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People at risk and social vulnerability are of key concern to the Munich Re Foundation. Since adaptation is much more difficult for poorer countries, the focus is primarily on people in the developing world, in regions such as the Horn of Africa, where millions were under threat when severe drought caused famine in 2011. In Ethiopia, we are funding a promising project aimed at ensuring a reliable water supply in the crisis region (page 37). On similar lines, the foundation's fog net project in Morocco is designed to free people in the High Atlas Mountains from the drudgery of fetching water from wells in the valleys. Once installation is complete, the fog nets will be able to generate over 6,000 l of drinking water per day (page 32).

In stark contrast, the problem we are addressing in Mozambique is a surfeit of water or, to be more precise, floods. Our flood warning projects in central Mozambique are making good progress and further projects are now under way in northern Mozambique, funded in part by the German Federal Ministry for Economic Cooperation and Development (page 30).

Turning to microinsurance, which is also one of our main concerns, the 7th International Microinsurance Conference was well received. The very real thirst for knowledge in this field was demonstrated by the large number of participants the conference attracted from more than 50 countries. The foundation will continue its efforts to maintain interest in this issue on the part of regulatory authorities, private sector practitioners and other key stakeholders (page 6).

Our dialogue forums in Munich focused on various aspects of demographics and migration. These were the topics that 13 leading figures from the political and scientific communities discussed with the audience at the series of five evening events. The discussions provided a wealth of material for developing a new understanding of demographic change and migrant populations (page 14). Migration was also on the agenda of the foundation's Summer Academy, which analysed issues relating to environmental changes in fragile states. Many people regard leaving their native lands as the only means of escaping from the destruction of their natural resources caused by environmental and other factors. This is true of the Horn of Africa, where thousands of women and children have been languishing in refugee camps for months on end.

It is what inspires and compels us to continue to do everything we can to create risk awareness and improve living conditions.

Thomas Loster
Chairman

Countries in Africa are firmly in the grip of extreme droughts and thousands are forced to seek refuge elsewhere: migrants in Chad.



Microinsurance

Plea for viable business models

Andreas Kleiner

Microinsurance is a young sector. If you had attended a meeting on microinsurance as an insurance professional ten years ago, you would have been a rarity. Until a few years ago, microinsurance was chiefly associated with issues like development aid, corporate social responsibility and self help.

Now the microinsurance sector has made significant progress and caught the attention of professional insurers. Microinsurance is also a politically driven issue in many countries these days, although it has not yet been possible to develop viable business models on a major scale.

Microinsurance can improve the living conditions of countless millions of poor people. Estimates refer to a potential 1.5 to three billion customers globally, and a premium volume of €30bn to €35bn. However, only 5% of this global market potential has been tapped to date. According to recent ILO estimates, some 500 million people worldwide are now covered by microinsurance products, 60% in India alone. In general, strong geographical differences can be observed in the way microinsurance is becoming established.

For example, the market is dynamic in India, where the introduction of "rural obligations" has been instrumental in stimulating rapid growth. Since 2005, India's insurance regulator, IRDA, has laid down a minimum premium quota that Indian insurers are required to generate from microinsurance solutions. Nevertheless, well over half the population has no real access to insurance.

Microinsurance is on the advance. Once a month, insurance agents and villagers in the south of Bangladesh meet to deal with microloans and micro-insurance matters.



Substantial administrative costs stand in the way of profitable business. Often no computer is available in poor countries and each step has to be painstakingly noted in handwritten lists.





Andreas Kleiner,
a member of the Board of
Management of ERGO Inter-
national AG, has been on
the Board of Trustees of
the Munich Re Foundation
since 2008.

According to China's CIRC insurance regulator, a pilot programme launched in 19 provinces in late 2009 to develop microinsurance solutions for some 11 million people generated €30m in microinsurance premium volume in 2010. In Southeast Asia there is huge diversity of microinsurance initiatives, and the market penetration rate in the Philippines in particular is as much as 5.4%. Almost half of the premium volume is accounted for by statutory credit life insurance.

In Africa, numerous programmes introduced in recent years have boosted the sector's rapid growth. At the end of 2010, approximately 14.7 million people had taken out microinsurance cover, premium volume being in the order of €200m.

There are no reliable statistics for Latin America. Whereas countries like Colombia or Peru have enjoyed high market penetration rates in recent years thanks to favourable regulatory conditions, microinsurance products are scarce in markets such as Mexico.

Why is microinsurance growth so sluggish despite its remarkable market potential? One of the main reasons is doubt about its ability to generate sustained profits. Even now, microinsurance covers are primarily sold for charitable rather than economic reasons.

To cover the costs, a number of conditions have to be fulfilled. Microinsurance is in many respects a sector that does not follow traditional insurance rules. As sums insured and premiums are low, sales, administration and loss-processing costs, for example, have to be kept to a minimum. The needs of customers, who often have no regular income and a low level of education, always have to be borne in mind. The products need to cater for irregular premium payments and be very easy to understand. It is important to foster cooperation with well-respected people holding positions of trust in the local community because understanding of and confidence in insurance solutions has to be developed in the target groups to stimulate potential demand.

All this can only be achieved if normal insurance conventions are abandoned and innovative solutions applied. This is true not only of the insurers but also of the regulatory environment, which will have to develop special conventions for microinsurance.

I am firmly convinced that, in the long term, microinsurance can and must become an economically viable sector if it is to establish a lasting place in the market. There are a number of encouraging examples, and I am confident that it will, in time, be possible to realise its global potential and thus create a unique combination: a mechanism that can help prevent the poverty gap between industrialised and developing countries from widening, and the development of a market with breath-taking potential.

7th International Microinsurance Conference

Improved poverty reduction

Since 2005, the International Microinsurance Conference has offered a platform for representatives from a variety of different sectors to exchange views. The conference again attracted major interest in 2011. Some 430 microinsurance experts from 52 countries took part in the event organised in Rio de Janeiro by the Munich Re Foundation and the Microinsurance Network.

The conference was supported by the Brazilian insurance association (CNseg), Brazil's regulatory authority (SUSEP), the German Agency for International Cooperation (GIZ), the German Federal Ministry for Economic Cooperation and Development, and Georgia State University.

In Brazil, over ten million people live in slums like the favelas in Rio de Janeiro, where basic cover is available through microinsurance.





Top: In his opening speech, Prof. Stefan Dercon, Chief Economist at the UK's Department of International Development (DFID), emphasised the role of microinsurance in combating poverty.

Bottom: At the opening session of the conference, Luciano Portal Santanna (right), head of Brazilian regulator SUSEP, announced that new, far-reaching microinsurance legislation would be introduced in Brazil in 2012.

Renowned development economist Prof. Stefan Dercon opened the conference by issuing a stark warning that a lack of insurance solutions is conducive to long-term poverty. According to Dercon, an Oxford University professor and Chief Economist at the UK's Department for International Development (DFID), there are many risks, such as sickness, that are entirely insurable, yet without health insurance, people can rapidly slide into poverty, and it is difficult to escape. The consequences of a famine that hit Ethiopia in the 1980s, for instance, can still be felt decades later.

Insurance pivotal to sustainable development

Solutions that genuinely help to combat poverty can only be arrived if innovation is applied along the full length of the value chain, which entails more efficient sales channels and progress in education, for example. The conference agenda comprised basic issues that were addressed in 22 workshops, seminars and podium discussions. They covered a very wide spectrum, with discussions on technological innovation, actual case studies, insurance solutions used in different regions and regulation issues. Strategies pursued by individual countries to improve the access of what are termed the "working poor" to insurance and financial services were also addressed.

Brazil's vast potential

The International Labour Organization (ILO) estimates that almost half a billion people have access to microinsurance. According to Craig Churchill, Chairman of the Microinsurance Network, 60% of these are in India. Brazil, the largest country in Latin America by area and population, is potentially the region's main microinsurance market. With a population of almost 200 million, it has nearly as many inhabitants as France, the United Kingdom and Germany combined and has enjoyed economic growth well above that of the eurozone in recent years. Development experts estimate that some 30 million people now belong to its middle and upper classes but, even now, a fifth of the population has an income of less than US\$ 90 a month and relies on the state for support.

As 85% of Brazilians live in towns and cities, the target group is more accessible than in India for example. Brazil's financial infrastructure is relatively well developed and people in rural areas can also be reached, e.g. with floating bank branches penetrating into even the most remote areas of Amazonas. On the whole, the conditions for rapid market development are good, hence Craig Churchill's conclusion that Brazil has the potential to become the India of Latin America.

