cooperation between national/federal authorities, NGOs/private actors such as the German Red Cross (DRK) and the state forces such as the “Bundeswehr” described in Priority 1 Core Indicator 1 secures strong capacities in all areas. Also the technical capacities of the “Federal Agency for Technical Relief” (THW: see link) are integrated very well into the disaster management and defence of the Federal States. In the case of large disasters, the Federal States request assistance from the THW and it provides technical aid for the management of all kinds of disaster situations. The THW is prepared for large-scale operations in hazard situations, as it is the de facto operational organisation of the Federal Government.

In the framework of the German Strategy for Adaptation to Climate Change and the Adaptation Action Plan the topic of disaster management is very important. A special agency cooperation of “German Meteorological Service“ (DWD), “Federal Office of Civil Protection and Disaster Assistance” (BBK), “Technical Relief Agency” (THW), “Federal Office for Building and Regional Planning” (BBSR) and the “German Federal Environment Agency” (UBA) deal with the topic of Climate Change and disaster management. The so called Strategic Agency Alliance - Climate Change Adaptation (see link) aims in improving the coping strategies of the society with regard to

adverse effects of Climate Change - in particularly with extreme weather events. Long-term strategic planning is considered as well as short-term operative measures. The results of the cooperation are used in the German Adaptation Strategy (DAS) of the year 2008 and in Adaptation Action Plan of the year 2011 and for the updates of these strategies. All participating agencies are involved in the overall process of adaptation and in particularly linked with each other through the cross cutting topics of civil protection and spatial planning. In addition, the strategic alliance includes prevention and response plans, which are adapted at the federal but also partly at federal state levels.

The German development cooperation provides several implementation organizations to support affected partner countries in different disaster situations with different specialist knowledge at all levels (such as the German Red Cross (DRK) or Malteser International, the THW, GIZ or the “Federal Institute for Geosciences and Natural Resources” (BGR: see link)). These different capabilities and capacities are used to strengthen emergency aid in partner countries.

The German Ministry for Economic Cooperation and Development (BMZ) launched a new strategy called Development-Oriented Emergency and Transitional Aid (ESÜH) by the end of February 2013. The new strategy is focusing to provide relief and assistance in the aftermath of catastrophes, natural and man-made, in order to bridge the gap between immediate humanitarian relief and development projects. The strategy takes into consideration the Linking Relief, Rehabilitation and Development (LRRD) approach in order to establish links between relief, reconstruction and development. Important part of the new strategy is DRR including mitigation and prevention, preparedness and risk analysis. The strategy outlines that all measures are being executed in a climate sensitive manner and that DRR is going to be mainstreamed into all sectors including climate change adaptation. The new strategy will guide the BMZ when assessing project proposals and when evaluating the outputs and outcomes of the projects funded by the BMZ.

By the end of January 2013 the German Federal Foreign Office issued a new concept for humanitarian aid interventions. Amongst others the concept outlines the importance of humanitarian disaster risk reduction and mentions preparedness as one of the objectives. Besides this new strategy, the German Federal Foreign Office is also fostering preparedness. As a result the “Principles and Recommendations on Preparedness” were published by the German Federal Foreign Office after a conference held in Berlin in June 2013 (see link).

GRC developed its own DRR policy and strategy and Resilience Approach for its international department. Disaster preparedness and early warning plays a major role in GRCs DRR and Climate Change Adaptation Mainstreaming activities.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be

overcome in the future.

The challenges in terms of policy and institutional capacities result from the forecasting abilities at the different levels and sectors of DRR and disaster management. The vertical and horizontal diversification is so distinctive that no general/central action plans are in place. Every authority, organization or flood management centre has its own sophisticated plans of action, but in a disaster situation these different plans have to be adapted and there is currently no system, besides deNIS II plus, to integrate them in a functional way. deNIS II plus (see Priority 2 and the next Core Indicators) has initiated an approach to integrate and adapt them, but this is currently in an initial phase and not yet concluded.

From the perspective of the Johanniter DRR preparedness, response and contingency policies should be intensified at schools.

Related links:

BBK <http://www.bbk.bund.de>

BGR <http://www.bgr.bund.de>

DRK <http://www.drk.de/>

GIZ <http://www.giz.de/de/html/index.html>

InWEnt http://www.bmz.de/en/what_we_do/approaches/bilateral_development_cooperation/players/selection/inwent/index.html?follow=adword

Malteser International <http://www.malteser-international.org/>

Principles and Recommendations on Preparedness:

http://www.unisdr.org/files/33663_33663conferenceondisaterpreparednes.pdf

Core indicator 2

Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes.

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Are the contingency plans, procedures and resources in place to deal with a major disaster? Yes

Plans and programmes are developed with gender sensitivities

No

Risk management/contingency plans for continued basic service delivery	No
Operations and communications centre	Yes
Search and rescue teams	Yes
Stockpiles of relief supplies	Yes
Shelters	Yes
Secure medical facilities	Yes
Dedicated provision for disabled and elderly in relief, shelter and emergency medical facilities	No
Businesses are a proactive partner in planning and delivery of response	No

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

Preparedness plans are in place, although they are decentralized on different levels and with different organizations and authorities. As a result, there are plans on all administrative levels and among the emergency services.

On a national level, the “Federal Office for Civil Protection and Disaster Assistance” (BBK) of the “Federal Ministry of the Interior” (BMI: see link) carries out exercises for collective response to large nationwide disasters on the strategic level in its training program LUEKEX (Länder-Übergreifende Krisenmanagementübung/Exercise). Target groups are recruited from real crisis/emergency staffs of the higher administration levels in cooperation with the operators of critical infrastructure (involved are mostly public actors from different sectors such as the police and non-police hazard prevention/civil protection/crisis management, civil-military cooperation (CIMIC) as well as private companies and organizations). LUEKEX enables: a) identification of deficits in the coordination and communication of crisis management, b) identification of the general need for action and c) enhancement of the cooperation of the different sectoral crisis management actors in a federal system. During more than ten years of exercises scenarios have included blackout, terrorist attacks, pandemic, cyber security and bio-threats. The 7th LUEKEX exercise with a storm surge scenario will take place in November 2015 and is currently under preparation. The continuation of the LUEKEX exercises contributes to the identification of deficiencies in disaster management and disaster prevention and facilitates the cooperation within and in between the Federal States, the participating ministries of

the Federal Government and other state and non-state actors in Germany.

