



Pakistan

Linkages for Effective Disaster Management in Khyber Pakhtunkhwa Province

Institutional and Capacity Development for Civil Protection

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List of Acronyms and Abbreviations

ADPC	Asian Disaster Preparedness Centre
BMZ	German Federal Ministry for Economic Cooperation and Development
CDPM	Centre for Disaster Preparedness and Management (University of Peshawar)
DDMA	District Disaster Management Authority
DPMP	Disaster Preparedness and Management Project
ERRA	Earthquake Reconstruction and Rehabilitation Authority
FATA	Federally Administered Tribal Areas
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH
ICIMOD	International Centre for Integrated Mountain Development
IDP	Internally Displaced Person
NDMA	National Disaster Management Authority
NDMO	National Disaster Management Ordinance
NGO	Non-Governmental Organisation
PDMA	Provincial Disaster Management Authority
UNDP	United Nations Development Programme

Addendum in light of recent events

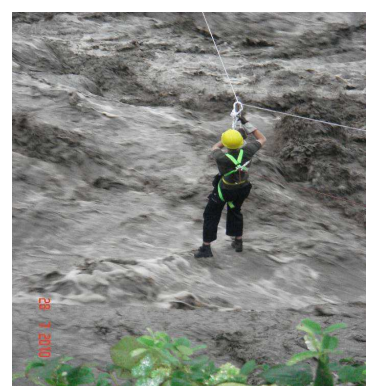
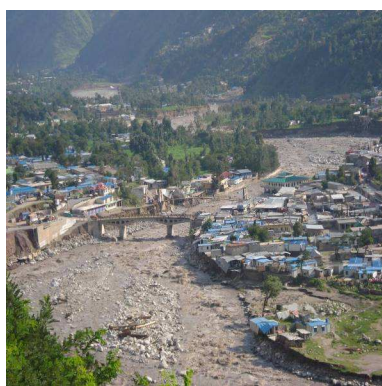
The present brochure was completed in July 2010, when the advisory project Supporting Disaster Risk Management in Khyber Pakhtunkhwa Province was concluded after three years. It summarises the lessons learned in the project, as well as the pilot activities that were launched to reduce disaster risk.

Without a doubt the impacts of the disastrous flooding in August 2010 have been devastating, and left us all shocked. They were of such a magnitude that the new structures established by the project could do little to mitigate them, the more so as the flooding also spread to regions outside the pilot districts and the province. We can say that in Manshera district in particular the coordination of early warning activities, the cooperation with volunteer organisations (also in remote regions) and the rescue measures implemented worked as well as they could have done under the circumstances. The division of responsibilities that had been laid down and the prior training of volunteers and administrators paid dividends and helped save lives there. The Centre for Disaster Preparedness and Management at the University of Peshawar, and the teams of volunteers trained in civil defence, also provided efficient support. At the provincial level it was helpful from the outset to have institutions with clearly defined responsibilities and officers for disaster management, even if these and other local actors were overwhelmed by the sheer scale of the disaster. At the national level, as the flooding spread there was renewed demand for the video clips produced in the media campaign initiated by the project to communicate disaster risk management messages.

Promising approaches were developed, though these are still in their infancy. Effective disaster risk management requires years of effort that also needs to be maintained in times of low intensity and frequency of emergencies and disasters. Disaster risk management is also a highly interdisciplinary field that must build on the capacities of functioning health, education, logistics and information systems.

Now, in the wake of the worst flooding in a century, disaster risk management will once again be a high priority, adding a timeliness to the lessons learned presented in this brochure. They offer an insight into the challenges to come, and can serve as a starting point for future projects and programmes.

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH September 2010
Islamabad (Pakistan) – Eschborn (Germany)



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Summary

North-western Pakistan is a region where the population face natural disasters and their impacts time and time again. One particularly serious event was the earthquake of October 2005, in which more than 70,000 people lost their lives. Flooding, too, claims lives every year, as well as inflicting huge material losses on the population, who are in any case poor. The 2005 earthquake led the Government of Pakistan to recognise the need to improve disaster management, so that the number of victims and the scale of damage caused by natural disasters in the future could be reduced or such outcomes avoided altogether. At the request of the Government of Pakistan, German development cooperation therefore supported Khyber Pakhtunkhwa province, which had been hardest hit by the earthquake, in establishing a disaster management system. In this context, in early 2007 the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ), began delivering the German inputs to the 'Disaster Preparedness and Management Project' (DPMP) in Khyber Pakhtunkhwa.



Earthquakes and also floods hit the population in Khyber Pakhtunkhwa province

The project first of all focused on the organisational development of the new Provincial Disaster Management Authority (PDMA). The PDMA was designed to either ensure improved management of the negative impacts of disasters in the future, or to prevent such disasters where possible through disaster risk management measures. To this end its staff members were trained, and planning and implementation instruments were developed to enable the new authority to perform its core tasks. Further key activities of the project to support the sustainable ongoing development of disaster management included the motivation of policymakers and decision-makers in other government departments and institutions, and the efficient networking of additional disaster management actors. The advisory inputs delivered by the GTZ-supported project succeeded in raising overall awareness of the relevance of disaster risk management among policymakers and administrators, and supported the development of disaster risk management capacities among these actors.

Key elements of comprehensive disaster management also include its mainstreaming as an issue of concern to society, and the development of the emergency services. To raise popular awareness of natural hazards and to make people aware of what to do in an emergency, the authorities conducted media campaigns together with the project. Pilot measures to introduce elements of disaster risk management in school curricula were also implemented.

One key step toward more effective disaster response was the government of a professional rescue service establishment by the provincial. Given the insecure political situation, general civil protection against other hazards – especially terrorist attacks – is a key challenge. The fire brigade and emergency rescue services will therefore in the future be deployed both in everyday emergencies and in disasters. To promote emergency cover for all, including in remote areas, pilot measures were implemented to train civil defence and first aid volunteers, to improve the networking of rescue teams at village level, and to establish a semi-professional rescue team at district level. In order to pool the professional disaster management expertise in the region and guarantee a continuous process of national and international professional exchange, the University of Peshawar – with support from the project – established a Centre for Disaster Preparedness and Management, as well as a corresponding postgraduate course.

Despite the significant deterioration in the security situation, the project succeeded in showing a continuous presence in the project region, which made a major contribution toward promoting trust. A further factor inducing trust was the project's flexible and timely responses to the partner side's unfolding needs, as manifested for instance by the project's support of humanitarian assistance measures during the refugee crisis in the wake of the military clashes in the Swat Valley.

The interdisciplinary approach pursued by the project, which incorporated and networked various political levels and a large number of stakeholders, enabled it to provide key support in the establishment of the disaster management system in Khyber Pakhtunkhwa. By practising disaster risk management the authorities are now able to reduce or even avert the negative impacts of disasters, and if a disaster does occur they are able to deliver timely, effective and appropriate assistance to those affected through improved disaster response. As a result, the overall safety of the population has improved significantly.

The organisational consultancy inputs will be continued in the future by the 'Administrative Reform in Khyber Pakhtunkhwa' Programme, supported by German development cooperation. A particular focus here will be on improved coordination and cooperation between the provincial, district and sub-district levels.

1. Introduction

On 8 October 2005 an earthquake measuring 7.6 on the Richter scale struck the north of Pakistan. The disaster caught the population and the government completely unprepared, claiming more than 73,000 lives, and destroying a large proportion of the infrastructure as well as countless public and residential buildings. Almost 3,000,000 people were made homeless, which in view of the impending winter in the mountainous regions meant a further deadly hazard for the survivors. In the few cases where disaster management structures were in place, these were inadequate. The immediate plight could only be mitigated with massive international assistance.

In the past, Pakistan has regularly been afflicted not only by earthquakes, but also by other natural events such as flooding and drought. The population were often unable to cope with the negative impacts of these disasters without external assistance. The authorities were also often overwhelmed by the emergency situation. Moreover, disaster management was in most cases confined to short-term rescue measures. There were barely any preventive measures to avert disasters or reduce their possible impacts. The devastation wrought by the earthquake in 2005 demonstrated clearly to those in charge that appropriate preventive measures, such as earthquake-resistant construction methods, could have saved many human lives. The Government of Pakistan therefore decided to reform the disaster management system, which until then had been operational only to a limited extent, at all levels of the administration. In December 2006 it developed a new disaster management strategy, in connection with which it requested the German Government to support implementation of the reform in the province of Khyber Pakhtunkhwa, which had been hardest hit by the earthquake.

The Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) had already been operating in Khyber Pakhtunkhwa since the spring of 2006, on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), in a project to support disaster preventive reconstruction. To prevent future earthquakes from having such disastrous impacts, earthquake-resistant construction methods were being introduced and disseminated. In March 2007 the 'Disaster Preparedness and Management Project' in Khyber Pakhtunkhwa began its work. The project focused on supporting the institutional development of disaster management authorities, and on generally improving disaster risk management and disaster response. This was designed to prevent future disasters wherever possible, and to enable the local authorities and the population to respond effectively to the impacts of any disasters that might occur.