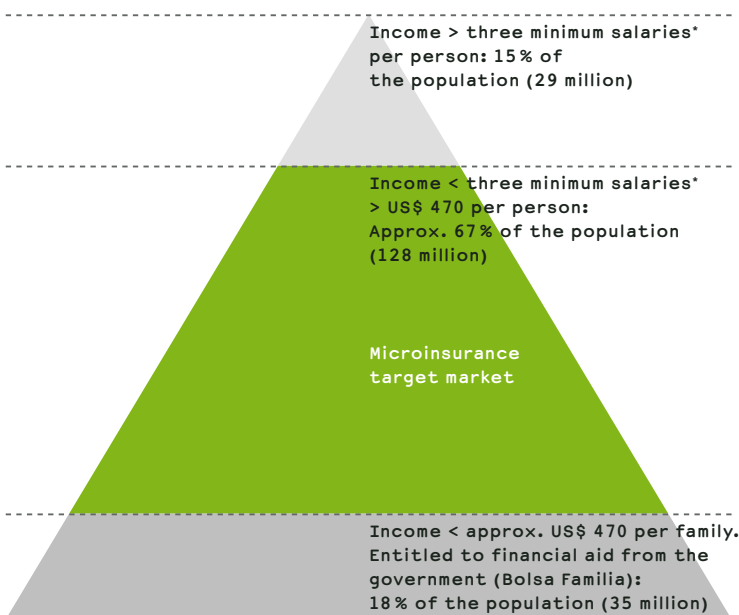
The income distribution chart below shows the extent of this potential. Microinsurance is of interest to approximately two-thirds of Brazilians, i.e. about 130 million people, who have more than the minimum income and are able to manage without state help. The South African Center for Financial Regulation and Inclusion (Cenfri) assumes that the number of people with microinsurance policies will rise in the next 20 years from the current estimated 20–30 million to as much as 100 million.

However, the conference also showed that, without close cooperation between the relevant stakeholder groups such as regulatory authorities, insurance industry, development organisations and scientists, the development of sustainable microinsurance solutions will be slow. The very positive response to the microinsurance conference in Rio is thus all the more encouraging. More than 40% of the participants came from the insurance industry or insurance-related service providers – a clear sign of private sector interest in this issue.

Microinsurance in Brazil: Who is the target market?

A mere 15% of Brazil's population have an income that is more than three times the minimum. Below this level, there is a potential market for (private sector) microinsurance. The lowest income class is considered too poor and thus reliant on governmental solutions.

Source: Cenfri, CNseg: Microinsurance in Brazil, 2011



*Minimum salary: approx. US\$ 320 per month.

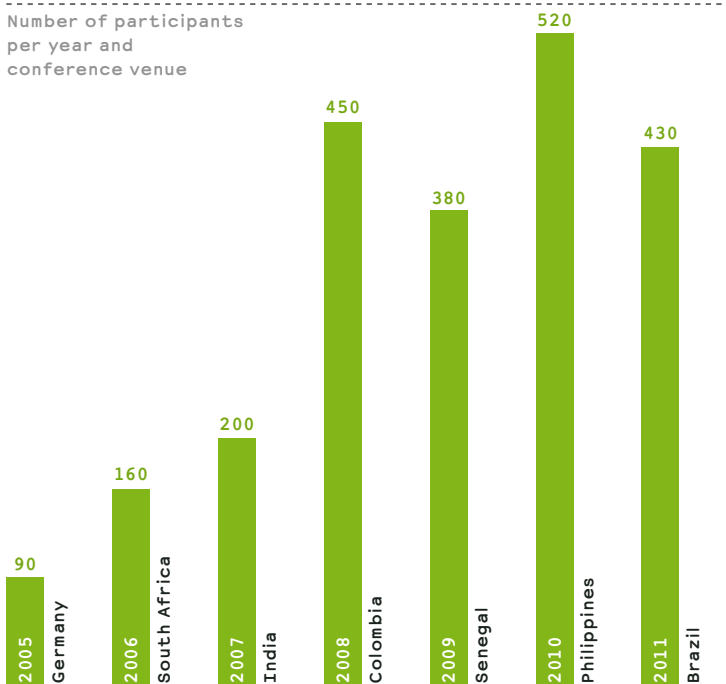


More than 400 participants from 52 countries show the extent of interest in the conference. Of those attending, 40% were from the insurance industry.

Microinsurance Conference – Participation trends

Since the first conference in 2005 at Schloss Hohenkammer near Munich, the number of participants has grown considerably. The conference, the biggest of its kind, now regularly attracts some 400 to 500 experts.

Source: Munich Re Foundation, 2011



Regulation needs to set the course

It is particularly gratifying that, thanks to partnership with the Access to Insurance Initiative (acii), dedicated to improving access to cover, 23 national regulatory authorities made the journey to Rio de Janeiro. This shows that more and more governments are convinced that microinsurance can benefit low-income sectors of the population. To promote the spread of insurance solutions, the legal conditions have to be right, and Brazil is at the forefront in this area. According to Luciano Portal Santanna, head of insurance regulator SUSEP, a new legal framework will be set up in early 2012. Its goal will be to improve access to insurance solutions and give customers greater protection, primarily by clamping down on illegal providers and, in this respect, the authority has over 100 organisations in its sights. Switching from non-regulated to regulated insurance providers will also help build customer confidence.

Prof. Stefan Dercon pointed out that the task of developing sustainable insurance solutions for the poor is too important to fail. The Munich Re Foundation will continue to play its part by gathering leading international microinsurance experts around the discussion table. Preparations for the 8th International Microinsurance Conference have already begun. It will be held from 6 to 8 November 2012 in Tanzania.

For further information on this issue:

Microinsurance Conference
www.microinsuranceconference.org/2011

Migration from Africa

Women on the move

Dr. Florence Tsagué
Assopgoum

Migration is increasingly affecting women too. This has not always been the case. The fact that younger men migrated over considerable distances more easily than women led, particularly during the historic migratory movements of the 19th and 20th centuries, to a surplus of men in the host regions.

The aspects of migration are also explained by Jürgen Leib, Günter Mertins and Karl-Heinz Dehler in their book "Bevölkerungsgeographie" (Population geography). However, according to the United Nations Human Development Report, women accounted for 49.2% of global migratory movements in 2005. The increase is particularly noticeable in Africa, where the percentage of female migrants rose from 43.1% in 1960 to 47.8%. Whereas, in the past, female migratory movements were inhibited by misogynistic legal and social obstacles, women's right to mobility is now increasingly acknowledged.

The repercussions of such trends are also making themselves felt in Germany, where more and more African women are finding a new home. According to the German Federal Statistical Office, out of a total of 271,431 Africans living in Germany in 2010, only 117,510, i.e. 43%, were women. However, analysed by region, it emerges that there were considerably more female migrants than male from East Africa, for instance, (21,396 compared with 16,775) and the same applied to certain countries of origin, such as Ethiopia, the Democratic Republic of Congo and Ghana.

The cramped quarters of Awa Karaokk and her children, migrants from the Ivory Coast, measure just nine square metres. She is trying to make a new life for herself in the Moroccan capital, Rabat.



Morocco is a popular transit point for emigrants from countries south of the Sahara. This young woman from the Congo has found temporary lodging with a family in Rabat.





Dr. Florence Tsagué Assopgoum, a political scientist and author from Cameroon and now resident in Germany, deals with different aspects of migration. She described the situation in her home country at our dialogue forum.

As the role of women in international migratory movements comes increasingly to the fore, so the debate on gender mainstreaming that aims to achieve gender equality at all levels of society recedes into the background. This is because, if male and female migration are assumed to have the same underlying causes, making a gender-specific distinction is of limited interest in scientific terms. There is no point in focusing on female migration unless it can be linked to more gender-specific features than push factors such as poverty and pull factors such as better prospects in terms of living standard and career.

A study of African women in North-Rhine Westphalia by Nadine Sieveking proves that this is indeed the case. She concludes that women's migration paths differ from those of men. Whereas, for example, reuniting the family is a priority for women, men emigrate primarily to give their families better and more secure livelihoods and living conditions. Since men and women have different reasons for migrating, they often face divergent obstacles.

According to experts, the growing proportion of African women in international migratory movements is partly due to socio-cultural, religious, economic and political changes in their regions of origin. The improvement in education opportunities alone is giving women easier access to information and resources. This enhances their chances of competing successfully in the international education and labour markets as well, and opens up perspectives beyond the traditional role of housewife and mother. Even though reuniting the family is still the main motivation for female migration, women are embarking on studies or taking up employment in the host country so that they can earn a living.

Although the schooling, training and international mobility of women are now more readily accepted in many African societies, one gender-specific difference that remains is access to resources. This is an obstacle to African women's self-development and independence, and so they also see migration as a means of liberation, allowing them to escape the control of family and society. Apart from providing an opportunity to gain qualifications, it also helps them to emancipate themselves from the patriarchal system.