The THW trains regularly with other institutions and is very good integrated into the civil protection of the Federal States. The coordinating centers in the States civil protection know how to reach the THW. During major disasters it is established and the Federal States call the THW in order to receive technical relief.

The communal administration is by law /regulations at the Federal State level to hold regular training sessions and tests in emergency services and to improve preparedness, especially in the case of the voluntary fire brigades. The private relief/emergency services such as the Red Cross (DRK) have their own plans and training, which also conduct training with the THW as the operational organisation of the Federal Government at regular intervals. The THW is well integrated in disaster preparedness plans and carries out internal and external exercises together with other relief units at all levels (see link for an overview). The flood management centers have their own action plans and carry out training with the responsible communal authorities as well as their enforcement organizations, such as the fire brigades.

The “Federal Foreign Office” (AA) supports training for humanitarian aid workers and the German development cooperation supports its partner countries in preparing emergency plans and committees and accomplishing simulation trainings. “Federal Foreign Office” (AA) developed 2007 guidelines for the funding DRR projects in foreign countries. In November 2012 the “Strategy of the Federal Foreign Office for Humanitarian Assistance Abroad” has been introduced by the Federal Foreign Office including the objective to achieve preparedness, improving response capabilities before disaster strikes and strengthening local structures (see link).

The Johanniter have available DRR and emergency plans on all administrative levels and there are regular exercises and trainings in order to verify and further develop disaster response programmes.

In the programmes that GRC supports, DRR plans and emergency drills are an important part of the projects but these examples do not allow a ranking of the countries as a whole. It also depends on the country since GRC is currently working in more than 50 countries.

Welthungerhilfe implements actions related to disaster risk management, communication centres and communication lines, equipment and training of rescue teams, contingency plans / evacuation routes, simulation exercises.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

Concepts are in place for all possible disaster situations at all levels.

From an overarching national point of view, the LUEKEX trainings are sophisticated though not limited exclusively to natural disasters, rather applying to any large-scale crisis. The challenge in a federal system is to merge the different civil protection structures and responsibilities into one agreed exercise concept agreed by the national authorities as well as the Laender in order to reach the best possible involvement of high-ranking participants.

The challenges lie within the different levels of voluntary services, which are facing the challenge of a decreasing number of new recruits in recent years due to the change in demography and mobility of the population, including urbanization of the young work force (see Priority 1). In the case of the voluntary fire brigades, there is a lack of appropriate training and adequate equipment for specific wildfire suppression requirements.

German fire and rescue services schools do not provide any specific wildfire management training. Starting in 2008 the Germany-based Global Fire Monitoring Center (GFMC) in partnership with a professional fire service and a forestry school has developed a model for capacity building (wildland fire training academy), inter-agency cooperation, and integrated fire management in the State of Hesse, to serve as model for the remaining 15 states (Laender). Although this initiative has been welcomed by the Federal Ministry of Interior, there is no funding support for implementation since there is no federal responsibility for wildfire prevention and control. On the other side, an individual state will not finance the initiative of which all 16 states would benefit. This demonstrates the weakness of decentralized responsibilities in disaster risk management in Germany. Local initiatives to capacitate and equip professional and voluntary fire service teams in wildfire management are underway in some communities with encouraging results. Furthermore, a specific project was implemented in Brandenburg State to develop technologies and methods for fire management on terrains contaminated by unexploded ordnance (UXO) in the State of Brandenburg stemming from military activities during the 20th century. In addition a first inter-agency and multi-stakeholder round table on integrated fire management at state level had been convened in the State of Brandenburg in 2014 to address cross-cutting issues of fire management at landscape level.

Measures of disaster preparedness and risk reduction form one important building block in the emergency, rehabilitation and development-oriented projects of the German Red Cross (GRC) to strengthen local preparedness capacities and community resilience. The GRC in close cooperation with the National Red Cross and Red Crescent Societies concentrate on the following priorities:

- 1) Project communities are supported in substantially expanding their level of knowledge about natural hazards, in identifying existing disaster risks and in developing preparedness plans and contingency plans. The plans, which are drawn up participatively, are to be used by the population to seek additional support also from the government authorities for strengthening the community's resilience even

beyond the current project.

2) In particularly disaster prone communities, small scale infrastructure measures are implemented jointly with the local population and based on participatory planning. They are designed to abate future disaster impacts and are maintained by the local target groups independently.

3) Local structures designed to strengthen existing self-help capacities and to improve organisation and networking (e.g. village committees, first aid groups) are set up, and disaster preparedness and risk reduction procedures are developed, which are closely coordinated with other relevant governmental and civil society stakeholders.

4) Schools in the project areas are supported in establishing and developing effective structures and disaster preparedness procedures (e.g. first aid services in schools, evacuation plans). Moreover, students and teachers are intensively trained on natural hazards and disaster preparedness, and appropriate education materials are developed in coordination with the local education authorities and are used in the schools.

5) The National Red Cross and Red Crescent Societies are supported by the GRC to strengthen and improve their own structures and resources for effective preparedness for response (especially volunteer networks, branch offices, services and qualified assets) and to maintain them in a sustainable manner as to support the public authorities in their own countries as independent auxiliaries to the government in the humanitarian field.

From the point of view of the Johanniter in particular the private sector should integrate DRR more deeply into own approaches. This is relevant for planning and exercises. Furthermore, the medical facilities should be technically prepared in order to provide autonomous services during a disaster.

Related links:

ASB <https://www.asb.de/en>

DRK <http://www.drk.de/>

Global Fire Monitoring Center <http://www.fire.uni-freiburg.de/>

Malteser Germany <http://www.malteser.de/>

Strategy of the Federal Foreign Office for Humanitarian Assistance Abroad

http://www.auswaertiges-amt.de/cae/servlet/contentblob/634144/publicationFile/177842/121115_AA-Strategie_humanitaere_hilfe.pdf

THW http://www.thw.de/EN/Homepage/homepage_node.html

Core indicator 3

Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Are financial arrangements in place to deal with major disaster? Yes

National contingency and calamity funds	No
The reduction of future risk is considered in the use of calamity funds	No
Insurance and reinsurance facilities	Yes
Catastrophe bonds and other capital market mechanisms	No

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

There is no special fund for disasters because the Federal Government, the Federal States and private actors possess enough resources for emergencies, also from a financial perspective. The insurance industry provides coverage for private, commercial and industrial sectors. From case to case reconstruction funds are launched for infrastructure, emergency and response services. The Government has an economic responsibility in the case of large-scale damage, which is carried out, however, by regrouping budget resources. There is basic protection for small and medium-sized businesses through reconstruction credits from the Federal State banks and the “KfW Mittelstandsbank” (as mentioned in Priority 4 Core Indicator 3).