In the course of the project, which ended in June 2010, the focus had to be adapted to the changing needs of the Pakistan side at short notice on repeated occasions, particularly as a result of the serious deterioration in the security situation. Initially the focus was on delivering organisational development inputs to the emerging Provincial Disaster Management Authority. Later on the project also supported the authorities in responding to disasters. Parallel to that, pilot measures were launched in various areas of disaster management.

The present publication first of all describes the initial context in Pakistan. It then goes on to explain the approach pursued by the project, the measures implemented, the results achieved, and the factors that played a role in their achievement. It is hoped that this will provide ideas for future projects, and make the lessons learned available to a broad public.



Winterproof emergency shelter

2. Khyber Pakhtunkhwa Province: A Region Afflicted by Disasters and Conflicts

Natural and anthropogenic hazards in Khyber Pakhtunkhwa

A hazard exists where there is a certain probability of an event occurring that threatens the population's personal security, their lives or their livelihoods. When we talk about disasters we usually mean extreme natural events such as earthquakes, flooding or drought. Hazards may also be caused by human actions, however. This may involve accidents, the failure of vital infrastructure, or hazards caused by wars, conflicts, terrorism or crime.

Khyber Pakhtunkhwa's location in a zone of tectonic weakness makes the likelihood of earthquakes in the region particularly high. Although earthquakes occur relatively rarely in relation to other natural hazards, they usually have the potential to

cause major damage¹. A much more frequent occurrence is flooding, which occurs almost every year during the monsoon season. These floods leave a substantial material damage in their wake, and claim human lives time and time again. In the mountainous regions, flooding and thawing very often cause landslides and torrents, and in rare cases also glacier run and glacial lake outburst floods². In the north of the province a threat of avalanche holds sway during the winter, while in the south droughts may occur in the summer.

As well as the hazards caused by the natural threats described above, the hazards caused by accidents and anthropogenic

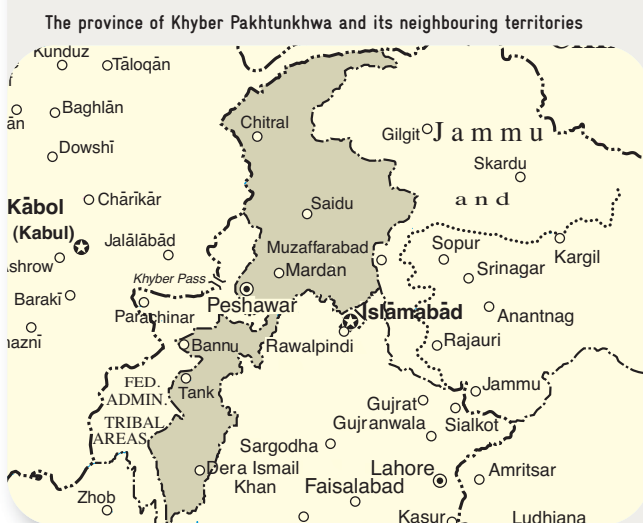


The landscape of Khyber Pakhtunkhwa

The province of Khyber Pakhtunkhwa³

Khyber Pakhtunkhwa is physically the smallest province of Pakistan. It shares borders with the special territory of Gilgit-Baltistan, partially autonomous Kashmir, the province of Punjab, the Federally Administered Tribal Areas (FATA) and Afghanistan. Khyber Pakhtunkhwa is divided into 24 districts, each with their own administrative structures. The districts are further broken down into smaller units called tehsils, and the lowest administrative units are the union councils, each of which unites several villages.

Today, some 21.7 million people live in Khyber Pakhtunkhwa. The population has virtually quadrupled since 1950. The region is also home to 1.8 million registered Afghan refugees, which makes Pakistan the country with the largest refugee population in the world. The population of the provincial capital of Peshawar is estimated to be 2 to 3 million. Over two thirds of the region's population live in rural areas, and 99.4% are Muslims. The adult male illiteracy rate is around 50%, while the rate for women is as high as 81%.



¹ International Disaster Database EM-DAT, Centre for Research on the Epidemiology of Disasters

² Glacier run is a phenomenon involving flash floods that occur when the melting or breaking off of glacial ice releases torrents of water that have up to then been dammed. These are usually glacial lakes that have been prevented from escaping by a glacier, and are suddenly released when the ice becomes thinner.

³ Then known as North-West Frontier Province and in April 2010 renamed in Khyber Pakhtunkhwa



Landslides



Flash floods



Earthquakes



Flooding

Natural hazards in Khyber Pakhtunkhwa

disasters are also increasing. An increase in the volume of traffic is also leading to an increase in traffic accidents. Infrastructure that is in a poor condition or is inadequately maintained can for instance cause the bursting of dams, industrial accidents or power failures. A further threat in urban zones is the rapid spread of fires.

Disaster management has become a more urgent matter in recent years due to the increase in terrorist attacks in the region, and the internal displacement caused by the military counter-measures. Consequently, disaster management in Pakistan today involves a comprehensive approach to both natural and anthropogenic hazards.

Vulnerability factors in Khyber Pakhtunkhwa

Extreme natural events only become disasters when they entail negative impacts on the lives, health and livelihoods of the population, and when this occurs on such a scale as to exceed the capability of the society concerned to cope unaided. The scale of a disaster is dependent not only on the hazard, which is to say the natural event and its level of intensity, but also on the concerned society's vulnerability to the event in question.

This was demonstrated with particular clarity in the case of the Pakistan earthquake in 2005. Many of the negative impacts occurred only as a result of factors such as dilapidated building stock and the fact that people were unaware of the correct

course of action in an earthquake. This meant that many buildings collapsed and many people lost their lives because they did not seek protection in the open in good time. The authorities, the emergency services and the population on the ground were unable to cope with the consequences. Preventive measures could have reduced the negative impacts. This would include for example earthquake-proof construction, raising the population's awareness of what to do in case of disaster, and contingency plans guaranteeing coordinated assistance in an emergency.

There are a large number of such vulnerability factors that turn a hazard into a disaster. These include factors that on the one hand increase the negative impacts of natural events, and on the other hand limit the ability of the population to cope with the disaster.

Economic factors: Khyber Pakhtunkhwa is one of the poorest provinces in the country, and most of its inhabitants live from agriculture. Extreme weather events therefore strongly influence food security, which is in any case fragile. Should a disaster occur, the consequences are particularly severe for the poorer sections of the population. These groups have virtually no financial reserves with which to offset the impacts of these events.

Social factors: The major social inequality present in Khyber Pakhtunkhwa makes the poorer sections of the population much more vulnerable to disasters than others. This is largely due to their inferior access to resources, infrastructure and information,

The earthquake in 2005

The earthquake that occurred on 8 October 2005, which measured 7.6 on the Richter scale, was the largest ever in Pakistan. It shook the entire north of the country, as well as parts of India and Afghanistan. The epicentre was located close to the city of Muzaffarabad in Kashmir, and the quake wreaked havoc and devastation in the five districts of Abbottabad, Mansehra, Batagram, Shangla and Kohistan. In Pakistan more than 73,000 people lost their lives, and 130,000 were injured. Almost three million people were made homeless and lost all they had in the wreckage. Some three quarters of all public buildings such as health posts, schools and administrative buildings were either badly damaged or razed to the ground.



A building destroyed by an earthquake

and the lower self-help capabilities that this produces. Particularly vulnerable are refugees and internally displaced persons, who form a large group. The military offensive against the radical Taliban groups in the Swat Valley in 2009 caused some 2.5 million people to flee within the country. As a result the region faces a permanent humanitarian crisis, because the refugees leave their livelihoods behind and then find it difficult to gain access to basic infrastructure, or have no access at all.

Society in Khyber Pakhtunkhwa is largely traditional and patriarchal. In some rural regions women have only limited access to education. Their radius of movement is largely confined to the household, which makes them particularly vulnerable if an earthquake occurs. In the context of the region's culture and religion, delivering emergency treatment to women may also present a problem. First-aiders are usually men, who are not allowed to treat women that are not members of their own families.