For many women, migration opens the door to a new world of greater equality but it also has its shadowy side, with risks like human trafficking, abuse and exploitation at the workplace. This is especially true in the absence of any legal and secure form of labour migration. A report by an expert meeting of the African Union (AU) therefore calls for the recognition of gender-specific obstacles to international migration and special protection for women's rights. However, despite the obstacles, there is no stopping them: women are on the move!

Dialogue forums 2011

Where from? Where to? Demography and migration

The aim of the dialogue forums is to foster debate between public and panelists. Prof. Harald Mieg, who specialises in research into cities, in discussion with members of the audience at "Country – city – megacity: Who wins, who loses".



Instituted in 2005, the dialogue forums are now a well-established component of the foundation's activities. They offer an ideal platform for making the foundation's topics known to a broader public and raising awareness for the problems of our times.

The 2011 series of events entitled "Demography and migration" once again met with lively interest, not least because of the podium's prominent line-up. During the five evening events, notable politicians such as Franz Müntefering and Prof. Rita Süßmuth and scientists discussed current key issues, outlined solutions and presented perspectives for the future.

The coming years and decades will probably see very different migratory movements taking place around the world. Whereas the megacities of the developing nations, such as Lagos or Dhaka, are mushrooming, some areas in industrialised countries are becoming depopulated. The task of maintaining control over these shrinkage and growth processes is a difficult one for all stakeholders. In Germany, issues like empty office buildings and unoccupied apartments are relatively easily to deal with, given far-sighted urban planning. In contrast, no solution has yet been found to the problems associated with the progressive growth of slums in the megacities. The uncontrolled influx of the rural poor into the cities is pushing already overtaxed infrastructures beyond their limits. Local authorities often lack the will to take decisive countermeasures.

A new understanding of demographic change

Demographic change cannot be stopped either. In Germany, for example, by the year 2050, every third inhabitant will be 60 years of age or more. With a population that is ageing and decreasing, the accustomed standard of living will be threatened. The loss of affluence can be significantly reduced, however, if more older people are integrated into the labour market and more money is invested in education. To cope with this change, we must rethink our current concept of professional life – first education, then work, then retirement. The norm should be for people to return to university at 40 and then embark on a new career, even though HR consultants and companies see things differently today. We may be getting older, but it lies within our own power to shape this process ourselves.

"Many urban areas and regions would not function without the entrepreneurial activities of immigrants."

Aygül Özkan, Minister for Social Affairs, Women, Family, Health and Integration for Lower Saxony



The audience in Munich Re's Main Conference Room: The five evening dialogue forums attracted keen interest.

Competition for the best brains

The discussions surrounding the often heated debate on integration call for a cool head. The fact is that without immigration the lack of specialised professionals cannot be compensated for, despite every effort to do so. However, Germany is in danger of falling behind in the global competition for the best brains due to bureaucratic, petty-minded regulations. It is, therefore, important to be aware of the individual behind every immigrant, to recognise such people as culturally enriching and to make use of their qualifications. However, an honest approach to the subject is also crucial to successful integration policies. It must be made clear to people that migration is not only an enormous challenge for those arriving in a country but also for their hosts. Nor should we close our eyes to the consequences of the "brain drain" for the developing nations. The more highly-qualified workers they lose, the more difficult it is for them to catch up economically.

Successful integration

A good example of how well integration can succeed are the so-called "guest workers" who began arriving in Germany in the 1960s. Now in their second and third generation, as well as making an important contribution to the economy, these families are also highly entrepreneurial and a greater proportion of them choose self-employment. Many of our inner city areas and regions would not function without businesses founded by immigrants. Without this cultural diversity, some districts would even be less attractive. Fifty years ago, it would not have been thought possible. This development encourages us to take a positive approach to the problems associated with demographic change and migratory movements.

"Environmental and climate changes will bring us new immigrants."

Prof. Rita Süßmuth,
former President
of the German Bundestag



A detailed summary of the 2011 dialogue forums can be found on our website along with the accompanying "Positionen" publication. It is available from the foundation as a PDF file or as a printed brochure (in German).

Munich Re Foundation
www.munichre-foundation.org/
[StiftungsWebsite/](#)
[Projects/](#)
[DialogueForums/de](#)

Fragile states

How to improve the situation in Kyrgyzstan

Prof. Michelle Leighton

The ancient routes of the Silk Road that traverse Kyrgyzstan led over centuries to the establishment of many diverse ethnic communities and cultures. Today, the environment in the country has become extremely fragile, leaving many communities impoverished and in conflict with their neighbours. The newly elected government may have less time than it thinks to make a difference.

In many respects, Kyrgyzstan exemplifies many of the world's poor countries that are emerging from conflict. New leaders spend enormous amounts of time seeking to rebuild their fragile state by transforming political processes, issuing new decrees, erecting or tearing down statues, and changing personnel in institutions. They hope to secure their country's future development and gain legitimacy from their public – only to find that the lack of institutional capacity, systemic corruption, and rapidly deteriorating natural resources and infrastructure threaten the human security and development their country so badly needs. This could, once again, ignite political conflict. The rational path leading toward stability would suggest a serious attempt to address these specific problems. Yet, it seems, so often this does not happen.

After Kyrgyzstan gained independence from the former Soviet Union in 1991, the country endured two bloody revolutions, the last in 2010 which was followed by massive ethnic violence that created 110,000 refugees and displaced 300,000 people. With the recent election of a new President, the question is whether the country can finally move beyond exercises in state-building, ethnic division and corruption. The significant needs of its population, most still living in poor agricultural communities, must be addressed.

Uzbek families are on the run: ethnic disturbances in Kyrgyzstan have already claimed hundreds of lives and forced some 400,000 people to leave the fragile state.



Waiting and hoping:
at the Uzbek school in
Osh, a woman reflects on
political reforms. The
new Kyrgyzstan govern-
ment has promised that
life will improve for the
population.





Prof. Michelle Leighton, a former holder of the Munich Re Foundation Chair on Social Vulnerability at the UN University in Bonn, is currently researching fragility issues in Central Asia at the Tian Shan Policy Center in Bishkek, Kyrgyzstan.

The years after gaining independence have been marked by corruption, repression of civil society, environmental damage, ethnic violence and revolution. Unemployment and poverty have increased, as has migration to Kazakhstan and Russia. Remittances sent back to families in Kyrgyzstan accounted for 32% of the country's GDP in 2010 – the third-highest in the world behind Lesotho (ranked second) and neighbouring Tajikistan (ranked first).

Though 75% of lands were privatised, they became less productive, with the country importing large amounts of key staple goods, such as 43% of its wheat. Members of farm families are increasingly using migration to cope with falling farm incomes, to help their families survive.

Low productivity in agriculture is in large part due to three phenomena. First, soil erosion has become a significant problem, more than 65% of arable land is now affected. Second, with three to four extreme weather events occurring yearly and continuing rural poverty, Kyrgyzstan remains highly prone to disasters. Heavy hailstorms, floods, and landslides in winter, frosts in spring, and droughts in summer make it difficult for communities to farm profitably. The third key contributor is the government's lack of investment in farm communities – either to improve their security from weather-related disasters or to foster access to training on sustainable land management.

These critical problems affecting the majority of the Kyrgyz population are due to get worse. If new climate models are correct, temperatures throughout Central Asia will increase by 2°C by 2020. The predicted rapid rise is likely to lead to more weather-related disasters and agricultural impacts in Kyrgyzstan. Moreover, international agencies are predicting that food prices in the country will continue to rise, and the government has warned that energy will become more scarce.

It is uncertain whether increased food and energy prices would spark a revolt. But, it would not be the first time. Sudden price hikes led to the protests of April 2010. After police opened fire on the civilian protestors, killing 86 people, a massive public gathering staged a new revolution, effectively ousting the Bakiev government. The power vacuum left by the change in regime stimulated conflict among clans in the south and led to widespread ethnic killings in Osh and Jalabad.

The question remains to what extent the new government will reorient its priorities toward serious investment in the struggling and vulnerable agricultural communities that comprise the bulk of the electorate. International donors have pledged assistance, but with the declining economy in Europe, this might not be for long. The government may have a small window of opportunity in which to act, that is, to undertake real collaboration with affected communities to target their micro-climate, micro-project, and micro-financing and insurance needs. The investment in education, training, and agricultural extension programmes and infrastructure accessible at village level is rather an old concept, but one that bears revisiting. As revolutions come and go as they have in Kyrgyzstan, and as climate change poses greater challenges, the government could do worse than to focus on building community resilience to environmental change.

UNU chair project
and Summer
Academy 2011
Fragile states and
climate change —
An exceptional
challenge



Top: The vulnerability of fragile states has many different levels and facets. Social, economic, political and environmental factors play a major part.

Bottom: Academy participants investigated how environmental changes can trigger severe crises, using case studies based on Somalia and Nepal.

It is particularly difficult for fragile states to adapt to climate change. The greatest obstacles they can face are corruption, violence and poverty. The Summer Academy 2011 and the UN University chair project for social vulnerability, funded by the Munich Re Foundation, together looked into the question of how these problems can be solved more effectively.