Beside the economic responsibility of the German government and national authorities, one should recognize the insurance industry as an important and established financial reserve and reconstruction mechanism. The privately available risk capital in the form of natural hazard and other specific damage/indemnity insurance offers worldwide amounts to several billion euros. The evaluation of risk accumulation and the establishment of reserves are the most important duties of an insurance company and the enterprises in Germany are fully aware of this role.

The instruments of the German Humanitarian Assistance and Development Cooperation become active in the case of emergencies in other countries within the scope of its international obligations. Therefore the federal budget was substantially

increased in recent years and additional funds allocated for severe emergencies.

Around the world there are many systems for early warning of temporarily increased likelihood of disasters, such as forecasts of storms tracks or weekly rainfall. These seasonal forecasts can provide a crucial window before a potential disaster occurs in which local communities and organizations such as national Societies helping them can take action. But in most humanitarian aid organizations money often only becomes available once a disaster has already occurred, or its given for long term projects based just on average risk. Since 2013 the GRC, in collaboration with the “Federal Ministry for Economic Cooperation and Development” (BMZ), the Red Cross Red Crescent Climate Center and respective National Red Cross red Crescent Societies are implementing DRR/CCA projects in Togo and Uganda, which further finance a “Preparedness Fund”. This Preparedness Fund is used to respond more timely of local and seasonal extreme weather forecasts and prepare the affected communities. GRC as well as the International Federation of the Red Cross and Red Crescent Movement have special financial tools in place to have financial resources mobilized as soon as possible after a disaster strikes, e.g. Disaster Response Emergency Fund, appeals etc.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

In Germany, however, the legislator can also contribute to the broader private precautionary measures, in addition to the compulsory insurance constraint, by clarifying legally that its ad hoc-facilities and services in emergencies are only made available if every single citizen has fully exhausted his or her own precautions in the form of insurance offers.

The Preparedness Fund mechanism (as described above) is a fairly new and innovative approach to respond to the changing climate and its impact on the most vulnerable communities. Most humanitarian aid organizations often only receive funds once a disaster has already occurred, or its given for long term projects based just on average risk.

Core indicator 4

Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews.

Level of Progress achieved? 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Key Questions and Means of Verification

Has an agreed method and procedure been adopted to assess damage, loss and needs when disasters occur? Yes

Damage and loss assessment methodologies and capacities available	Yes
Post-disaster need assessment methodologies	Yes
Post-disaster needs assessment methodologies include guidance on gender aspects	No
Identified and trained human resources	Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

The BBK runs a “German Emergency Planning Information System” (deNIS IIplus: see link) together with various partners from different areas of disaster management. It includes information about hazards, vulnerabilities and risks, but is not complete and currently does not attempt to address climate change risks. In its current version - deNIS IIplus - it also delivers information for civil protection/disaster management. deNIS IIplus was created to support emergency/relief units and authorities with real-time information about disaster events, geographical information (e.g., location of critical infrastructure, facilities which pose a risk or resources for emergency assistance), risk types and background information. The core elements of the web-GIS system form three modules to support situation management (interactive situation map), information management (dispatching of instructions/announcements) and resource management (management of all reactionary resources). deNIS IIplus is connected to all important decision makers and actors within the disaster management system. This builds a network in the area of civil protection and emergency services that also include official authorities (Federal Government - Federal States - Communities) to support crisis management during extreme dangers and disaster/damage situations in Germany. An automatic review and feedback process are conducted and the integration of current measured values (radioactivity, weather data and water levels) is currently in progress. Additionally, the BBK operates the “German Joint Information and Situation Centre of the Federal Government and Laender” (GMLZ: see link), which provides information for the Federal States (Laender) and government as well as organisations in large-area

damage situations or other circumstances of national importance.

In an extreme hazard situation the “Federal Agency for Technical Relief” (THW: see link) can offer, for example, its professional section “Guidance and Communication” (Führung und Kommunikation). This group can assure the guidance of its own and other forces during a disaster through its mobile command centre and facilities. After every event the event log is used to generate a lessons-learned review.

The flood management centres and registration/information services in Germany are well positioned and held in high esteem and looked upon positively by the public. The website www.hochwasserzentralen.de (see the link below) offers shortcuts to all flood management centres and services in Germany and neighbouring countries with water levels and dangers. In the case of a flood the responsible authorities, fire brigades and citizens` groups are interlinked through the flood management centres, emergency plans, call lists and flood information systems.

In the case of severe disasters, the “Federal Foreign Office” (AA) takes charge of coordinating German emergency assistance through its crisis and reaction centre as well as with special meetings of the coordination group for humanitarian assistance. The AA also works together with other departments and organizations and participates very actively in the “European Commission’s Humanitarian Aid Office” (ECHO: see link) and others such as the “United Nations Office for the Coordination of Humanitarian Affairs” (OCHA).

From the point of view of the Johanniter loss assessment methods and methods to assess the needs after disaster are available through research, the Federal Office of Civil Protection and Disaster Assistance and the insurance industry.

The GRC runs an operation center (FÜLZ) in the headquarter in Berlin, which can be used for coordination during large-scale operations e.g. international operations or several GRC regional associations.

Inside the Red Cross / Red Crescent Movement there are different high valuable tools in place for information exchange during hazard events, e.g. Disaster Management and Information System.

Welthungerhilfe has available methodologies for damage and loss assessment and post disaster need assessment as well as trained staff.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

The homogenisation of the data necessary for the integration of the systems is tedious, therefore the BBK and the responsible authorities in the Federal States aim

to build interfaces between these different systems in the near future.