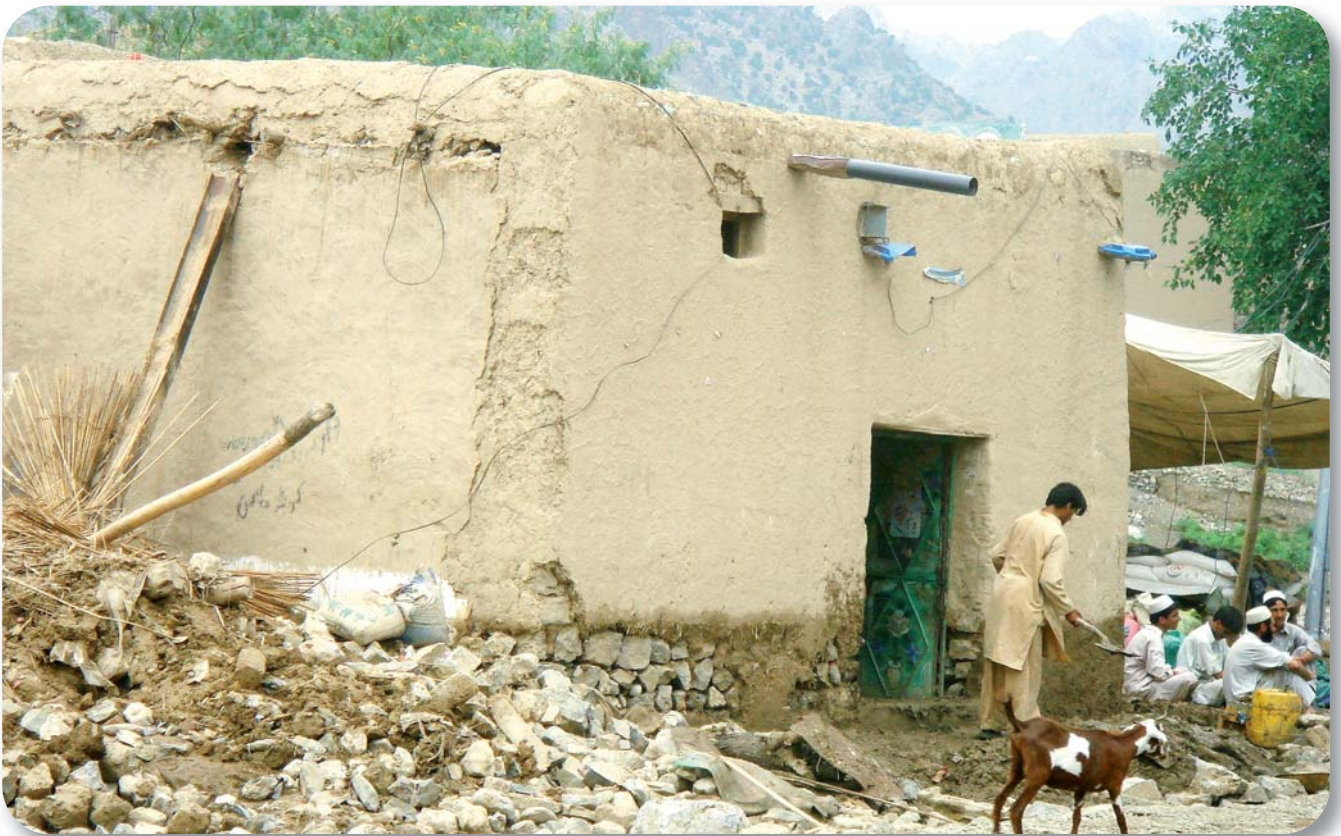
Physical factors: In the urban zones, population growth caused by migration and the birth rate are giving rise to elevated population pressure. This is causing the poor population to also settle in high risk areas such as river banks that are suscep-

tible to flooding, and slopes that are susceptible to landslides. Many settlements arise without planning, as a result of which the quality of construction and access to infrastructure are poor.

In Khyber Pakhtunkhwa, however, unsafe construction methods and dilapidated buildings are a problem that is by no means limited to the poor population. Basic infrastructure is often deficient. Technical facilities, water management infrastructure, transport infrastructure, vehicles and electricity grids are often outdated or inadequately maintained. This infrastructure is therefore not only not disaster-resistant, but also harbours additional risks.

Ecological factors: The province is considered the most forest-rich region of the country, although in recent years forest stands have been decimated by uncontrolled logging. The loss of vegetation and the erosion caused by deforestation are increasing the risk of landslides and flooding.

Overall, environmental awareness in the region is not very pronounced. In conjunction with increased population pressure, this is leading to an over-utilisation of natural resources and further erosion.



Poverty and poor building stock – vulnerability factors for disasters

3. Paradigm Shift: Toward Interlinked Disaster Management in Pakistan

The objectives of comprehensive disaster management are to prevent disasters, or mitigate and eliminate their negative impacts as quickly as possible. Disaster management therefore encompasses both disaster risk management and disaster response measures.

While first rescue measures following a disaster aim to minimise loss of life, injuries and damage, the humanitarian aid that follows is designed to mitigate the negative impacts through the provision of medical care, aid goods and emergency accommodation. Humanitarian aid should transition directly into reconstruction, so that the society in question can return to normality as quickly as possible. A key principle here is to reconstruct what has been destroyed while at the same time also improving it, in order to also derive some positive effects from the disaster. This is a fundamental principle of disaster management. A disaster should be a learning experience; the lessons learned should lead to future behaviour that prevents such disasters from occurring again in the same form.

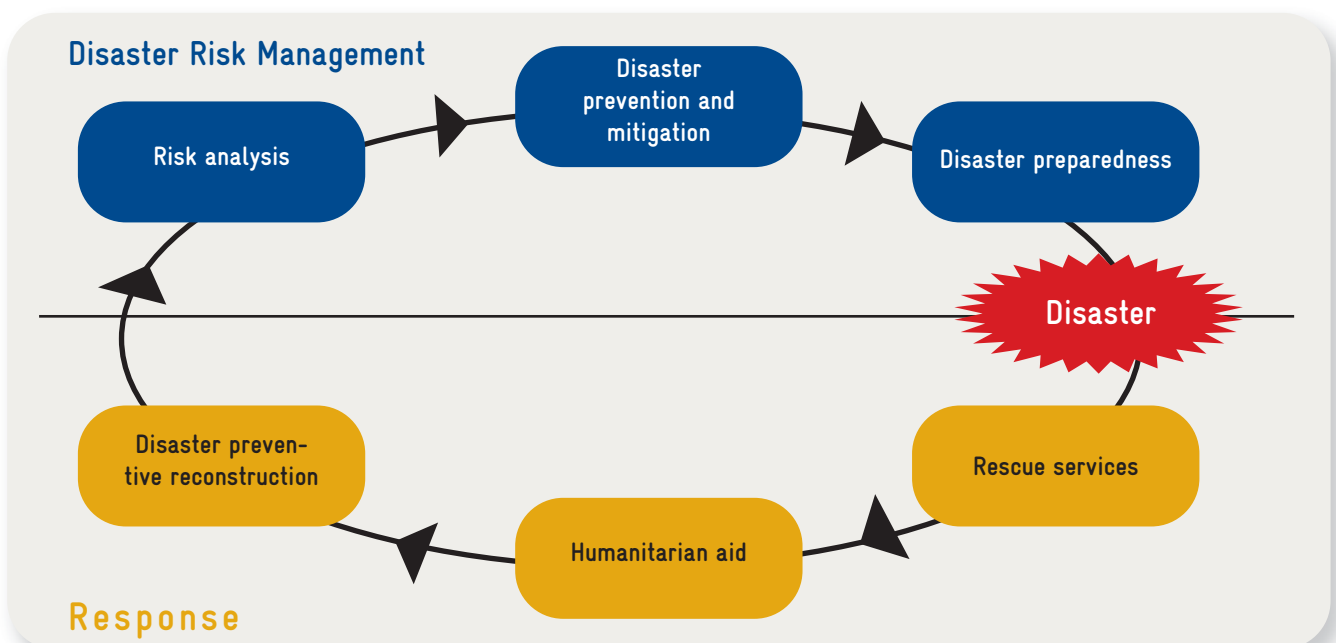
Disaster risk management aims to prevent disasters and minimise negative impacts (disaster prevention and mitigation). It also includes disaster preparedness. Only sound preparation can enable swift and coordinated action in the event of disaster, in order to save as many people as possible and minimise the damage to their property and infrastructure. Risk analyses are designed to identify hazards and appropriate prevention and mitigation measures before a disaster occurs.

An awareness of how important risk management measures are often only develops after a disaster has occurred. In the wake of

the 2005 earthquake in Pakistan, for instance, a paradigm shift took place. Up until then, disaster management had been understood very much in terms of response, which is to say that corresponding measures were initiated only after a disaster had occurred. Furthermore, disaster response capacities were in most cases inadequate and poorly coordinated. Barely any attention was paid to disaster risk management – the population were not aware of the possibilities of disaster risk management, nor was the issue sufficiently mainstreamed at the institutional level.

Accordingly, the Government of Pakistan identified the following weak points in the country's disaster management system:

- One of the key agencies responsible for disaster management hitherto had been the Civil Defence Department. However, this agency had few resources at its disposal and was not in a strong position either politically or as an institution. Its mandate focused primarily on civil defence in case of war or conflict.
- At the political level the regulations and institutions for disaster management were weak, and the issue was poorly integrated into political processes. Disaster management tasks were not clearly defined within the municipal, district and provincial administrations. Moreover, the authorities did not address the issue on a continuous basis, but only ever in response to a particular disaster.
- There was barely any awareness within public institutions of the link between disaster risk management and sustainable



The disaster management cycle

development. Those responsible were in many cases unaware of the links between disaster risk management⁴ and their own areas of specialisation.