What are fragile states?

There is no standard international definition. Generally speaking, countries whose authorities cannot or will not ensure such functions as security, the rule of law or the satisfaction of basic social requirements are considered to be fragile. Political wilfulness and unpredictability give rise to a regional safety risk that can have global repercussions. In fragile states, often there is an accumulation of stress factors, some of which interact with each other: instability, a lack of adaptability within the population, poverty, social inequality, unresolved conflicts. If these are exacerbated by unfavourable climatic conditions – be they extreme weather events or climate change – such a society can soon be overwhelmed by the problems.

Countries such as Somalia or Sudan can be counted among the fragile states. They are barely capable of reacting adequately to major environmental disasters, as their governance capacity has been weakened. In extreme cases, the system of government collapses completely and people in the crisis regions are left to fend for themselves.

Development goals lie in the distant future

A further aspect that characterises many fragile states is the discrepancy between expectations and reality in respect to development aims such as the millennium goals of the United Nations. Many countries lag far behind in combating poverty or infant mortality and require international support. This creates ethnic problems whenever corrupt regimes are in power. Development work cooperation must not help to cement political injustice or violate human rights.

Summer Academy on fragile states

Consequently, there was plenty to discuss at the Summer Academy hosted in Schloss Hohenkammer for the sixth time. Entitled “Climate change in fragile states: Rethinking adaptation”, it was organised by the Munich Re Foundation and the United Nations University Institute for Environment and Human Security (UNU-EHS) under the leadership of Prof. Mohamed Hamza, the 2011 holder of the Chair on Social Vulnerability. Twenty specialised students, many of them doctoral candidates, and ten senior experts from altogether 15 different countries examined the effects of environmental and climate change on fragile states and the issue of possible adaptation measures.

“While there are commonalities among fragile states, we must not fall into the trap of implementing ‘one-size-fits-all’ solution sets. It is crucial to identify country-specific points of entry.”

Idowu Ajibade, Nigeria



Prof. Mohamed Hamza, holder of the Chair on Social Vulnerability, led the Summer Academy from 18 to 22 July 2011.

The fragility of states is not always evident, as conflicts simmer beneath the surface. This was brought home to the students by Prof. Michelle Leighton of the University of San Francisco, a former holder of the University Chair on Social Vulnerability. She showed in a case study on Central Asian Kyrgyzstan how seething conflicts between ethnic groups led to a national crisis in 2010. The gravity of the situation was far from apparent, and threatened the country's development. "Reality has shown that smouldering conflicts can unleash tremendous force", the legal expert concluded from her research in Central Asia.

Political influence makes development cooperation more difficult

Development organisations often encounter problems when seeking to launch projects in a host country where they have no political network. If, for example, the government is not in favour of local institutions or initiatives, it is difficult to establish contact with them or integrate them into the work. Potential is often wasted in this way. Only specialised non-governmental organisations (NGOs) can find means and ways of circumnavigating political control. One of these organisations is International Alert, a peace-building organisation from London. It has already gathered experience in many countries. Experts from this group reported on their work during the Summer Academy. They showed how they had achieved preliminary successes in Somalia and Nepal under difficult conditions.

Attention was focused particularly on a region in Nepal which, in the recent past, has been repeatedly hit by torrential rain and flooding. Peace activists from International Alert explained how projects can be successful even if the relevant national institutions do not exercise the requisite responsibility. A further example outlined options for dealing with an extreme drought in a fragile state such as Somalia. Here, too, in the absence of disaster management plans alternative solutions must be found. Both examples provided the participants in Hohenkammer with the foundations on which to build new ideas using role play, dramatisations and discussion rounds.

The use of new technologies, teaching and presentation methods also opens up new perspectives. Innovative scientific methods introduced by an expert from the reputed Parsons The New School for Design in New York were applied in workshops and case studies and formed the basic framework of the week's work.

Top: Julie Maldonado, a young anthropologist from the USA, points out a flaw in the concept.

Bottom: Ten senior experts and 20 young scientists from 15 countries attended the Summer Academy at Hohenkammer near Munich, where they analysed how climate change affects fragile states.





Analysing problems from different perspectives, drawing on a range of experience from vastly different countries (from the left): Osman Hamdan (Sudan), Idowu Ajibade (Nigeria), Katherine Houghton (USA), Eunice Omanga (Kenya) and Pravin Kumar (India).

How can vulnerability be reduced?

There are no patent remedies for bolstering a community's resilience. The many facets of state fragility and complex climate changes make it impossible to define standard solutions. To improve buffer and adaptation capabilities, as many people as possible need to address the problems and be involved in finding solutions. Depending on the geographical scale (local, regional, national, international) the right contacts have to be found and they must network with each other, from UN representatives to national and local politicians or representatives of NGOs. One unanimous lesson drawn from the Summer Academy was that a key aspect of sustainable success is to take local knowledge in all its facets into consideration.

It is certain that climate change and its impacts cannot be avoided. People will be forced to adapt to a changed environment. If civil society is not integrated into the relevant processes, peace and stability will be at stake in politically weak or fragile states. Worse still, the problems could spill over into other regions. For this reason, it is also in the international community's own interests to lend its support to fragile states.

Our project:
UNU-EHS Chair
www.ehs.unu.edu/

International Alert
www.international-alert.org

Disaster prevention

Time for a new era

Thomas Loster

Earthquakes, floods, droughts – the large number of natural disasters in 2011 have once more brought home to us the fact that prevention is more important than ever. However, to minimise risks in the long term, it is not enough to implement projects in isolation. An approach that uses the combined strengths of partnerships has a greater likelihood of success.

In 2011, natural catastrophes again assumed unimagined proportions. Torrential rain triggered huge floods in eastern Australia, several earthquakes in neighbouring New Zealand caused massive damage, and a tsunami wiped out vast areas in Japan. Amidst all the disaster reports, it almost went unnoticed that Pakistan had again been hit by massive flooding following last year's hundred-year flood. And in the Horn of Africa millions are suffering the effects of the worst drought in 60 years.

If we consider for how long the global community has endeavoured to optimise disaster prevention, it becomes clear that the time has come for a completely new approach. Developing countries, in particular, are frequently though not unexpectedly hit by natural disasters for which they are often insufficiently prepared. This does not mean that the efforts to date have been without success: in declaring the 1990s the International Decade for Natural Disaster Reduction, the UN has raised awareness of the social, ecological and economic consequences of ever-increasing extreme natural events. As a result, important institutions, instruments and guidelines have been established to improve disaster risk management and, following its inaugural meeting in 2007, information has been exchanged and alliances formed at the biennial world conference "Platform for Disaster Risk Reduction" in Geneva.

Massive rainfall triggered the worst floods in Thailand's history in October and November. Losses were well over US\$ 40bn, and a thousand lives were lost.





With increasing losses from disasters, the UN General Assembly has launched a number of initiatives to improve disaster risk management. Despite every effort, global coordination is still lacking.



Thomas Loster
The Chairman of the Munich Re Foundation is an expert on climate change and catastrophe prevention. He has been working on catastrophe analysis and trends for more than 20 years.

More players, greater efforts

Adaptation measures and risk management are also coming increasingly to the fore in the political discussion surrounding climate change. This aspect is not usually mentioned whenever the media and environmental associations bemoan the apparent failure of the world climate summit. Over the years, numerous work programmes have been established to enhance disaster prevention and reduction. The latest programme of the Secretariat of the United Nations Framework Convention on Climate Change, called "Loss and Damage", has been set up to analyse the loss potential of weather-related natural catastrophes caused by climate change. Another of its goals is to develop risk management options and build resilience, particularly in poorer countries. A practice that has been around for decades in traditional insurance in the developed world is now finding its place on the political agenda for the developing world.

For the time being, it does not look as if there will be a shortage of money to fund the programmes: up to US\$ 30bn have been earmarked to finance climate adaptation projects – by 2020 it is even hoped to scale this sum up to US\$ 100bn a year. This can help improve risk management and raise disaster prevention in many regions to a new level. These are also the goals of the RISK Award launched by the Munich Re Foundation, the Global Risk Forum and the UN Secretariat of the International Strategy for Disaster Risk Reduction in May 2011 in Geneva. The award, offering the highest international prize money for disaster prevention, promotes innovative approaches to disaster prevention (see also page 28).

Networking strategies – Following a global master plan

Despite all the progress, one problem remains: there is a lack of coordination, even where different projects are engaged in a similar context. Of course, people's ability to adapt and their needs, gender aspects and, ideally, justice and self-determination should always be the main issues. Good programmes integrate factors such as local know-how and adaptation techniques that have evolved over time.