An instance of deNIS II plus could not be integrated into the crisis management of some Laender since they already operate their own crisis management systems. In those cases exchanging information will be supported through a special interface the so called XÖV-gateway.

For official flood protection/management, the reduction of qualified staff and especially the use of different systems create challenges, for example, in disseminating relevant information in a hazard situation to all actors. In the opinion of most flood management centres, there has to be a uniform system on the Federal State or even national level.

Due to the non-existent requirement for a collective post-event review, there are a variety reviews and evaluation reports by the individual organisations and authorities. This is not a negative assessment, although it can be a challenge to acquire a clear overview.

Related links:

deNIS IIplus <http://www.denis.bund.de/>

ECHO http://ec.europa.eu/echo/index_en.htm

GMLZ http://www.bbk.bund.de/SharedDocs/Downloads/BBK/EN/booklets_leaflets/Flyer_GMLZ-en.html

Overview Flood Management Centres <http://www.hochwasserzentralen.de/>

THW <http://www.thw.de>

Drivers of Progress

a) Multi-hazard integrated approach to disaster risk reduction and development

Levels of Reliance

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Do studies/ reports/ atlases on multi-hazard analyses exist in the country/ for the sub region?: Yes

If yes, are these being applied to development planning/ informing policy?: Yes

Description (Please provide evidence of where, how and who)

It can be argued that one of the current core drivers for multi-hazard approaches are the different strategies for adaptation to climate change. There is the official national “German Strategy for Adaptation to Climate Change” (DAS: see Strategic Goal 1 and Priority 4) and the approaches to critical infrastructure of the “Federal Office for Civil Protection and Disaster Response” (BBK). In addition, approaches from Priority 3 should be specified as drivers, such as the deNIS IIplus-system and the Method for Risk Assessment for Civil Protection of the BBK or, most importantly, the different capacities of the “German Meteorological Service” (DWD: see link) to provide extensive weather forecasts and data and to warn the public and the relevant authorities comprehensively in the case of an extreme weather event. Its risk maps for certain extreme weather conditions or the Risk Explorer of the “Center for Disaster Management and Risk Reduction Technology” (CEDIM: see link) equally qualify as multi-hazard approaches. The German scientific landscape and the “German Committee for Disaster Reduction” (DKKV) act as the main drivers of the progress to integrate the different approaches for DRR in the different areas of natural disaster risk into one functioning multi-hazard-system. It is worth to mention that the “Climate-Check” initiated by the “Federal Ministry for Economic Cooperation and Development” (BMZ) will contribute to wide-ranging consideration of climate related risks for drafting and implementing development projects and conceptual work.

On the level of the Federal States (Laender) several strategies to climate change were adopted (see examples in the links below) and the Federal Act to Improve Preventive Flood Control (see link) from May 2005 could count as a multi-hazard approach to DRR on the local level. Also the trainings of the (voluntary) fire brigades, the “Federal Agency for Technical Relief” (THW) and other organisations for diverse hazards are very important. With the different systems described in this report, an

integrated multi-hazard approach will take time but is developing currently.

For international cooperation and humanitarian assistance, the strategies of the Federal Government, the “Federal Foreign Office” (AA: see annexes), “The European Consensus on Humanitarian Aid” and the Hyogo framework itself play the main role.

Risk assessment is continually included in the projects of the German Development Cooperation. For this process experiences from the past (historical events) as well as expected or probable events are considered. Such events and related data are applied to the presumably affected area (risk mapping) in order to take consequent actions. Therefore, risk mapping always consists of possible events and is related to multi-risk analysis. Once this information is provided there is only the question open, which action could be applied next. Such procedure is implemented in the plans and strategies of various relevant actors.

Supporting document:

Climate Change and Security (2008)

http://www.preventionweb.net/files/2967_gtz2008enclimatechangesecurity.pdf

Leitlinien AA [http://www.preventionweb.net/files/2967_katastrophenvorsorgegrundsaetzeleitlinien\[2\].pdf](http://www.preventionweb.net/files/2967_katastrophenvorsorgegrundsaetzeleitlinien[2].pdf)

Katastrophenvorsorge des AA [http://www.preventionweb.net/files/2967_AA\[2\].pdf](http://www.preventionweb.net/files/2967_AA[2].pdf)

Related links:

Bavaria [http://www.bayceer.uni-](http://www.bayceer.uni-bayreuth.de/bayceer/de/pub/pub/59022/stmugv_app000000.pdf)

[bayreuth.de/bayceer/de/pub/pub/59022/stmugv_app000000.pdf](http://www.bayceer.uni-bayreuth.de/bayceer/de/pub/pub/59022/stmugv_app000000.pdf)

CEDIM Risk Explorer <https://www.cedim.de/riskexplorer.php>

DWD [http://www.dwd.de/bvbw/appmanager/bvbw/dwdwwwDesktop?_nfpb=true&_wi](http://www.dwd.de/bvbw/appmanager/bvbw/dwdwwwDesktop?_nfpb=true&_windowLabel=dwdwww_main_book&switchLang=en&_pageLabel=dwdwww_start)

[ndowLabel=dwdwww_main_book&switchLang=en&_pageLabel=dwdwww_start](http://www.dwd.de/bvbw/appmanager/bvbw/dwdwwwDesktop?_nfpb=true&_windowLabel=dwdwww_main_book&switchLang=en&_pageLabel=dwdwww_wetter_warnungen_book)
DWD Warning http://www.dwd.de/bvbw/appmanager/bvbw/dwdwwwDesktop?_nfpb=true&_windowLabel=dwdwww_main_book&switchLang=en&_pageLabel=dwdwww_wetter_warnungen_book

Federal Act to Improve Preventive Flood Control

<http://www.bmu.de/files/pdfs/allgemein/application/pdf/hochwasserschutzgesetz.pdf>

German Strategy for Adaptation to Climate Change [http://www.bmub.bund.de/en/topi](http://www.bmub.bund.de/en/topics/climate-energy/climate/adaptation-to-climate-change/)

[cs/climate-energy/climate/adaptation-to-climate-change/](http://www.bmub.bund.de/en/topics/climate-energy/climate/adaptation-to-climate-change/)
KomPass Overview <http://www.umweltbundesamt.de/en/topics/climate-energy/climate-change-adaptation/adaptation-tools/project-catalog/kompass-competence-centre-on-climate-impacts>

b) Gender perspectives on risk reduction and recovery adopted and institutionalized

Levels of Reliance

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Is gender disaggregated data available and being applied to decision-making for risk reduction and recovery activities?: Yes

Do gender concerns inform policy and programme conceptualisation and implementation in a meaningful and appropriate way?: Yes

Description (Please provide evidence of where, how and who)

Although there is gender equality by law, also in terms of career choice, women are not equally integrated in the appropriate organizations of disaster management due to previous regulations and traditions. This is changing through approaches to give the enlistment of women preference. One example can be found in the voluntary fire brigades, which try to attract more female volunteers with their recruitment campaigns. All organizations and authorities recognize gender equality to be the universal guiding principle for all their actions. Through the equality of both genders by law there is not a real difference in vulnerability or preparedness for disasters.