- Neither the population nor officials were sufficiently aware of disaster management issues. They lacked knowledge of the hazards, emergency assistance measures and the right procedure in case of emergency, as well as knowledge of how disasters can be prevented and additional risks minimised.
- Whenever major damage occurred, the Civil Defence Department and the existing emergency services (police force, municipal fire brigade and ambulance service) would deliver responses that were usually independent of each other and uncoordinated. This was because there was no prior consultation or agreement, nor was there a joint emergency call centre or joint operational command and control. Furthermore, the few civil disaster response personnel who were available were often poorly trained and poorly equipped. Even today, the army has to help out with disaster response in many cases.

Against this background the Pakistan Government decided to reform the entire disaster management system. Since this task went beyond both the mandate and the capacities of the existing Civil Defence Department, decision-makers opted to create a new agency. This underlined both the growing relevance and the new orientation of disaster management.

The first step of this comprehensive reform was the adoption of the National Disaster Management Ordinance (NDMO) in December 2006. This defines the tasks and responsibilities for disaster management, while placing explicit emphasis on the need for disaster risk management. On this basis the National Disaster Management Authority (NDMA) was established. Corresponding authorities are planned for the provinces and districts, namely the Provincial Disaster Management Authorities (PDMAs) and the District Disaster Management Authorities (DDMAs). The organisational design of these authorities and their tasks were not defined clearly at the outset and only took on concrete form gradually.



Representatives of the PDMA and the Mansehra district government assessing the situation on the ground following a landslide

The disaster management authorities and their tasks

The NDMA is the supreme national authority responsible for all disaster management tasks. In 2007 it drew up a national strategy for the establishment of enabling institutional frameworks for disaster management⁴, which also included a disaster prevention component. Its core tasks include the definition of strategies, guidelines and standards, the coordination of civil defence measures in case of national disasters, and the support of authorities at provincial level.

The PDMAs are mandated to put in place effective systems for disaster risk management and disaster response in the provinces – regardless of the factors causing the hazard. They are responsible for developing and implementing corresponding strategies and legal guidelines at provincial level, the conduct of public information and awareness-raising campaigns, and the capacity development of the DDMAs. They are also mandated to network all the relevant governmental and non-governmental actors, and coordinate measures before and during a disaster.

The DDMAs will in the future be responsible for coordinating government departments, emergency services and non-governmental organisations at district level in order to ensure disaster preparedness and the delivery of an efficient response should a disaster occur. Their mandate includes the establishment of voluntary rescue teams at the municipal and village level, the creation of local early warning systems and the strengthening of community-based disaster risk management.

The Civil Defence Department is mandated to protect the population, particularly in urban centres, against the impacts of armed conflict, as well as – a more recent development – the impacts of disasters of any kind. To this end the Department promotes the training of the population and the establishment of voluntary civil protection units. It is envisaged that these will be closely networked with the DDMAs in the future.

⁴ Government of Pakistan 'National Disaster Risk Management Framework', 2007.

4. The 'Disaster Preparedness and Management Project' in Khyber Pakhtunkhwa

When the earthquake struck on 8 October 2005 the population and the government were completely unprepared, and the impacts could only be mitigated with massive international support. Following this experience it was decided that the disaster management system should be fundamentally reorganised. Up until that point there were barely any corresponding capacities and little expertise available in the country. In response to a request by the Government of Pakistan, the German Government therefore commissioned GTZ to support the efforts to reform the disaster management system.

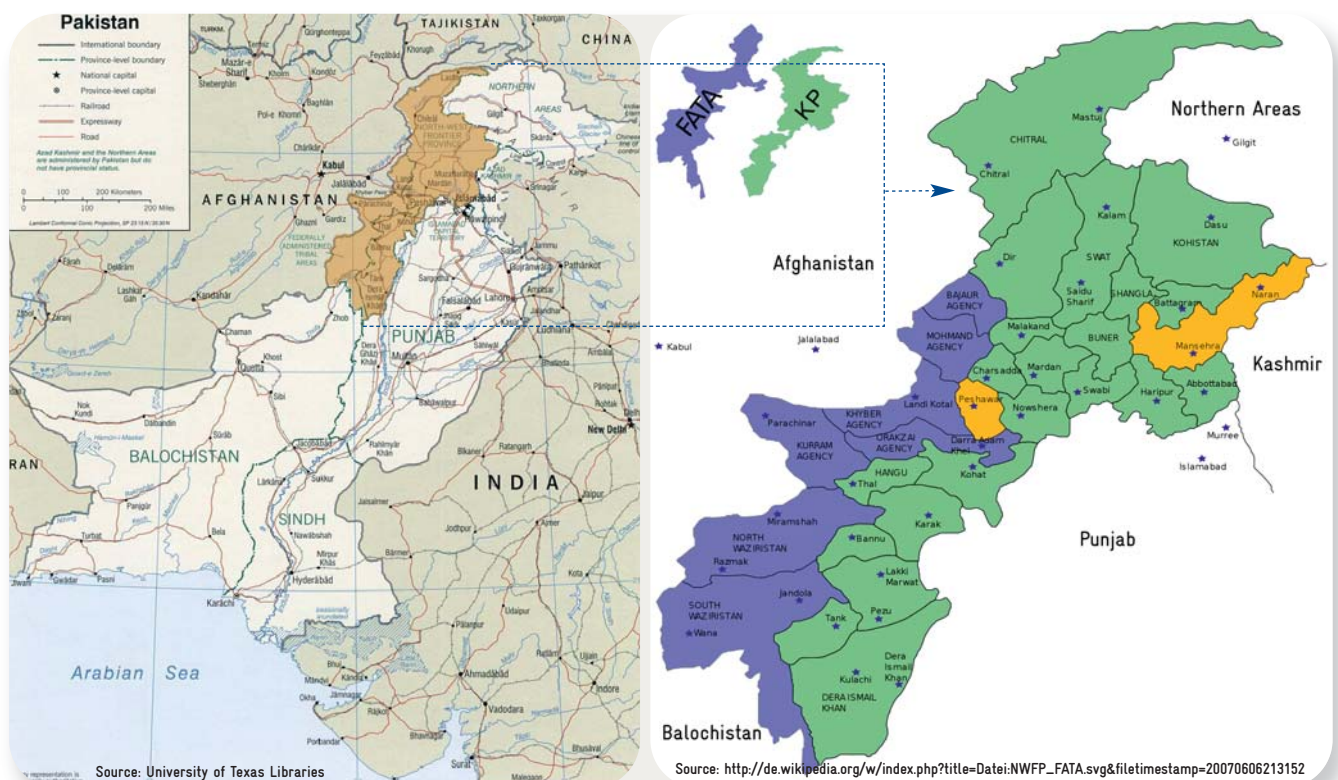
The project region selected for the GTZ project was Khyber Pakhtunkhwa, as this was the area hardest hit by the impacts of the earthquake in 2005. The pilot districts selected were Mansehra and Peshawar districts, as these provide good examples of the various hazard situations in urban and rural areas. Peshawar is an urban centre that faces flooding, accidents and fires, and at the same time is increasingly becoming the target of terrorist attacks. In the mountainous rural district of Mansehra flooding often causes landslides and flash floods, and the threat of earthquakes is very high. Urban and rural zones also differ considerably in terms of their socio-economic situation, infra-

structure and environmental conditions, which means that very different factors are responsible for the hazards faced by the population.

The objective of the 'Disaster Preparedness and Management Project' in Khyber Pakhtunkhwa was to strengthen the institutions and organisations in charge of disaster management so that they could prepare themselves for disasters and, if a disaster does occur, mobilise and coordinate the available resources efficiently. This includes supporting the capacity development of the emergency services, and promoting the participation of the population in disaster risk management and disaster response. The project therefore focused on delivering advisory services on various levels:

- **Institutional development:** Advisory services to support PDMA development and establish a disaster management coordination office at district level in Mansehra
- **Capacity development of the Civil Defence Department and the emergency services:** Capacity development support for the Civil Defence

The province of Khyber Pakhtunkhwa (KP) and Peshawar and Mansehra districts



Department and its voluntary units in Peshawar and Mansehra; development of a professional rescue service with 'search and rescue' and medical rescue units, a fire brigade and a control centre

- **Training and research:**

Establishment of a postgraduate course in disaster risk management at the University of Peshawar, and expert training

- **Raising the population's awareness:**

Media information campaigns on disaster risk management and what to do in an emergency, and integration of these issues into curricula.

This was designed to help improve civil protection against natural disasters in the project region, as well as to improve rescue in case of emergencies, accidents and terrorist attacks.