Many frictional losses could be avoided and synergies deployed if projects were interlinked and if they were set up and treated collectively. It is also important for local community measures to be fully embedded within a national or even an international prevention strategy. National programmes and initiatives need to be liaised across ministries and departments. International institutions should be better coordinated and deploy global master plans to evaluate milestones and progress. Ultimately, it is about partnership between political institutions and between public and private sector.

A new era is possible

Only if disaster prevention is coordinated on a broad basis, strengths pooled and successes communicated is there a real prospect of sustainable success. If the link to the overarching political level that determines the scope of action is also right, disaster prevention will have entered a new phase. This new era will not be able to influence the whims of nature. But we will at least ensure that the people at risk are better prepared.

RISK Award Ideas for improving disaster prevention

Successful risk management begins at local level. If communities and cities were better prepared for disasters, the inhabitants and their assets could be protected more effectively. In pursuit of this goal, the RISK Award was launched, which promotes innovative approaches towards improving risk reduction in disaster management.

According to the Secretariat of the International Strategy for Disaster Reduction (UNISDR), almost 300,000 people were killed in 2010 in 375 natural disasters, while the lives of over 200 million people were affected. According to the statistics, not only are the frequency and intensity of natural disasters increasing but also their complexity. Such as in Fukushima for example, where in March 2011 a seaquake triggered a chain of reaction that led to a nuclear meltdown. Integrated risk management is a significant factor in reducing the risks involved in such catastrophes and increasing the resilience of economies and populations. It gives the management of natural hazards an overall context by integrating all the possible risks involved (technical, ecological, economic and social).

Suitable best-practice projects can be used to provide examples of ideal integrated risk management at work. This is where the RISK Award, launched by the Munich Re Foundation in cooperation with UNISDR and the Global Risk Forum (GRF) of Davos, comes into play. It promotes concepts for the field of risk reduction and disaster management. The prize, offering funding of up to €100,000, will be awarded for the first time on 26 August 2012 and subsequently at the International Disaster and Risk Conference (IDRC) held every other year in Davos. Individuals, teams, institutions, municipalities and communities were able to submit proposals up until the end of December 2011. The first award will be granted to groundbreaking early warning systems for natural hazards in urban areas.

The IDRC conferences with their broad spectrum of participants from science, economy and practice offer an ideal setting for the award ceremony. They complement the UNISDR Global Platform attended by political figureheads from all over the world.

Thomas Loster (Munich Re Foundation, left), Margareta Wahlström (UNISDR) and Dr. Walter Ammann (GRF) pictured here during the RISK Award ceremony held at the Global Platform for Disaster Risk Reduction in Geneva in May 2011.



For further information
on this issue:

www.risk-award.org

Global Risk Forum
www.idrc.info

UN Secretariat of the
International Strategy for
Disaster Reduction
www.unisdr.org

Interview with Margareta Wahlström

**Margareta Wahlström,
United Nations Special
Representative of the
Secretary-General for
Disaster Risk Reduction.**

Margareta Wahlström's career spans more than 30 years in international disaster response and humanitarian work. In 2008, she was appointed Assistant-Secretary General for Disaster Risk Reduction and Special Representative of the Secretary-General for the implementation of the Hyogo Framework for Action at the United Nations.



The new RISK Award is dedicated to “early warning in urban areas” — What are you expecting?

Margareta Wahlström: The best-prepared cities tend to have citizens who are well informed by their local government about the hazards they face, and who know that it's a shared responsibility between themselves and the government to manage that risk. When they receive early warning from the authorities that a potentially catastrophic event is about to hit, citizens take it seriously and are ready to follow the government's advice. This was how thousands of lives were saved when the Great East Japan earthquake struck — children and adults alike were well-drilled on what to expect in the event of a tsunami and many managed to flee to safety despite the overall tragic loss of life. The best-prepared cities also tend to put plans in place to respond to the needs of the more vulnerable groups, so that when an early warning is issued, everyone can respond appropriately. I am very much looking forward to hearing what the nominees propose along those lines, and I hope that they will have new, innovative suggestions.

Why is the ISDR campaign “Making Cities Resilient” so important?

M. W.: For the first time in human history, the majority of the world's population now live in urban settings, and the 21st century will see urbanisation accelerate further. Cities need support from the national government, the private sector, academia and research institutions, civil society and other partners to be truly resilient against disaster. The campaign, which was launched in 2010, provides a framework for these actors to work together as they implement the ten principles, which the campaign has identified as essential for cities to manage disaster risk. Next year, we will produce a handbook for mayors,

which will provide further guidelines for turning the ten principles into practice. A local government self-assessment tool will also come out next year to help cities benchmark their progress. And, because the sharing of experience is a key element of the campaign's success, we do what we can to recognise best practice and draw attention to it.

The RISK Award is a partnership prize. Why are partnerships crucial to disaster risk reduction?

M. W.: Reducing the risk of disaster requires different kinds of expertise. For example, it's important that city officials get support from companies because the life of a bustling city is closely linked to its industrial and private sectors. Building a network of committed private sector partnerships increases opportunities to pool data and resources. The most successful governments also benefit greatly from good relationships with civil society, the media, and donors. That's why we at UNISDR always stress the importance of partnerships, and we are pleased to count the Munich Re Foundation and Global Risk Forum Davos among our strongest partners.

Flood warning in Mozambique

An exemplary concept in disaster risk management

The flood warning systems in central Mozambique, whose installation has been driven forward by the Munich Re Foundation for many years, are proving to be a success. They are now to be handed over to the authorities for future management. At the same time, they are being further extended and new warning systems are to be established in flood-prone regions in the north of the country.

During the 2008 and 2009 rainy seasons, severe flooding also hit northern Mozambique, along the Zambezi and Shire rivers. People were unprepared and lives were lost. As a result, our partners in Mozambique, the German Society for International Cooperation (GIZ) and IP Consult, decided to extend the tried and tested systems in operation on the Búzi and Save rivers in central Mozambique into flood-prone areas to the north. Funding was provided by Germany's Federal Ministry for Economic Cooperation.

Climate change exacerbates risk situation

Setting up the warning system in northern Mozambique is proving extremely difficult. On the one hand, the Shire River also marks the border with Malawi while, on the other, autonomous districts in Mozambique have to be included in the risk management process, which makes coordination more difficult. However, it is well worth the effort, especially in view of the fact that the risk situation has deteriorated considerably, partly as a result of climate change. In addition to heatwaves and droughts, more frequent and intense cyclones are causing severe flooding in the centre of the country, and Mozambique's Council of Ministers declared the critical "red" hazard level on the Zambezi and Shire rivers in 2011.

Disaster prevention committees, monitoring, transmission and receiver stations have now been set up along the rivers. Risk maps of the Shire identify critical zones and areas that have flooded in the past so that vulnerability can be assessed. During rainy periods, volunteers regularly measure the water levels and radio the results to an evaluation centre for analysis. The system has already proved its worth.




Coordinated evacuation of risk areas is an important part of our flood warning systems. At this practice drill held in the Búzi district of Central Mozambique, everything went according to plan.





Flood warning systems in Mozambique

The Munich Re Foundation and its partners GIZ and IPConsult have spent several years developing flood warning systems in Mozambique. In 2011, the systems in Central Mozambique were further consolidated and work is now going ahead on similar systems in the north of the country.

-  Expansion of the project to the Zambezi and Shire rivers
-  Expansion of the project to the Revue and Gorongosa rivers
-  Búzi and Save rivers

Source: Munich Re Foundation, 2011

Plans to include the whole of Mozambique

The next step will be to relocate the analysis and forecasting centre, the heart of the flood warning system, to the centre of the exposure zone, which will facilitate coordination. The Shire warning system will also be extended to the upper reaches of the river, and thus to hazard zones in Malawi. This cross-border process will be a challenge for all stakeholders. In the long term, the flood warning system will be expanded to encompass all of Mozambique, demonstrating that even the poorest of countries can adapt to climate change.

Consolidating the established systems

Ownership of the systems in operation for several years now on the Búzi and Save in central Mozambique will subsequently be handed over to the authorities. Seven local heads of district joined the early warning programme in 2011 and a legislative initiative is planned to raise flood warning to a higher political level. Such institutionalisation is the key to long-term success. Progress has also been made at local community level, and the smaller Gorongosa and Revue rivers have been integrated into the system. The current early warning systems have been accepted by the people of Mozambique, who are wholeheartedly committed to them.



Obituary

Our long-standing project partner in Mozambique, Wolfgang Stiebens, died suddenly and unexpectedly on 10 September 2011. He spent many decades working for the interests of the people in Mozambique, Central America and elsewhere, and was a key figure in terms of development and project success.

Wolfgang Stiebens had worked with us since 2005 in setting up a flood warning system in Mozambique perfectly tailored to the requirements of the population. We have lost an astute, reliable, sensitive and competent partner and mourn the death of a good friend. We will endeavour to ensure that his mission of optimising risk management in poor countries is successfully pursued in the future.