The German development cooperation integrates gender aspects as a cross-cutting principal in all its projects. Women play an important role in DRR. Not only do they often belong to the most susceptible personal groups, considering they are not as equally integrated into official communication mechanisms as men, but also because they make a substantial contribution to the creation of a culture of resilience. Often they are responsible for the education of children, giving them the opportunity to teach disaster preventive behaviour to younger generations. Stay-at-home mothers, for example, are more actively integrated into local early warning systems. Because the everyday lives of men and women can differ greatly, the often unique perspective that women offer include an indispensable perspective to emergency and evacuation plans.

Gender mainstreaming and gender equality is a quality mark of the German Development Cooperation. This is a reason why Data and Information is disaggregated according to Gender and why assessment takes place on individual level. Therefore, for raising resilience of the entire social system result specific measurements. Disaster Risk Management processes integrated in countries with the social inequity are suitable for strengthening gender mainstreaming considering practical considerations.

c) Capacities for risk reduction and recovery identified and strengthened

Levels of Reliance

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Do responsible designated agencies, institutions and offices at the local level have capacities for the enforcement of risk reduction regulations?:
Yes

Are local institutions, village committees, communities, volunteers or urban resident welfare associations properly trained for response?: Yes

Description (Please provide evidence of where, how and who)

Capacity development for DRR is integrated in various responses to the Priorities above, as well as the different training methods and further development of technical capabilities of the individual organizations and local and federal authorities essential to meeting the goals of the Hyogo Framework for Action.

The “Federal Ministry of the Interior” (BMI) has emphasized the importance of further development in DRR by its “New Strategy for the protection of the German population” and the integrated foundation of the “Federal Office for Civil Protection and Disaster Response” (BBK: see links) in May 2004. The BBK has continued this new strategy through the agenda development explained in Priorities 2-5: Critical Infrastructure Protection, Vulnerability Indicators, the “German Emergency Planning Information System” (deNIS) and the “German Joint Information and Situation Centre of the Federal Government and Laender” (GMLZ: see links). Other national authorities such as the “Federal Ministry for the Environment, Nature Conservation and Nuclear Safety” (BMU) with its central “Federal Environment Agency” (UBA) also carry out the development of DRR-related strategies, such as the continuously-mentioned “German strategy of adaptation to climate change” (Deutsche Anpassungsstrategie: DAS) of the “Competence Centre on Global Warming and Adaptation” (KomPass: see links). Strengthening of DRR-capacities is also integrated in the conceptual enhancements of the “German Meteorological Service” (DWD: see Priority 2). Response capabilities are strengthened by the participation of BKK/GLMZ in the EU GMES ERS, which provides satellite based information services and maps for disaster response. This information may be used as well by humanitarian aid actors like the Welthungerhilfe for risk assessment and the like.

Technology transfer and information exchange work through all levels, both vertically and horizontally, as described in Priorities 2 and 3. Here, the “German Committee for Disaster Reduction” (DKKV: see link) and the German civil society as a whole play an important role to spread information and awareness about DRR.

At the highly important lower levels, the local authorities and organisations, especially the oft-cited voluntary services such as the fire brigades or the THW, but also including the emergency services such as the Red Cross, have already developed strong capacities for disaster response, recovery and DRR, while they consistently develop new approaches to maintain and deepen these.

At an individual level it is difficult to achieve a uniform resilience due to the German

subsidiarity as described in Priority 1 and the individual responsibility for personal property as described in Priorities 2 and 4, though there is traditionally a local sensibility for natural dangers as well as in-grained preparedness through the culture of voluntary services as described in Priority 1 Core Indicator 3.

The “Federal Foreign Office” (AA) and the German development cooperation systematically develop and carry out approaches to advance and strengthen capacities in partner countries. The German development cooperation is accepted internationally as a partner for DRR and disaster preventive rehabilitation. Although its capacities are still not fully developed, the German development cooperation sees this fact especially as the driver to strengthen these in its future efforts. Governments and communities should accept all actors in disaster management and their capacity in hazard defense. Additionally, the population should be involved through regular trainings and volunteer engagement in civil protection entities. Moreover, the technical and personal resources need to be adapted to future hazard.

The German Development Cooperation carries out all applications that come from the German Government through a Capacity-Development- Strategy, which implements the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. In order to achieve sustainable changes it is necessary to raise the capacities of the relevant individuals on one hand and the development of the content, processes and coordination on institutional level as well as considering basic conditions on the other hand. Therefore, additionally to risk assessment also capacity assessment is a standard mechanism that’s deliverables serve a basis for funding individual areas or actions. The German Development Cooperation made also manifold experiences in advisory or capacity development area that took place in close cooperation with the responsible authorities in Germany like BBK or THW.

Buy in from the national authorities is essential in order to strengthen the capacities of the national players as well as of civil society. Civil society can play a very important role, like the National Red Cross and Red Crescent Societies also do, but cannot take over the government’s responsibility for these crucial programmes.

In GRC’s programmes for DP and DRR, capacity building of communities and Red Cross Societies is always a major part.