Actors and partners

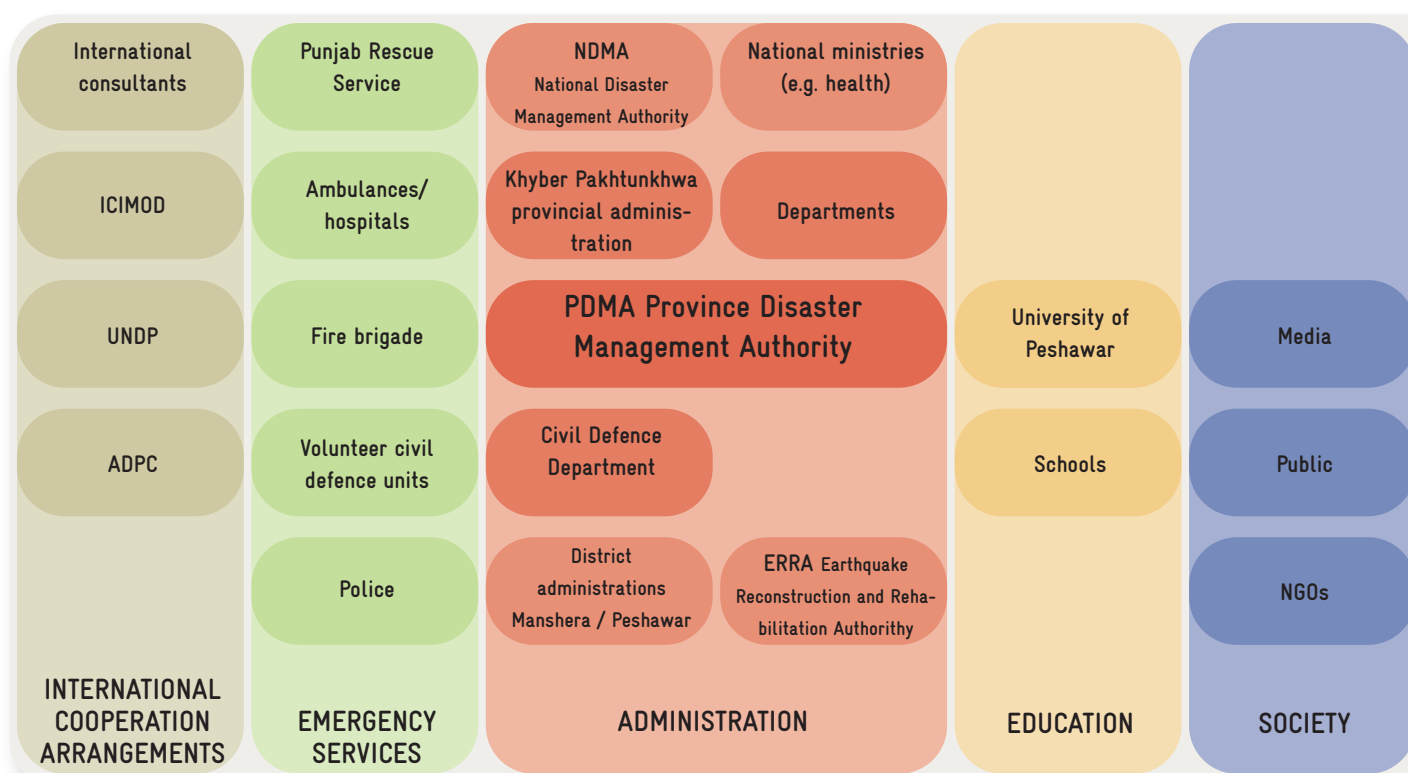
The key project implementation partner was the Khyber Pakhtunkhwa PDMA, which was still being established as the project was launched. Other important partners included the district administrations in Peshawar and Mansehra, which were the responsible authorities for local disaster management. A disaster management coordination committee within the Mansehra district administration emerged as the permanent secretariat of the planned DDMA. Since disaster risk management measures can be based in many different sectors, many departments of

the Government of Khyber Pakhtunkhwa, e.g. for interior affairs, health, construction and transport, were involved in the project, as were the officers responsible for these areas in the district and municipal administrations. The Civil Defence Department also acts as a focal point for voluntary emergency services and their training.

Together with the University of Peshawar and the Centre for Disaster Preparedness and Management (CDPM) established there, a postgraduate course in disaster management was created and a process of international and national expert exchange was launched. It is envisaged that the existing emergency services (ambulance, fire brigade and police) and the voluntary units of the Civil Defence will be integrated into the new system and trained. One key partner was the professional Punjab Emergency Service and its Emergency Services Academy in Lahore. Schools and the media played a key role in raising the awareness of the population. The project cooperated with local NGOs in the training of volunteers.

Cooperation with international organisations such as the International Centre for Integrated Mountain Development (ICIMOD), the United Nations Development Programme (UNDP) and the Asian Disaster Preparedness Centre (ADPC) were strategically important. These organisations are operating in the project region for a long time, are well networked and would be able to continue the approaches pursued by GTZ through their existing longer-term programmes.

Disaster management actors in Khyber Pakhtunkhwa



5. Measures and Results

5.1 Institutional development of the Provincial Disaster Management Authority in Khyber Pakhtunkhwa

When 'Disaster Preparedness and Management Project' in Khyber Pakhtunkhwa was launched in March 2007, the NDMA had only just been created. At that point the key project partner, the Khyber Pakhtunkhwa PDMA, was still in the early stages and in fact was not officially established until late 2008. A functioning and efficient agency is, however, a key prerequisite for the sustainable institutionalisation of disaster management. An agency of this kind will guarantee that disaster risk management issues are addressed continuously, whereas the Pakistani authorities had until that point only ever taken action in response to a disaster that had already taken place. The PDMA is mandated to put a functioning disaster management system in place in the province, and to coordinate the various departments and actors involved in this context. Past disasters had clearly demonstrated time and time again that coordination of the emergency services and the exchange of information between the responsible administrative units were poorly institutionalised.

The project therefore first of all advised the provincial administration on the organisational development of the PDMA, and on defining its tasks and working procedures. To help guarantee the PDMA's coordinating role the project also supported the development of various planning instruments.

The key advisory activities included:

- definition of the organisational structure and role of the PDMA together with the provincial government;
- development of coordination instruments enabling the PDMA to oversee existing resources in the province, and in case of disaster mobilise and coordinate these on a timely basis;
- participation in consultative meetings and advice on innovative administrative procedures;
- staff training;
- networking and coordination with other actors;
- cooperation with other departments to achieve networked disaster management.

In order to strengthen the PDMA's coordinating role an atlas on disaster risk management and disaster response in the province was first of all prepared. This includes a list of relevant institutions and NGOs, as well as emergency personnel, vehicles and equipment available in case of disaster.

In the long term it is planned to expand the available database and integrate this into an emergency preparedness information system. The basis for this was created by the establishment of a technical working group mandated to examine and analyse available data. Ultimately it is envisaged that the emergency preparedness information system will deliver relevant data to a Geographic Information System.

A further key aspect of comprehensive disaster management was the preparation of sectoral emergency plans. These defined the tasks of the departments for disaster risk management and disaster response. Two objectives were achieved. First of all, disaster risk management issues have been made an integral part of the political planning process. Secondly, the tasks of the departments in case of emergency have been defined.

The tasks of the PDMA include establishing corresponding authorities at district level – DDMA's. In most districts there are as yet no independent DDMA's, but only emergency coordination committees. In an emergency these spring into action as a



The Mansehra district administration meets to establish a disaster management coordination office.

kind of crisis management team, comprising representatives of various authorities. The project therefore supported the PDMA in establishing a disaster management coordination office in Mansehra district, to help ensure that the coordination committee is available and performs continuous work all year round. A local GTZ consultant supported the development of procedures and regulations on the ground. Together with municipal representatives, the district administration also developed minimum standards for voluntary teams on village level.

The official establishment of the PDMA in October 2008 marked a milestone in the project. The organisation chart developed for the new organisation got almost entirely adopted once PDMA got established. When the sectoral emergency plans were drawn up, the departments concerned identified their needs with GTZ support. In response to the applications submitted to the provincial government, provincial budget funds were then made available. The Local Government and Rural Development Department for instance received additional funds to develop the fire brigade in the cities and larger municipalities. The Forestry Directorate has received additional funds to develop its forest fire control capacities.

The key outcome of the strengthening of the PDMA is that disaster risk management has now become a mainstream long-term political planning issue. The project's main contribution to this was to help move disaster management – and especially disaster risk management – higher up the agenda by performing continuous advisory and awareness-raising work. As a result of this advisory activity, well trained and highly motivated actors are now pressing ahead with the further development of disaster management. The momentum of this process is also attributable to the close networking among these actors urged by the project.

5.2 Strengthening the emergency services: developing civil defence and establishing a rescue service

Following the earthquake in 2005, in addition to the lack of institutionalisation of disaster management, deficits in disaster response and rescue capacities were revealed. Fire-fighting, technical and medical rescue services were not sufficiently developed to ensure that the population could be protected, either in day-to-day emergencies or in case of disaster, because only few emergency service personnel existed. Moreover, the emergency personnel were poorly equipped and trained, and were not organised under a single system of joint operational command and control. As a result, professional rescue services in Khyber Pakhtunkhwa often do not reach the scene of the disaster immediately, which means that it is usually emergency assistance measures performed by the victims themselves or by voluntary helpers that save lives when a disaster occurs. The Civil Defence Department does maintain volunteer offices, although many of these are non-operational due to their lack of equipment and poor training.