Milking fog in Morocco

The Munich Re Foundation's work concerns water both as a risk factor and as a resource. A simple but effective method of obtaining water is to "milk" fog. Our "Fog nets for Morocco" project is designed to improve living conditions for people in the south of the country. The goal is to supply water to three villages and a school in this remote, mountainous region of northwest Africa.

The idea is quite simple in itself: just as early-morning dew collects in spiders' webs, large fog nets can be used to capture atmospheric moisture in parts of the world with very low rainfall and abundant fogs, like the region around Mount Boutmezguida in Morocco's Anti-Atlas range, where the Dar Si-Hmad organisation has launched a fog net project. As well as supplying some 400 people with drinking water, the project will mean better living conditions for village women and children, who will no longer have to undertake the strenuous and time-consuming walk to the next well. The project was chosen out of six applications submitted from Tanzania, the Cape Verde Islands, India and Morocco in response to an invitation to tender for fog- and dew-collection projects issued by the Munich Re Foundation.

First steps taken

The project was preceded by a four-year trial period during which the feasibility of harvesting drinking water using small fog collectors was analysed in detail. Conditions in the region are favourable. From December to June, dense fogs frequently form in the arid and semi-arid Anti-Atlas region, where humidity verges on 90%. Tiny fog droplets form on the mesh and can then be channelled away. The Canadian organisation FogQuest developed and optimised the technology.

Work on Phase 1 began in mid-2011 with the erection of large fog nets, each measuring 15 square metres, on the 1,225-metre Mount Boutmezguida. Each net can collect an average of nearly 200 litres of water a day and the plan is to install 38 in all. In the meantime Phase 2 has begun, which entails the instalment of water tanks, filtering equipment and a pipeline system before the fog nets finally come on stream. The "milked" fog will be collected in barrels and filtered before flowing down into tanks with a capacity of 300,000 litres located in the valley, from where it can be piped to the surrounding villages. The tanks can hold enough water to meet the needs of the inhabitants and their livestock for substantial periods.



Milking the fog

Given the right conditions, substantial amounts of drinking water can be obtained in arid areas. The map shows completed, current and planned fog net projects worldwide.

Source: Munich Re Foundation, in accordance with Otto Klemm, Münster, 2011

Getting the villagers involved

The Dar Si-Hmad organisation works with external experts as well as local community committees and villagers. Specialists supervise the erection of the nets, whilst the tanks and pipes are installed by the villagers themselves. The system will be monitored and evaluated by the women and children, maintenance of the nets being the responsibility of local community committees.

The advent of piped water will open up whole new perspectives for the village women in particular. Rather than spending three hours a day fetching water, they will be able to devote the time to gainful employment or looking after the family. This again shows how focusing on small-scale projects actively involving the local community and tailored to its environment can bring lasting improvement to living conditions for people at risk.



Top: Nature shows us how: these trees in the Anti-Atlas Mountains in Morocco filter water from the particularly dense fog that occurs at higher altitudes between December and June.

Bottom: The Moroccan project involves installing fog nets with an area of 600 square metres. On just one foggy day they can produce more than 6,000 l of drinking water.



Energy School Munich Getting an early start

Awareness of the need for environmental and climate protection should, where possible, be developed at an early age. The Munich Re Foundation expanded its activities in this area in 2011 by funding additional workshops run by the Energy School Munich of the Green City e.V. association.



Children find out how to measure the power consumption of everyday electrical appliances. This makes them more aware of the need to use electricity sparingly.

35 The goal of the Energy School is to introduce children and young people to topics such as electricity generation, energy conservation and climate protection using a playful approach like the “Sun-full of energy” project, aimed at giving second- to seventh-grade pupils a responsible attitude to energy. Green City ran day-long projects in the classroom, captivating pupils with demonstrations of solar cookers, electricity consumption calculators and an energy-generating bike. The solar oven, which made a particularly good impression thanks to the bright, sunny weather, showed the young scientists the vast quantities of energy contained in solar radiation.

The interactive workshop concept gives children a better grasp of this complex subject by encouraging them to conduct research and experiments for themselves. This also makes it easier to include children with learning or comprehension difficulties. In all, some 380 pupils took part in the workshops.

Green City took the project to an elementary school in Munich’s Oselstrasse at the end of May and to an intermediate school in Cincinnati-strasse in July. In November 2011, Green City teachers held a three-day “Energy for the future” module for a Grade 9 class at the secondary school in Gardinistrasse. As well as energy conservation, using energy efficiently and renewable energy, the curriculum covered career and training opportunities in the renewable energy field. The association also organised visits to specialist plumbing, sanitary ware, solar energy and heating technology firms, where the programme was jointly run by energy consultants, an applied theatre teacher and the firms’ training officers.

We believe it is very important that these projects reach elementary and secondary school pupils. The success achieved by the Green City workshops shows that children and young people can be inspired and motivated to use energy responsibly.



Top: The fascination of solar ovens: when the sun’s beams are concentrated on the cooking pot it soon becomes boiling hot. You have to keep stirring and keep an eye on it.

Bottom: The Green City Energy School offers a variety of learning modules. The combination of theory and practice turns a day at school into a memorable experience.

For further information
on this issue:

Green City e.V.
www.greencity.de

Aid to Haiti in 2010

Our efforts bring results

Drinking water can be especially scarce after natural disasters like the Haiti earthquake in 2010. Water treatment plants installed as part of our aid projects in Port au Prince and Leogane were used by several thousand people.



The people of Haiti continue to suffer from the aftermath of the devastating earthquake in January 2010, thousands of them still being forced to live in refugee camps. The water projects launched by the Munich Re Foundation and Munich Re together with arche noVa and members of the "Aktion Deutschland Hilft" alliance are helping to alleviate these hardships. The sanitary facilities at the field hospital in Leogane, which has since been taken down, rendered valuable services to several thousand people. A permanent water treatment system was installed in Carrefour, the sprawling slum at the gates of the capital city Port-au-Prince. It has now been handed over to a US mission that has been working in Haiti for many years. This ensures that the maintenance of the systems is also secured for the future. In Petit Guniée, the installation of two provisional drinking water systems was quickly followed by the construction of shower facilities. After the break-out of cholera in 2010, up to 4,000 people used the facilities every day. As the public water pipelines have not yet been repaired, this temporary solution is expected to remain in operation in 2012.

For further information on this issue:

www.arche-nova.org

www.Aktion-Deutschland-Hilft.de

Drought in the Horn of Africa Drinking water for Ethiopia



In some regions in the Horn of Africa, livestock numbers fell by 60%, aggravating the food supply situation still further.

In 2011, the worst drought in the Horn of Africa for 60 years threatened the subsistence of over 12 million people in Ethiopia, Kenya, Somalia and Djibouti. The central problem was a lack of accessibility to fresh water resources. The situation in the district of Erebti in northeast Ethiopia was particularly precarious. The few remaining wells in the area had been polluted as a result of volcanic eruptions, only two wells remaining unpolluted. The use of trucks for water supplies can alleviate the problem in the short term but is not a solution in the long term.

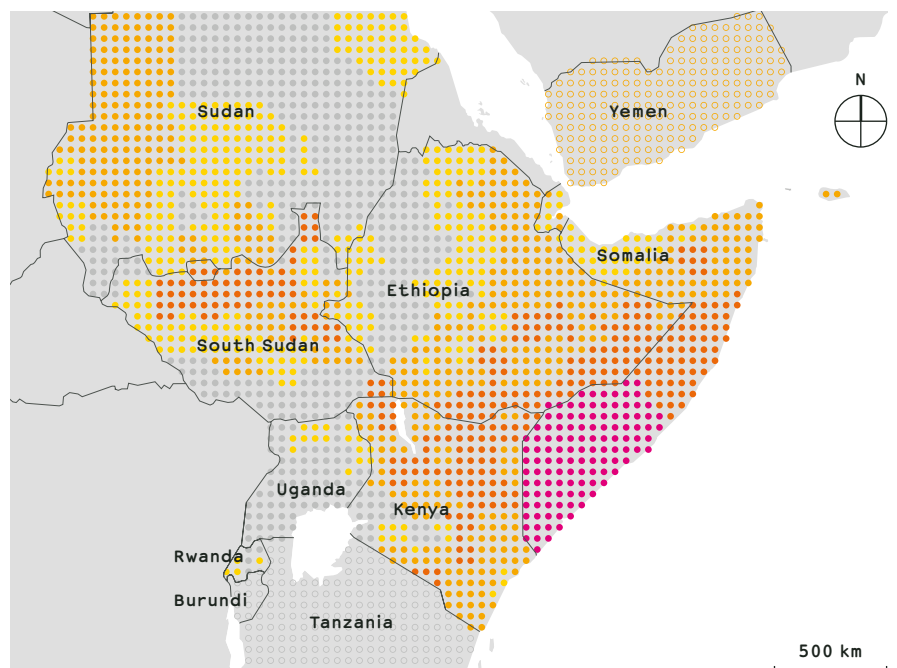
Our relief operations in recent years have shown that success depends on the selection of the right partner. For this reason, we have decided to fund another project in the Horn of Africa. Our partner arche noVa is planning to restore three wells and fit them with hand pumps (giving water access for approximately 4,500 people), to construct a storm water retention dam (providing water supplies for approximately 1,000 people) and to set up a water committee for routine maintenance and servicing of the systems. An accompanying hygiene and health education programme will also strengthen the population's ability to take responsibility for itself since, ultimately, aid can only have a sustainable effect if the programme covers all aspects.