Related links:

BBK <http://www.bbk.bund.de>

BMI <http://www.bmi.bund.de/>

BMU <http://www.bmu.de/english/aktuell/4152.php>

deNIS <http://www.denis.bund.de/>

DKKV <http://www.dkkv.org/>

GMLZ http://www.bbk.bund.de/DE/AufgabenundAusstattung/Krisenmanagement/GMLZ/GMLZ_einstieg.html

KomPass - DAS http://www.anpassung.net/nn_700470/DE/Aktuelles/Termine/2008/Termin__080827-28/termin__080827-28.html?__nnn=true

UBA <http://www.umweltbundesamt.de>

d) Human security and social equity approaches integrated into disaster risk reduction and recovery activities

Levels of Reliance

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Do programmes take account of socio-environmental risks to the most vulnerable and marginalised groups?: Yes

Are appropriate social protection measures / safety nets that safeguard against their specific socioeconomic and political vulnerabilities being adequately implemented?: Yes

Description (Please provide evidence of where, how and who)

As described in Priority 4 Core Indicator 2, changes have occurred in the effects of natural hazards and our vulnerability to them, which is due to social development, urbanization and the accompanying changes in agriculture and forestry. There are, however, social safety nets and legal obligations in place that can absorb parts of the aftermath or at least provide approaches to insure property against hazards. Moreover, the German government has a duty to care economically for the most affected groups and ensure their social safety.

The drivers of progress in the area of financial buffers to reduce economic vulnerability are economical analysts, insurers and the Federal States (Laender) of Baden-Württemberg, Bavaria and Hamburg, which demand universal compulsory coverage against natural hazards. Protection of critical infrastructure, which also reduces the vulnerability of the most affected groups, has become one of the key activities in DRR, for example, for the BBK (see Priority 2 Indicator 1).

The “Federal Foreign Office” (AA) aims to improve DRR in vulnerable societies through its guidelines for the promotion of DRR in foreign countries and, as a result, promotes the integration of sustainable DRR in national policies of partner countries. Concerning social development, the German development cooperation directly promotes the participation of affected persons, especially those of susceptible population groups, through its strategies of sustainable development. In the German Development Cooperation has been witnessed that vulnerability of the social disadvantaged communities tends to be higher as expected. This has been validated with the clear risk assessment results. However, the economic losses tend to be lower in these areas. Most of the time the social and political environment favor unfortunately approaches that does not consider much human conditions but the

safety of their property. This causes difficulties for decision makers that hinder them to fix priorities for socially disadvantaged groups. Furthermore, there are no clear solutions that can help to set either social and cultural dividing rules nor solutions for situations of the marginalized communities. Simple approaches like migration are normally not considered at all, because people lose their social and economical networks. Contemporary and efficient disaster risk management needs therefore a holistically approach based on wider understanding of Resilience appropriate addressing social underlying risk drivers that come out of elementary human rights and that step by step brings progressing realization.

e) Engagement and partnerships with non-governmental actors; civil society, private sector, amongst others, have been fostered at all levels

Levels of Reliance

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Are there identified means and sources to convey local and community experience or traditional knowledge in disaster risk reduction?: Yes

If so, are they being integrated within local, sub-national and national disaster risk reduction plans and activities in a meaningful way?: Yes

Description (Please provide evidence of where, how and who)

The German DRR- and Disaster Management System works to overcome the division of labour between state and private actors for the sake of cooperation. The governmental federal and national forces and the non-governmental/civil society forces work together in the case of an emergency as well as in the various preparedness and reduction activities. The national forces such as the Ministries and agencies work together with the private organisations or provide mandates for them. This encompasses all areas of DRR and the “German Committee for Disaster Reduction” (DKKV: see link) attempts to bring them together in its different assemblies.

In the field of scientific research and precaution, the public universities, private research institutes and governmental authorities cooperate, as in the case of the “German strategy of adaptation to climate change” (DAS: see Priority 4) or the civil protection research projects of the “Federal Office for Civil Protection and Disaster Response” (BBK), in which not only the private institutes are involved but also private aid or emergency organizations.

On a local level various connections between local authorities, the fire brigades, emergency services, local associations and NGOs as well as the private sector exist. Larger firms have their own fire brigades and emergency services, which also assist in major incidents. In direct cooperation, for example, the governmental “Federal Agency of Technical Relief” (THW: see link), the communal fire brigades and the different private relief/emergency services such as the Red Cross (DRK), Malteser Germany or the Workers` Samaritan Federation Germany (ASB) (see links) work together in extreme hazard situations. In the absence of a disaster, they work towards collective practices or carry out education campaigns.

Cooperation between state authorities, civil society and the private sector (above all civil society and the scientific world) ensure that DRR reaches a higher profile.

The German development cooperation has recognized that the integration of such a variety of partners helps to anchor a culture of resilience and ensure coherence. Therefore, the German development cooperation works together with different actors (NGOs, civil society, private sector). In cooperation with the private sector (e.g., the insurance industry, building material suppliers) there remains potentials to be realised. However, in the past years progress has been achieved in involving the private sector into the Cooperation Development. Partnerships with German companies has been concluded (e.g. MunichRe). The “Federal Ministry for Economic Cooperation and Development” (BMZ), the “Federal Foreign Office” (AA) work together with NGOs on a large scale, in its task force and coordination group for humanitarian assistance with CARE Germany or Doctors Without Borders, among other initiatives.

In the German Development Cooperation the approach of the Risk-Governance in Disaster Risk Management consists additionally to the representatives of governances also of stakeholders from private sector and from civil societies. An efficient DRM requires engagement and collaboration of all relevant actors and stakeholders. This however depends on the layout of the individual programs, target groups or involvement of the different levels of government. Accordingly, the multi-level approach aims to bring all levels together with the relevant stakeholders. NGOs play a very important role here as they can implement tasks that are target-group oriented. Private sector is particularly important concerning available capacities and possible exploitation of the respective synergies or constructive cooperation. The GIZ Initiative for DRM highly supports interconnection among various stakeholders and therefore in its methodology focuses on exchange between actors and collaborating countries for building on innovative solutions and development of appropriate and applicable approaches for finding solutions. The approach promotes in particular an exchange of knowledge and technology as well as education and qualifications on various context among governance, private sector and civil societies.