Initially the project planned to support the development of the existing police, fire brigade and civil defence emergency services by providing training and materials, and establishing a single command and control structure. The Department of Health had already provided funds to strengthen emergency rescue services by providing ambulances, personnel and equipment. First training measures were held for police and fire brigade personnel.



A height rescue exercise

The continuous advice to integrate and coordinate existing services, and the impressions gained on study-trips, led those responsible at provincial level to rethink their approach. The growing frequency of terrorist attacks also increased the pressure on them to act. In 2009 the Government of Khyber Pakhtunkhwa then decided to establish a professional rescue service for the province employing full-time staff. At that point in time a rescue service of this kind did exist in the neighbouring province of Punjab. There the fire brigade, the ambulance service and emergency teams operate within a single 'search and rescue' unit, and are coordinated by a single command and control structure that can be contacted by dialling the emergency number 1122.



Ambulances from the neighbouring province of Punjab



Civil defence volunteers

A total of 242 individuals underwent training in Peshawar, 170 of them men and 72 of them women. In one of the training measures representatives from the two municipalities spontaneously formed a network to facilitate the exchange of experience and improved communication and cooperation between themselves



Volunteers undergoing training in Peshawar

and the Civil Defence Department. Volunteers first of all discuss risk management measures that they can implement themselves within their communities, and then identify the activities for which they require support.

A cooperation arrangement between the Governments of Khyber Pakhtunkhwa and Punjab prompted by the project meant that more than 400 new emergency service personnel could be trained at the Emergency Services Academy in Punjab. While the emergency service is still being established, a team of 90 emergency paramedics and six ambulances from Punjab have been assigned to deploy in case of emergency in Peshawar. They have also conducted training measures and on the job training with their colleagues from Khyber Pakhtunkhwa province.

In a pilot measure to strengthen civil defence, the project delivered advisory services to help establish a community-based volunteer system in Peshawar. This was further supported by training staff members and trainers of the Civil Defence Department. In two pilot municipalities, the urban municipality of Andar Sher and the rural municipality of Wadpaga, civil defence

volunteers were recruited and volunteer structures established. The volunteers underwent three-day training courses in first aid and emergency life-saving measures, and are now available as first-aiders in case of emergency or disaster in their villages. These activities were implemented with the support of two local NGOs.

The potential of volunteer service has also been recognised in Mansehra. This is why the newly established DDMA has, with support from the project, created a semi-professional search and rescue team comprised of 30 individuals recruited partially from within the administration and partially as volunteers. The team members have received comprehensive training in first aid and rescue methods, including the handling of rescue equipment, and meet regularly for further training. The team has also been provided with a rescue vehicle and equipment for search and



The search and rescue team in Mansehra district performing an emergency exercise



Vehicle of the search and rescue team in Mansehra



Female first-aid worker in Peshawar

Women in disaster risk management

One important aim of the project was to also train women as first-aiders and rescue team members, because many accidents occur inside the household. Male first-aiders face restrictions on their ability to treat women who are not members of their own family, because cultural reasons prevent them from engaging in close contact with these women. In Peshawar 60 women have been trained in first aid, and in Mansehra three women are even members of the semi-professional rescue team. Given the cultural barriers, this must be considered a notable success. The civil defence volunteers in Peshawar do include women trained in emergency rescue. However, in the rural municipality of Wadpaga there was some resistance to this, and the women were unable to participate in the second module. Nonetheless, here too a change process has been set in motion, as one volunteer from the urban district of Andar emphasised at a network meeting: 'I'm very proud of the fact and I believe it's very important that women also learn how to perform emergency rescue and first aid. This makes the household a safer place to be. Then when disasters do occur, regardless of whether they are caused by nature or by attacks, we are first of all able to help ourselves.'



A female rescue worker in Mansehra explains: 'I perform volunteer work in order to save the lives of women and girls. During the earthquake in 2005, which almost completely destroyed the village where I live, I experienced for myself how helpless we were in the face of the disaster and all the suffering. Many women and girls lost their lives, buried under the rubble of their houses or in schools. No one was able to help them, no one was able to rescue them, no one was able to take care of the injured. That's why I'm getting involved in civil defence, to make sure that this never happens again. I'm trained to search for people buried alive using the snake eye camera.'

Female rescue worker from Mansehra

rescue operations. In case of disaster, terrorist attacks or accidents the team are able to locate and free people who are buried alive or face other acute predicaments, and provide them with first aid.

The provincial government's decision to establish a professional rescue service is partially due to the fact that the project advisory activities helped raise the awareness of those responsible. In 2010 the Government of Khyber Pakhtunkhwa invested over three million Euros in establishing the rescue service, and created over 400 jobs. The cooperation between the Governments of Khyber Pakhtunkhwa and Punjab is a welcome step, because there is usually barely any cooperation or exchange of experience between the provinces, whose relationship tends to be defined by competition for scarce resources. The establishment of a professional rescue service, the training in first aid and the setting up of voluntary rescue teams are key steps that have been taken toward increasing civil protection. It is now planned to apply the lessons learned in the pilot measures, in which volunteer first-aiders and rescue teams were trained, in other village communities. The inter-municipal networks that have emerged will be able to provide key support to this process.

5.3 Training and Research: establishing a postgraduate course in disaster management

The low level of awareness of disaster risk management and comprehensive disaster management is due not least to a shortage of experts. In order to form a pool of professional expertise in the region and train staff for the newly emerging PDMA, the Centre for Disaster Preparedness and Management (CDPM) was established at the University of Peshawar in 2008. The project had already been involved from mid-2007 onward in supporting the establishment of an interdisciplinary degree course in disaster management, and made a key contribution to the design of the course. In this connection the university was also supported by the International Centre for Integrated Mountain Development (ICIMOD).

The Centre for Disaster Preparedness and Management is now helping promote an exchange of experience in the province through numerous broad-based activities. In 2009, for instance, a disaster management exhibition was held on the university campus at which researchers, public administrators and practitioners got together for the first time. This gave the institutions and organisations involved an opportunity to present their service offerings and discuss possible cooperation.

In response to requests made by other institutions such as aid organisations, the police and the army, the university – supported by the project – developed practice-oriented short courses to train representatives and administrative staff from these institutions in disaster preparedness and management. Participation in these courses also raised the level of expertise available within the provincial government and the PDMA.

Steps involved in establishing the Centre for Disaster Preparedness and Management and the disaster management course

- **Series of interdisciplinary seminars to prepare the course:** In order to emphasise interdisciplinarity as a guiding principle for the planned centre and the course, the project first of all initiated a series of seminars at the university, at which various chairs shed light on disaster management issues from their own disciplinary perspective.
- **Curricular development:** Representatives of 10 chairs then met at a workshop in order to develop an interdisciplinary curriculum.
- **Preparing and appointing the premises:** At the same time the project supported the refurbishment and appointment of the premises for the planned CDPM.
- **International university cooperation and exchange of experience:** The exchange of experience needed in order to get the centre and the course off the ground was promoted by networking the CDPM with international research institutions and integrating it into existing research networks. The Director and other lecturers underwent training courses at the Asian Disaster Preparedness Center in Thailand. The project helped establish research contacts at the Universities of Kiel and Newcastle, and helped integrate the CDPM into the Asian University Network for Environment and Disaster Management.

Interdisciplinary course in disaster management



Now that the centre and the course for disaster management have been set up, experts and expertise will be available in the region in the future. Cooperation between the authorities and the university will also allow innovative disaster management strategies and solutions to be developed that are tailored to

Pakistan's specific situation. Lessons learned in Khyber Pakhtunkhwa will be fed into the curriculum and research activities, so that they can also be used in other provinces.



Professional exchange at the disaster management exhibition

The disaster preparedness and management course

Since January 2009, 40 students have completed a one-year interdisciplinary postgraduate course in disaster preparedness and management. The second intake for the course in 2010 now comprises 45 students. The course can also be taken by working professionals on a part-time basis. Participants come from public administration, the private sector, international organisations and universities. The course intake and the large number of enquiries received reflect both the need for the centre and its future viability.



5.4 Raising the population's awareness through the media and schools

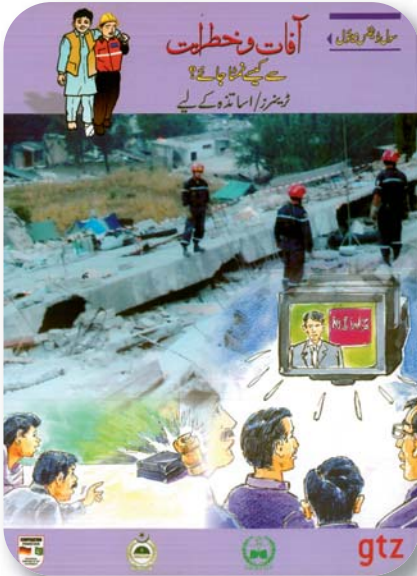
One key factor for effective disaster risk management is the sensitisation of the population, administrators and policy-makers. In most cases of emergency those affected help themselves, because professional assistance is often not immediately available. Knowing how to act in an emergency can therefore save many lives. As well as preventing hazardous situations, knowledge of the risks and dangers also enables citizens to point these out and demand improvements. Responsible policymakers and administrators also need to be informed of risks and familiarised with corresponding measures to reduce them, and must be able to implement such measures within their own sphere of responsibility.