Hunger crisis in the Horn of Africa

In 2011, the drought in the Horn of Africa led to famine in many countries. This map, produced by USAID, the US government agency for economic and humanitarian assistance, features a classification integrating food security, nutrition, and livelihood information.

- None or minimal
- Stressed
- Crisis
- Emergency
- Catastrophe/famine

Source: USAID Famine Early Warning Systems Network (FEWS NET), 2011



Further activities

Project news

Disaster risk reduction was also among the topics discussed at the General Assembly of the United Nations in 2011. Foundation Chairman Thomas Loster was invited to attend the "Invest today for a safer tomorrow" debate held on 9 February 2011 at the UN Headquarters in New York. He outlined the foundation's expertise and Munich Re's latest findings on disaster prevention to delegates from 192 member states. His main messages were:

1. It is worth investing in disaster prevention, as shown, for instance, by the National Flood Risk Management Program established by the US Army Corps of Engineers and flood control measures implemented in Hamburg, Munich and other German cities.
2. Reinsurance data point to clear trends in climate-related natural disasters. Munich Re's NatCatSERVICE shows a significantly above-average increase in storm and flood disasters over the past 30 years.
3. Insurance-based solutions are a viable option for helping developing countries adapt to climate change, even though many microinsurance projects and products still are at the pilot stage.
4. Risk awareness at all levels is the key to better disaster prevention.
5. Disaster prevention needs a global master plan. On the one hand, the people at risk have to be included in disaster prevention measures (bottom-up approach) while, on the other, corresponding laws have to be passed by the politicians (top-down approach).

The standard reference work on microinsurance compiled by the Munich Re Foundation and the International Labour Organization (ILO) in Geneva was first published in English in 2007. It has since been translated into four more languages (French, Spanish, Portuguese and Chinese) and ranks worldwide as a standard work of reference, some 7,750 copies having been printed and distributed. We are currently working on a second comprehensive volume, which will complement Volume 1 and reflect new developments in the microinsurance sector. The book will be published in spring 2012.

Fog nets research – University of Bonn's "Erdkunde" magazine

One of the 2011 issues of the University of Bonn's renowned geographical journal "Erdkunde" was devoted to fog net technology. "Erdkunde" Volume 65 presented research findings and projects that were also the subject of discussion in Münster at the 5th International Conference on Fog, Fog Collection and Dew, funded by the Munich Re Foundation.

Microinsurance learning session in London

There are about three million potential microinsurance customers worldwide. Demand is high but market penetration remains very low among those on low incomes. The British Actuarial Profession, the Munich Re Foundation and the Microinsurance Network held a seminar in June 2011 to promote awareness of microinsurance issues among actuaries and further consolidate the findings of the yearly International Microinsurance Conference.

Secretary-General Ban Ki-moon (left), too, and Joseph Deiss, President of the sixty-fifth session of the General Assembly, spoke at the panel discussion "Invest Today for a Safer Tomorrow" in New York.



Losses not an option! Sustainable asset management in turbulent times

Dirk Reinhard

The Munich Re Foundation finances its work out of income generated from its assets. Its goal is to be able to fund its current projects and maintain its capital in real terms, i.e. taking account of inflation. But what does this involve?

The Munich Re Foundation has decided to pursue a conservative investment strategy, investing a maximum of 30% only in shares, and relying to a large extent on bonds. This is in keeping with Bavarian law that requires foundations to have secure and viable investments.

At the same time, the various dimensions of sustainability, in particular its environmental and social aspects, are taken into account, in keeping with the purpose of the foundation. Thus, for instance, renewable energy and the protection of resources are key factors. The concept has been implemented in a special fund exclusively designed for the foundation by MEAG, the asset manager of Munich Re and ERGO.

However, conservative is seldom sexy and investors are often accused of being afraid to take risks. When the stock markets were booming, risk-averse investors had to justify their relatively low returns. There have indeed been years when the foundation's returns fell considerably short in comparison with the EURO STOXX 50 share index (see chart). However, from the long-term perspective, the picture is very different. Because it managed to avoid heavy losses in 2008 and 2011, for example, on balance the foundation's investments in the period 2002–2011 yielded a better return than investment in the EURO STOXX 50.

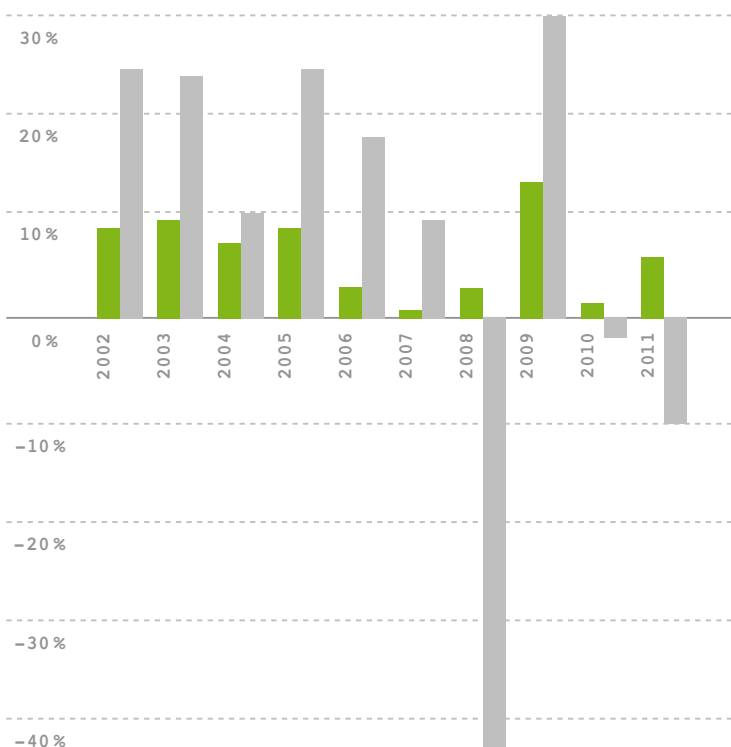
Against the background of extremely volatile markets with sharp price fluctuations, overall the foundation's risk management proved effective and, on average, the "3% plus inflation" target was achieved. In the short term, performance was boosted because falling interest rates led to higher bond prices. However, in the long term, this development, coupled with presumably rising inflation, will give rise to difficulties. In such circumstances, even the best investment programme can run up against its limits. And now a further threat looms from a completely different quarter: the debt problems experienced by countries in Europe and elsewhere show that even supposedly safe government bonds can involve substantial risk.

Stable earnings

Earnings comparison: Compared to the share price fluctuations on the EURO STOXX 50, the Munich Re Foundation has achieved relatively constant long-term returns.

● MEAG MRS
● EURO STOXX 50

Source: Dirk Reinhard, Munich Re Foundation, 2011

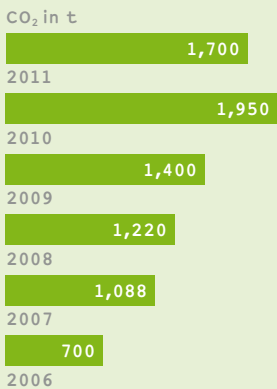


For further information
on this issue:

www.meag.com

2011 environmental review

The foundation's total 2011 emissions were a good 250 t CO₂ down on those of the previous year. Primarily because the travelling distances of conference participants were shorter.



Source: Munich Re Foundation, 2011

2011 offset project: Efficient energy for Brazil

In 2011, the Munich Re Foundation's total emissions amounted to 1,700 t of CO₂. They are inevitable when we carry out international projects. The majority (1,600 t or 93.6%) were due to events organised by the foundation. Emissions from office activities (electricity, heating) and business trips were comparatively low, amounting to 100 t (6%). The foundation's total 2011 emissions were a good 250 t CO₂ down on those of the previous year. Each year, the foundation purchases CO₂ certificates from licensed project partners to offset these emissions. It is important for the foundation to offset the emissions of the conference participants, too. Emissions from business trips made by foundation staff and those produced by its office activities kindly will be offset by Munich Re.