Related links:

ASB <http://www.asb.de/view.php3?show=5100005900162>

Deutscher Feuerwehrverband <http://www.dfv.org/>

DKKV <http://www.dkkv.org/>

DRK <http://www.drk.de/>

Malteser <http://www.malteser.de>

Contextual Drivers of Progress

Levels of Reliance

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Description (Please provide evidence of where, how and who)

DKKV itself brings together actors from all areas of DRR in its assemblies and meetings, conferences and projects, which is why it functions as one of the main drivers for

The German Development Cooperation perceives meaning of climate change during the last years. This is a challenge for many countries, which should be encountered in a very coordinated way. The impact of climate change manifest itself through the sea level rise, higher variability of the rainfall and the mere weather events especially causing damages weather events. These show an interaction of different themes of DRM as natural phenomena can cause large-scale disaster events as well as arising of more intensive of little events that are extensive disasters, which hardly noticed by Media.

Future Outlook

Future Outlook Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Overall Challenges

The challenges are two-fold: first, there are areas to improve in the existing disaster prevention and management system, then there are challenges that will result from future long-term changes, both in vulnerability and external conditions such as climate change. To cope with these challenges several strategies can be pursued. The biggest challenge in the Strategic Goal Area, as explained in Section 1, lies in the area of resilience on all levels by the build-up of regulatory frameworks (top-down) and especially in strengthening awareness and consciousness in the German population (bottom-up). This generally entails enhancing awareness and sensitivity to natural hazards and integrating all aspects of sustainable development with a special focus on a local communal level to improve individual willingness and ability to prepare individuals and households for hazardous events.

This also has to be considered in the case of the “German strategy for Adaptation to Climate Change” (DAS), as not only research efforts and political planning are needed, but also efforts to increase awareness in the population. The “Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety” (BMUB) promotes these, for example, through campaigns and appropriate information materials. One issue, however, is that natural disasters are only perceived as a key issue when they occur and DRR is not yet a main focus of German policy. As a result, the major challenge is the integration of this topic into public consciousness. As a result, DRR is to be addressed simultaneously in many diverse political and administrative structures, for that reason, however, posing a major challenge.

The challenges for the German development cooperation lie primarily in the fact that DRR is not a main topic due to its cross-cutting nature and consequentially it must compete with other pertinent issues for attention, operational readiness and financial resources. But the integration of DRR is recognised as a necessary strategy for long-term development cooperation and planning. Therefore it has to be integrated into standard documents and methods as well as the financial budget.

At the level of the German Development Cooperation three issues hinder an effective integration of Disaster Risk Management. The first is related to the opposition a Multi-Risk-Analysis provokes due to the implications of the results of such a study. Land

use and the price of the estate could change notably with consequences for its owners. Thus, it is hardly possible to have a nationally agreed analysis. The second overlapping aspect is the low political attractiveness to reduce disasters. The reason for this is that negotiation processes are difficult and take a long time, and often end with less satisfactory results. Unfortunately, assisting the local communities during the disaster and/or inaugurating the newly reconstructed buildings is still more attractive for the media. The third issue is the independency of sectorial ministries, where it is very difficult to achieve agreements and cooperation. Therefore, without having a good basis of information and coordination it is not possible to integrate disaster risk management into sectorial development plans.

Thus, Disaster Risk Management cannot enforce itself but has to be embedded into standard policies and regulations. The Federal Ministry for Economic Cooperation Development (BMZ) and the Federal Foreign Office (AA) act in the German Development Cooperation having different requirements and partners that use varying concepts. It is recommended to establish DRR as a BMZ internal and a cross-cutting inter-agency topic.

Future Outlook Statement

Regarding potential risks arising from Climate Change the Federal Government introduced the DAS which was concretized in the “Adaptation Action Plan” in March/April 2011. Until the end of 2015 a progress report will evaluate the German Strategy for Adaptation to Climate Change, the Action Plan, and proposals concerning their continuation and further development. This report will be presented by the Interministerial Working Group and will comprise a future "Action Plan for Adaptation II".

The challenges as outlined above need to be addressed from many angles in accordance with the cross-cutting nature of DRR, including federal approaches as well as strictly local ones based on private initiatives.

From an international point of view the overall future goal is to strengthen local resilience and to decrease local vulnerability. This bottom-up approach should be a central focus of DRR in the development cooperation, poverty reduction and the crosscutting integration of DRR in all programmes and projects.

The “Position Paper of the Federal Government on Disaster Reduction in Foreign Countries” (see link – in German only) recognises DRR in partner countries as one of the main topics for humanitarian aid, development-oriented emergency aid and development cooperation. It determines DRR as one of the most important future issues for sustainable development.

For the German development cooperation DRR will become more and more relevant during the next years due to an increasing disaster risk in developing countries.

Consequently, the long-term aim is the ability of the affected countries to mitigate and respond to disasters more independently. Therefore regular disaster risk assessments and analyses of endangered countries and regions are planned along with the adaptation of the aforementioned challenges. The German development cooperation has recognised the need of DRR for sustainable development.

In-between disasters there exists a special political responsibility for constantly enhancing protective and resilience building measures for the population.

Related links:

Position Paper of the Federal Government on Disaster Reduction in Foreign Countries (in German only)
<http://www.auswaertiges-amt.de/cae/servlet/contentblob/343782/publicationFile/3338/katastrophenvorsorge-grundsaeetze-positionspapier.pdf>

Future Outlook Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Overall Challenges

As already made clear in Section 1, the cross-cutting nature of any DRR approach enforces multidisciplinary/multistakeholder approaches. Specifically this means that many aspects have to be considered, as also mentioned in Section 1.

Resilience relies on three pillars: long-term prevention, early warning and disaster response. Long term prevention is prevalingly based on top-down mechanisms, such as federal legal frameworks, codes, information systems, co-financing measures/projects of other administrative levels, establishing research programmes, coordinating capacity building in DRR. At the national level there are various adaptation strategies and efforts to strengthen institutions and capacities for DRR, such as the “New strategy for civil protection in Germany“ (see Section 1 for a full overview) or the approaches of the “Federal Office for Civil Protection and Disaster Assistance“ (BBK) to protect critical infrastructure.

The bottom-up approaches work complementarily. The German administrative structure begins with the Laender and comprises very local/household-oriented structures, in which the NGO/private organisations are of enormous importance. The communal authorities have a duty to keep the local actors prepared and strengthen their institutional capacities. Nevertheless, there are some challenges in finding a common approach to the various tactics, techniques, and the management of local, regional and national levels between the variety of actors from the state and civil society.