Media campaigns

The media have a key role to play in alerting the population in the event of a disaster, and in disseminating information on risks. Reporting also maintains public interest, and raises awareness of the need to invest in disaster management. Disaster management is an issue that normally receives little attention in the media and is addressed at best only in the immediate aftermath of a disaster. The project therefore organised a two-day workshop for journalists covering disaster reporting and the fundamentals of disaster risk management.

With support from the project the PDMA also launched a major TV campaign. This involves brief TV spots in which a popular Pakistani TV celebrity communicates messages on how to behave correctly in an emergency. It includes information on what to do when an accident occurs, for instance. Drivers must give way to the emergency vehicles and must not impede their progress. Other examples include what to do in an earthquake, and managing the risk of flooding.

These TV spots were broadcast in Khyber Pakhtunkhwa on several channels at peak viewing time. Within one year of the workshop for journalists, 55 articles on natural risks and current deficits in disaster management were published in the regional and national press, with project support. This public awareness-raising work generated interest among the population, thus supporting the call for effective disaster management structures and the presence of emergency services. The media campaign helped directly improve civil protection by providing the population with information on what to do in a disaster. At the same time it also stimulated interest in voluntary activity.



Manual on teaching disaster risk management and civil defence measures in schools



This poster is part of a media campaign, and is designed to raise the population's awareness of the right course of action when a disaster occurs.



School students practising emergency relief measures in the classroom

Disaster risk management in schools

To enable an awareness of the risks and dangers to take root within society in the long-term, disaster risk management issues need to be addressed in schools. One way to reduce inhibitions and prevent panic reactions is to teach children what to do in an emergency by putting them through alarm and evacuation exercises, first aid courses and fire education. School students also act as effective multipliers within society – especially within their families.

A pilot project in Mansehra district therefore incorporated general information on natural disasters and disaster risk management, plus exercises showing students what to do in an emergency, into lessons taught to a number of ninth- and tenth-grade classes. For that purpose the project cooperated with the Civil Defence Department and the Department of

Education. 20 civil defence trainers spent two weeks undergoing training as multipliers, before going on to train teachers. When the project came to an end 60 teachers from 30 schools had already been trained. In the 30 pilot schools these teachers were then able to work with disaster risk management teaching materials, developed with support from the project and GTZ education experts.

The Khyber Pakhtunkhwa Department of Education plans to disseminate the modules in other districts. To support this, disaster management students at the University of Peshawar are systematically analysing the lessons learned in Mansehra. The Department of Education and the Civil Defence Department are cooperating in transferring the strategies developed in the pilot schools to the entire province.

Project results (✓) and impacts (>>) at a glance

Institutional development	Strengthening civil defence and the emergency services
<ul style="list-style-type: none"> ✓ The PDMA is operational and possesses first instruments for coordination. ✓ The DDMA Mansehra maintains a constant presence through a coordination office. ✓ 14 of the 17 departments have prepared disaster risk management plans, and discussed and agreed on these with the PDMA. >> Disaster risk management has been established as a multi-sectoral theme, and has developed major impetus within the administration. >> The authorities responsible for disaster management have been enabled to reduce the vulnerability of the population and thus the future risk of disasters. >> Coordination among the authorities responsible for disaster management and with the emergency services has been improved. 	<ul style="list-style-type: none"> ✓ Personnel of the emergency services in Khyber Pakhtunkhwa have received further professional training. ✓ 460 staff members have been selected for professional emergency services in Peshawar and have commenced their training. ✓ In Manshera and Peshawar volunteers have been trained and have already performed first aid on several occasions. ✓ The equipment of the emergency services and their coordination have been improved. ✓ In Mansehra a semi-professional rescue team has been established and equipped. >> The emergency services and the population in the project areas are better prepared for disasters. >> The provision of basic emergency services to the population has improved, and is also guaranteed in remote regions through village emergency committees and rescue teams. >> The population is actively involved in disaster management.
Training and Research	Population's awareness-raising
<ul style="list-style-type: none"> ✓ A Centre for Disaster Preparedness and Management and a corresponding postgraduate course have been set up at the University of Peshawar, 40 students are working on their degree theses, and course intakes are large. ✓ Professional in-service training is taking place in the region. >> A pool of professional expertise has been formed in the region and is now available country-wide. >> Experts are being professionally trained. 	<ul style="list-style-type: none"> ✓ The population's awareness of disaster risk management has been raised through media campaigns. ✓ Pilot projects for disaster risk management, first aid and fire education in schools have taken place, and school students report on having successfully applied the knowledge. ✓ Knowledge on what to do in an emergency and the appropriate skills have been transferred. >> The self-help and risk management capacities of the population have been developed. >> The awareness of natural hazards has been increased. >> Knowledge of what to do in an emergency will reduce the number of victims and damage in the future.

6. Factors for Success

The project results described in Chapter 5 are attributable to a number of factors. These factors and the way in which particular challenges were managed are described below. This will

make the lessons learned by the project available for use in other areas, and provide ideas for future projects.

The political situation in Pakistan and the armed conflict in Khyber Pakhtunkhwa

For Pakistan, the last few years were a time of major political and economic crisis. In the run-up to the parliamentary and presidential elections of 2007, the first since military dictatorship was imposed in 1999, major political unrest occurred. The conflict in Afghanistan is also having an increasing effect on Pakistan as militant Taliban groups operate to and fro across the border, and use the Federally Administered Tribal Areas and Khyber Pakhtunkhwa as areas of retreat. In 2009 alone more than 3,300 people were killed in terrorist attacks.

2007	July	The army storms the Red Mosque in Islamabad, whose leaders and students openly support the Taliban and the Shari'a.
	October	With the first battle in the Swat Valley between the Pakistan army and militant Taliban groups, the conflict moves increasingly towards Peshawar.
	November	President Musharraf declares a state of emergency and suspends the constitution.
	December	The former President and opposition leader Benazir Bhutto is murdered in the run-up to the parliamentary elections.
2008	February	The Pakistan Peoples Party (PPP) win the Parliamentary elections.
	August	President Musharraf steps down. The US military strikes targets in the north-west of the country using drones.
	September	Benazir Bhutto's widower Asif Ali Zardari becomes the new President. Tribal leaders mobilise their own troops against the Taliban. Fifty-three people are killed in the attack on the Marriott Hotel in Islamabad, the Pakistan army responds with reprisals in the north-west of the country.
2009	February	The government agrees to the introduction of Shari'ain Swat district and the withdrawal of the army.
	March	Several terrorist attacks claim up to a hundred lives. Long march to Islamabad: opposition elements and lawyers protest against the removal of the Chief Justice. A further military incursion against the Taliban in the Swat Valley is successfully concluded in July 2009, but causes a massive refugee crisis in Khyber Pakhtunkhwa.
	October	A car bomb explodes in the crowded Khyber bazaar in Peshawar, killing 41 people and injuring more than 100.
2010	March	Military initiative against the radical Islamic militia and the Taliban in the Federally Administered Tribal Areas.
	April	Two suicide bombings in Peshawar claim 25 lives.

6.1 High flexibility in a politically unstable and insecure environment

The timing of the project coincided with a period of major political unrest and change in Khyber Pakhtunkhwa. Since 2007, domestic and foreign policy conflicts have been worsening. The conflict in Afghanistan is also affecting Khyber Pakhtunkhwa, because the parties to the conflict operate to and fro across the border, thus destabilising the region. In May 2009 massive military operations conducted by the Pakistani army against militant extremists in the districts of Swat and Buner caused a flood of 2.5 million internally displaced persons. Managing the resulting humanitarian crisis became a priority of the provincial government, and tied up many of its resources.

Dealing with these events created major challenges for the only recently established PDMA. The project therefore adapted its advisory inputs and measures flexibly to the needs of the partner. First of all, as requested by the partner the project made a direct contribution to disaster management by delivering professional expertise in specialised areas such as camp management and logistics. Secondly, the project provided the PDMA with practical support and geared its advisory activities to the organisational development of the PDMA as required by the situation and the new challenges.

German development cooperation also had to respond to the increase in terrorist attacks in the region, some of which were deliberately targeting the staff of international organisations. It did so by relocating its seconded personnel to Islamabad. Several measures that had already been planned then became either impossible to implement or were delayed. Providing continued support for the development of disaster management institutions despite this new situation created difficult challenges for the project team. Additional local consultants and experts were employed in order to guarantee the presence of the project on the ground.

This flexibility in responding to partner needs, and the guarantee of a continued presence at a time when many international organisations were withdrawing from the province, created a stable relationship of trust. Our partners frequently and expressly emphasise how highly they value GTZ's work and presence in Khyber Pakhtunkhwa.

6.2 Motivating key persons and supporting capacity development

One key achievement of the project was to create an awareness of the importance and interdisciplinarity of disaster management. This made it possible to overcome initial scepticism regarding the disaster management innovations, and significantly increase the importance attached to the theme and the new agency. Initially, the prevailing opinion was that disaster management was purely a matter of response. The project successfully shifted the focus onto disaster risk management.