Since the main source of the emissions is our International Microinsurance Conference, we try to purchase certificates that support projects being run close to the venue of this annual conference. In 2011, we supported a biomass project in the state of Rio de Janeiro in Brazil, which had been set up to convert a number of ceramics factories (Piraí, Três Rios and Itaborá) to a different fuel system. The kilns, which were originally oil-fired, were converted to biomass in 2006. They now use sustainably sourced wood, wood residues, sawdust and industrial waste (wooden pallets, wooden packages), and this produces a saving of 6,125,000 litres of heating oil per year.

The ash from the kiln is added to compost that the factories produce themselves, and the waste heat is used to dry the ceramic products. The whole system is now more modern and efficient. It has also been possible to implement a number of social and ecological measures:

- Social benefits, e.g. life insurance for employees
- Additional education programmes to combat illiteracy among the workforce
- Purchasing biomass from the local favela as a poverty-alleviation strategy
- Using ceramic waste in road construction projects.

Overall, the project sponsored through the purchase of these certificates incorporates many different facets, paving the way for social and ecological progress as well as promoting climate protection.

An employee in Piraí undertaking quality controls. The ceramic waste is used in road construction projects.



Details:

Verification:
TÜV NORD CERT GmbH

Project run-time:
2006–2016

Certificate type:
Verified Carbon Standard,
Social Carbon

Total volume:
277,707 tonnes of
CO₂ equivalent

Partner:
ClimatePartner
Deutschland GmbH

Board of Trustees, Team and Committees

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UN-ISDR, PPP Advisory Board,
Geneva (Adviser)

D+C Development and
Cooperation journal published
by the German Federal
Ministry for Economic Cooperation
and Development,
Berlin (Advisory Board)

Publications

Own publications

2010 report

Date of publication
03/2011
Order numbers
German: 302-06801
English: 302-06802

6th International Microinsurance Conference 2010

Making insurance work for the poor
Date of publication
04/2011
Order number
English: 302-06931

Positionen

Dialogforen 2011
Woher? Wohin?
Demographie und Migration
Date of publication
09/2011
Order number
German: 302-07101

Publications with project partners

Microinsurance project
The Journal of Risk and Insurance, Vol. 78, number 1
2011 Symposium on Microinsurance
ISSN 0022-4367 (Print)
ISSN 1539-6975 (Online)
Date of publication
03/2011

UNU-EHS chair project
SOURCE
Climate Change and Migration: Rethinking Policies for Adaptation and Disaster Risk Reduction
Date of publication
04/2011

UNU-EHS chair project
Research Brief
Policy and Institutional Mechanisms to Address the Needs of Climate-Related Migrants
Date of publication
07/2011

UNU-EHS chair project
InterSecTions
Climate Change and Social Vulnerability: Improving Global Protection of Forced Migrants and Displaced Persons
Date of publication
07/2011

Microinsurance project
Protecting the poor
A microinsurance compendium, Volume II
Preprint of Chapter 19
Date of publication
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Electronic publications and other brochures etc., see:

www.munichre-foundation.org



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Munich Re Foundation, 2011
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Current projects 2011



Chair on Social Vulnerability at the Institute for Environment and Human Security, United Nations University (UNU EHS)

Project partner:
UN University in Bonn (UNU-EHS)

The Chair on Social Vulnerability we established in Bonn researches social vulnerability and how social resilience can be boosted. Development cooperation must be needs-based. The chair has been in existence since 2006, each incumbent holding office for one year. The 2011 chair holder is Prof. Mohamed Hamza of Oxford Brookes University. Research benefits our work in the field and can be used as a basis for policy-making.

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6th Summer Academy: "Climate change and fragile states"

Project partner:
UN University in Bonn (UNU EHS)

We invite 20 young international scientists and renowned experts to discuss solutions to global challenges at this annual event held at Schloss Hohenkammer, near Munich. The Chair on Social Vulnerability at the UN University in Bonn coordinates the academic programme of the Summer Academy, which was initiated in 2006. Its findings are used in our field work and in the political decision-making process.

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"Climate, water, energy" seminar

Project partner:
Munich University of Applied Sciences

One of the foundation's aims is to pass on the fruits of its research and its practical implications to young students. Since 2010, we have run a series of lectures at the University of Applied Science in Munich, dealing with the main issues addressed by the foundation. This seminar completes the sustainability aspect of our educational programme.

Climate lessons with the Energy School Munich

Project partner:
Green City e.V., Munich

The Energy School seeks to introduce elementary and secondary school pupils to the world of power generation, energy conservation, climate protection and similar fields using a fun, hands-on approach. We have supported their workshops since 2010, as it reaches children and young people in Munich.

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Preview of 2012

3 February

Dialogue forum "Power structures between aspiration and reality"

16 February

Dialogue forum "Raw materials and energy – Is the world being redistributed?"

1 March

Dialogue forum "Facebook, Twitter & Co. – The power of the (new) media"

11–13 April

Research Conference on Microinsurance, Enschede, Netherlands

17 April

Dialogue forum "Changing economies – Do we need economic growth?"

15 May

Dialogue forum "New lifestyles – Perspectives for sustainable development?"

22–23 May

Microinsurance learning session, Accra, Ghana

June

Release of the publication "Global yet equitable", Springer Verlag

1–7 July

7th Summer Academy discussing "From Social Vulnerability to Resilience – Measuring Progress toward Disaster Risk Reduction"

26 August

Presentation of the RISK Award, IDRC Davos

October

Closing conference of the UNU endowed chair

6–8 November

8th International Microinsurance Conference in Dar es Salaam, Tanzania



International Micro-insurance Conference

Project partner:
The Microinsurance Network,
Luxembourg

The International Micro-insurance Conference offers representatives from supervisory authorities, donor organisations, the insurance industry, the scientific community and other areas a knowledge-sharing and networking platform. The conferences date back to 2005, each one being held in a different region of the world. Their aim is to tackle poverty and create a basis for improving the living conditions of the world's poor.

Page 6



Book project "Protecting the poor – A microinsurance compendium" – Volume II

Project partner:
International Labour
Organization (ILO), Geneva

We are currently working on this comprehensive project which will make key micro-insurance findings available to the insurance industry and the general public. Volume I of the compendium (600 pages) appeared in 2006 and has been published in four languages. Volume II complements Volume I and addresses current issues discussed at our International Microinsurance Conference.



Book project "Climate change and justice"

Project partners:
PIK, Potsdam,
MISEREOR, Aachen and
IGP, Munich

There is a tendency for global justice issues to be overlooked in the climate change debate. Our findings on the subject are summarised in two major studies – the English version to be published by Springer Verlag is currently being produced. The first German book project "Global, aber gerecht" ("Global yet equitable") was published in 2010. The project provides a wealth of useful knowledge relating to two of our major concerns: climate change and development policy.



2011 dialogue forums: "Where from? Where to? Demography and migration"

At this event, which is open to the general public and held in Munich, high-ranking experts address current topics, take a look behind the scenes and engage the audience in discussion. The dialogue forums have been organised since 2005. In keeping with our motto "From Knowledge to Action", they are designed to increase awareness of demographic trends, risk perception, development policy and other foundation concerns.

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RISK Award

Project partners:
UNISDR, Geneva and
GRF, Davos

Disaster prevention is more vital than ever, and local projects show particular promise. The RISK Award, which will be launched in 2012 and presented every two years, will provide up to €100,000 to help fund groundbreaking projects. RISK Award projects are extending the scope of the early warning systems in Mozambique and Tonga (completed in 2009). Knowledge acquired from UNU projects benefits our early warning projects.

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Mozambique flood warning system

Project partners:
German Society for International Cooperation (GIZ), Maputo and IP Consult, Stuttgart

In Mozambique, the foundation and its partners are working with the local community to set up flood warning systems along a number of rivers. Early warning systems only work if the people at risk are involved in setting them up. The project was launched in 2005, and the systems have proven their worth in a number of floods in recent years. Flood warning is a central element of our disaster prevention efforts.

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Disaster aid: Water for Ethiopia

Project partners:
Aktion Deutschland Hilft (ADH), Bonn and arche noVa, Dresden

We provide crisis management resources when major natural disasters occur and ensure that those resources reach the people in need. This was the case in Pakistan (earthquake in 2005, floods in 2010), Myanmar (Cyclone Nargis in 2008) and Haiti (earthquake in 2010). Currently we are helping drought victims in the Horn of Africa, a further contribution to disaster management.

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Fog net project in Morocco

Project partner:
Dar Si-Hmad, Sidi Ifni

Ample supplies of drinking water can be provided even in arid and virtually inaccessible regions using fog nets. Our current project in Morocco is our second such venture (the first being Eritrea – from 2006 to 2009), and we funded an international conference on fog nets (in 2010). Our aim is to provide a fully functioning water supply and thus enhance the life quality and improve the resilience of people at risk.

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