From an international perspective, the development of methods and instruments to strengthen the institutions and capacities in partner countries of the German development cooperation is the main challenge for future strategies. In every country, responsibilities are regulated differently based on the project level and degree of decentralization. Generally transferable principles must be identified and inferred with situation-specific attempts, as there are no real blueprints to follow. Disaster reduction must contribute to the stabilization of the development process in partner countries, which is why Capacity Building plays a determining role in the strategies of the German development cooperation today as well as in its future work.

Recourses in civil protection are scarce and significant increase of staff at all levels is required. Additionally all members of the communities need to be embedded into preventive actions.

GRC observes the need to strengthen the coping mechanisms of communities living in disaster prone areas, to provide disaster proof infrastructure for safe drinking water and health services and to substantially support the managerial structures for disaster management (DM) and DRR in these communities. The national Red Cross and Red Crescent societies are ideally placed to assist the national authorities in the establishment and the running of DM- and DRR structures.

Future Outlook Statement

The German DRR is constantly developing and its institutions are strong and reliable. There are some challenges that have to be treated in the further institutionalisation of DRR. Through the “German strategy for Adaptation to Climate Change” (DAS) and other strategies like the EU flood directive the public authorities and the population are becoming more sensitised and resilient. DAS also aims at strengthening institutional capacities such as through “Climate Service Centres” and the public resilience to hazards. This also has to be increased through concrete and active strategies for DRR, which rely on several institutions, each with its own legal framework. This results in sectorial strategies and efforts to strengthen institutions and capacities for DRR. Therefore the recent cooperation between federal authorities have been intensified and needs to be further strengthened.

In order to achieve DRR, a multidisciplinary/multistakeholder strategy is necessary as a result of the cross-cutting nature of DRR. This means the integration of DRR aspects in both top-down and bottom-up approaches to disaster prevention, early warning and disaster response, including increasing resilience and awareness, decreasing vulnerability and exposing hazards on all levels, globally to locally. Any systematic approach to this goal comprises planning and implementation of adaptation strategies, and the entire spectrum of development cooperation. The increasing awareness of threatened populations as well as political decision-makers will be a precondition for all sustainable disaster reduction efforts.

As already indicated in the section "Drivers of Progress", capacity development is a key objective of the Development Cooperation in Germany. All related mechanisms and institutions have to regularly adapt to the new challenges and developments. The German Development Cooperation actively works on the various levels (from community to national level) in cooperating countries. In order to support disaster risk management processes, methods and instruments on all levels are updated regularly. Every country has different responsibilities for a respective level or grade of the decentralization. Overall, transferable principles or regulations need to be identified and combined with the factors that are related to each situation. However, the German decentralized and subsidiary DRM system is still attractive for other countries.

In order to achieve the above-mentioned objectives in the German Development Cooperation it is necessary to have a coherent approach. It is meaningful to have a close inter-ministerial cooperation within the framework of the guidelines of the HFA (or HFA-2 agreement) as well as close and continuing coordination with multilateral partners in the field like the European Commission and specific departments and the World Bank. In this context the BMZ finances a new Global Initiative on Disaster Risk Management. We recommend to accordingly organise in-house policies and in particular to promote a consequent implementation with regards to the Development-Oriented Emergency and Transitional Aid (ESÜH).

Future Outlook Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Overall Challenges

The aim and at the same time the largest challenge of international cooperation is the integration of DRR in emergency aid without diminishing the speed of reaction. This can succeed only if procedures are standardized and, above all, the necessary data exists for the subsequent phases to be based upon.

A DRR policy inside GRC is in place. Disaster preparedness plans and contingency plans are incorporated in the RC/RC policies relevant to this subject. However, they need political and financial support for the implementation in each country.

Future Outlook Statement

The official "Strategy of the Federal Foreign Office for Humanitarian Assistance

Abroad” from November 2012 highlight the importance to “achieve preparedness, improving response capabilities before disaster strikes and strengthening local structures” for Germany’s humanitarian assistance (see link).

There is an urgent need to combine DRR and climate change adaptation in the future. DRR and disaster response should be embedded as key elements of adaptation strategies. Adaptation funding should cover increased costs of humanitarian action to respond to climate-related disasters.

Services like the European Earth Observation Programme, Copernicus may provide important impetus within DRR in future. Environmental information, damage assessments, risk assessments and appropriate information for the civil protection can facilitate all phases of disaster management. Supra-regional initiatives can intensify the cooperation between the involved European actors involved in DRR.

In order to enhance sustainability DRM should be considered acting together with the emergency response and reconstruction. However, in reality this often fails due to the urgency of response and different implementing actors. The Development-Oriented Emergency and Transitional Aid (ESÜH) that promotes Development Cooperation and Capacity Building of BMZ can be an efficient instrument in this case. ESÜH integrates aspects of “Linking Relief, Rehabilitation & Development” (LRRD) or “connectedness” in order to enhance resilience and considers in particular challenges in high-risk countries (like fragility or conflicts).

Related link:

http://www.auswaertiges-amt.de/cae/servlet/contentblob/634144/publicationFile/177842/121115_AA-Strategie_humanitaere_hilfe.pdf

Stakeholders

Organizations, departments, and institutions that have contributed to the report

Organization	Organization type	Focal Point
Global Fire Monitoring Center (GFMC)	Academic & Research Institutions	GFMC Director: Prof. Dr. Johann G. Goldammer
Federal Ministry for Economic Cooperation and Development (BMZ)	Governments	
CARE Deutschland-Luxembourg	Non-Governmental Organizations	
German Cartographic Society (DGfK)	Non-Governmental Organizations	Horst Kremers, Engineer, Information Scientist / Office
German Meteorological Service (DWD)	Governments	
German Red Cross (GRC)	Non-Governmental Organizations	
Federal Office of Civil Protection and Disaster Assistance (BBK)	Governments	
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	Private Sector	
German Association for Water, Wastewater and Waste (DWA)	Non-Governmental Organizations	
The Johanniter	Non-Governmental Organizations	
German Insurance Association (GDV)	Private Sector	
Helmholtz Centre Potsdam - GFZ German Research Centre for Geosciences	Academic & Research Institutions	
Munich Reinsurance Company	Private Sector	
German Federal Environment	Governments	

Agency (UBA)

Welthungerhilfe

Non-Governmental
Organizations