One factor in achieving this outcome was the support given to capacity development among key persons. This was achieved through a process of professional exchange, training at the University of Peshawar and participation in international conferences, e.g. in Nepal and Tajikistan. Further stimulus was provided through study trips, e.g. to Germany and Thailand, as well as Lahore and Karachi in Pakistan. Several policymakers and administrative decision-makers, including the Director General of the PDMA and the Director of Operations Planning, were trained in this way before they took up office. This helped increase their awareness of comprehensive disaster management, and raise their motivation to implement it within their own spheres of responsibility. As a result, very much higher importance was attached to disaster management, and the process of institutionalisation developed a strong momentum. The continuous lobbying work performed by the project was also partially responsible for the fact that the engagement of the provincial government went on to exceed the initial expectations. The PDMA and its staff are now professional and committed advocates of effective disaster management. This will guarantee the sustainability of the results beyond the completion of the project.

As well as meetings with decision-makers within the provincial administration, conferences and assemblies with the volunteers and citizens were also organised. This generated further public interest, thus increasing the pressure on decision-makers to put in place and implement effective disaster management.

6.3 Focus on the networking of actors

The project created platforms for political and professional exchange between various groups, and consciously also brought the kind of actors together who had previously been involved in disaster management either only peripherally, or not at all. By involving and networking a large number of actors, several productive cooperation arrangements were enabled to emerge, some of which were utilised in pilot measures.

- The cooperation between the Civil Defence Department and the Department of Education for instance led to a pilot project for disaster management in schools, which is now to be extended to the entire province. This will strengthen civil protection, because several project staff members in this pilot project were also trained as multipliers and will continue to be available in future. At the same time, the measures in schools will allow new volunteers to be recruited.
- The preparation of emergency plans within the various departments of the provincial government improved cooperation between the departments. This integrated disaster risk management into political processes, as a result of which it is now seen as an important task of civil protection.
- The exchange between the rescue services in Khyber Pakhtunkhwa and Punjab not only led to knowledge transfer between the regions, but is also helping improve the relationship between the provinces, which in the past has often been dominated

by competition. The national knowledge exchange process will reduce dependency on international consultants in the future.

- The new Centre for Disaster Preparedness and Management at the University of Peshawar is a key actor for facilitating the further networking of various actors and stakeholders in the future. The CDPM itself is internationally well networked, making it an important point of contact for other international organisations. It also trains experts who will later be employed in the various disaster management institutions (such as the PDMA), and who ideally will be networked

through their shared training experience. In this way, researchers and practitioners will in the future be involved in a process of close professional exchange. The Centre will also promote regional exchange of experience and linkages to other research disciplines.

- A strong interest exists in linking the newly mobilised and trained Civil Defence volunteers with the reformed professional emergency services in Peshawar. The Civil Defence Department, the PDMA, the DDMAs and the 1122 rescue service are cooperating to this end.



Public decision-makers



Administration



Emergency services



Schools

**Disaster management
is a task
for the community!**



Voluntary services



University



General public



Hospitals and rescue services

7. Conclusion and Outlook

Over a period of three years, and under difficult conditions, the GTZ-supported ‘Disaster Preparedness and Management Project’ in Khyber Pakhtunkhwa made a significant contribution toward mainstreaming disaster management at the institutional level within the province, and turning it into a living reality. Disaster risk management has been recognised and acknowledged as a key issue by the actors concerned, who are now in a position to further reduce the disaster risk and the negative impacts of disasters by implementing risk management measures. Disaster response capacities have also been improved, thus making a key contribution toward civil protection.

By supporting the capacity development of institutions and authorities, as well as by networking and involving a large number of actors, an innovative and dynamic process of ongoing disaster management development has been launched that will continue to unfold beyond the completion of the project. This is important not only because of the recurrence of disasters. It is also becoming increasingly important due to the precarious security situation, which involves a high risk of terrorist attacks. Protecting the population and infrastructure against threats is a key task of the state, and one which is performed largely at the municipal level. Over the three years the project succeeded not only in helping develop disaster response capacities, but also in putting in place an effective system for everyday risk management. By raising popular awareness and establishing a volunteer system it has been possible to involve the population in the system.

One challenge for the future will be to put disaster management and response measures in place for the entire population. So far, district-level disaster management authorities and village rescue teams have been established only in a few pilot regions. Nevertheless, by implementing the pilot measures the project has created key foundations for transferring the lessons learned

to other districts. The wider implementation of these lessons learned will be a core task of the PDMA over the coming years.

In order to sustain the momentum of the process of institutionalising disaster risk management and disaster response, GTZ financed three experts to support the PDMA for a further 18 months: one engineer specialised in reconstruction for disaster prevention, one expert for civil protection, and one expert for organisational and human resources development. After completion of the project, the advisory services for organisational development delivered to the PDMA will be continued by the GTZ-supported ‘Administrative Reform in Khyber Pakhtunkhwa’ Programme. One challenge in the future will be to further improve disaster management cooperation between the province and the districts. The project described in the present publication can therefore be seen as a pioneering contribution. From this point on it will be possible to continue utilising and further developing the existing contacts and the trust established between the relevant institutions and the provincial government on the one hand, and GTZ – as well as German development cooperation in general – on the other.

To summarise, it is evident that civil protection was improved considerably in the course of the project, and will continue to develop positively in the future. Although natural events such as earthquakes cannot be prevented by disaster risk management, it can be assumed that if an extreme natural event occurs in Khyber Pakhtunkhwa in the future, many more human lives will be saved and there will be less damage. The ‘Disaster Preparedness and Management Project’ in Khyber Pakhtunkhwa has thus made a significant contribution toward more sustainable development in the region.



Fire extinguishers and buckets of water ready for use in an emergency



Volunteers practising safe abseiling techniques

Appendix

Glossary

Vulnerability: Disasters only occur when a natural event (*hazard*) strikes a society which is vulnerable to that event. The scale of the negative impacts on the lives, health and livelihoods of the people affected is dependent on a large number of social, economic, physical, ecological and politico-institutional *vulnerability factors*.

Civil protection encompasses all preventive and responsive measures designed to protect the lives, health and livelihoods of the population, regardless of the event causing the damage.

Disaster management encompasses all disaster risk management and disaster response measures. In this context, disaster management is also understood to include the strategic and operational coordination of these measures.

Emergency plans define the measures and responsibilities that will come into play should an emergency arise. These plans lay down where and when crisis management teams are to meet, and incorporate information gathered in advance to allow rapid decision-making. They are designed to facilitate the launch of immediate counter-measures, and minimise all further damage. Emergency plans are based on *risk* and *vulnerability analyses*.

Disaster risk management involves measures taken before a natural event occurs. These are designed to reduce or avert the negative impacts of a natural event on the society concerned.

Disaster prevention and mitigation: activities designed to prevent the occurrence of a disaster, e.g. earthquake-proof construction.

Disaster preparedness: all measures designed to make effective preparation for a disaster or hazardous situation, in order to minimise the impacts on the population and allow assistance to be provided to the victims immediately.

Disaster response comprises

- *rescue measures* designed to save life and limb in the immediate aftermath, protect the population's livelihoods and prevent secondary damage by rapidly restoring social infrastructure;
- *short-term humanitarian aid* for the affected population, and
- *emergency aid, transitional aid and reconstruction*, in order to deal with the damage that has occurred and return quickly to normality.

Disaster preventive reconstruction: Here, when a disaster has occurred the lessons learned from the event are integrated directly into the reconstruction process. The aim is to reconstruct what has been destroyed, while at the same time improving it in such a way as to prevent a similar disaster from occurring in the future.

Rescue service: The integrated rescue service in Khyber Pakhtunkhwa encompasses fire-fighting, emergency medical assistance and search and rescue units. These are coordinated by a single command and control unit, and can be reached by dialling 1122.

Search and rescue units are responsible for locating and safely extracting people from collapsed buildings or other predicaments. The teams are, however, also trained to perform technical rescue operations in case of accidents or damage to infrastructure.

Emergency rescue involves the provision of emergency medical care at the scene of the emergency, and the transport of victims to an appropriate treatment facility by ambulance.

Civil protection comprises civil measures to protect the population and their livelihoods from the impacts of war, armed conflict and other serious emergencies. (By contrast, the term 'civil protection' in Germany refers only to the protection of the population in the event of war.) In Pakistan, civil protection remains a part of civil defence, and as such is focused mainly on the protection of the population in case of war, and only to a limited degree on rescue measures in case of disaster. Nevertheless, the civil defence authorities in Pakistan are responsible for training the population in first aid and establishing volunteer structures.

Literature und Links

Literature

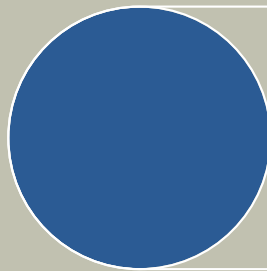
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