2020 report



Munich Re Foundation From Knowledge to Action



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Cover: Bangladeshis on their way to work in a garment factory. Despite the wearing of masks, coronavirus protection measures such as distancing and contact restrictions are almost impossible. As the social protection and insurance systems in the country are frequently overstretched, people in Bangladesh are hit hard by risks like coronavirus, climate change and natural disasters.

Editorial

Dear Readers,

In the last year, we have all experienced the dramatic changes that COVID-19 has brought to our everyday lives. The pandemic also forced us at the foundation to rethink and reorganise many of our processes. In-person events such as the Dialogue Forums or the International Conference on Inclusive Insurance could no longer take place in their original format. On-site projects such as the fog nets in Bolivia and our RISK Award project Floating Homes in Bangladesh had to be put on hold due to Corona.

While the Dialogue Forums planned for March and April 2020 had to be cancelled at short notice, we had enough time to transform the Inclusive Insurance Conference planned for the beginning of November to a purely digital event. More than 2,000 insurance and development experts from 126 countries had signed up to attend the presentations of 77 speakers in 18 different sessions.

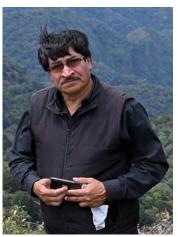
Digital formats have allowed us to reach significantly more participants than in previous years, but of course we felt the lack of in-person contact and networking — a very important part of our events under normal circumstances. It was the same with our Summer Academy on climate change and social protection systems. The virtual events took place in September 2020. Unfortunately it wasn't possible to offer in-person introductions and the usual close exchange between participants from around the world on the digital platform.

The foundation has undergone a number of personnel changes that are unrelated to COVID-19. In November 2020, Renate Bleich took over as Chair from Thomas Loster, who retired. There were also important changes on the Board of Trustees: Dr. Joachim Wenning is the new Chairman, whilst also maintaining his position as Chairman of the Board of Management of Munich Re. New to the Board of Trustees are Nicholas Gartside, Chief Investment Officer of Munich Re, and Harald Lesch, Professor of Theoretical Astrophysics at Ludwig Maximilian University in Munich and of Natural Philosophy at the Munich School of Philosophy. We are glad to have the expertise of these gentlemen on the board, as it can only benefit the work of the foundation.

We hope you enjoy this issue. Your team at the Munich Re Foundation



Roufa Khanum, Resilience Solution, is the lead of our Floating Homes project in Bangladesh (page 44).



Adalid Salazar Garcia, Instituto de Capacitación del Oriente (ICO), is responsible for our fog nets project in Bolivia (page 25).



Francis Zambo Zambo from Cameroon's Ministry of Finance helped us to organise an Inclusive Insurance Learning Session in northern Cameroon (page 32).

Munich Re Foundation From Knowledge to Action

The foundation in figures from 2005 to 2020

25.1m

8

euros invested in foundation projects

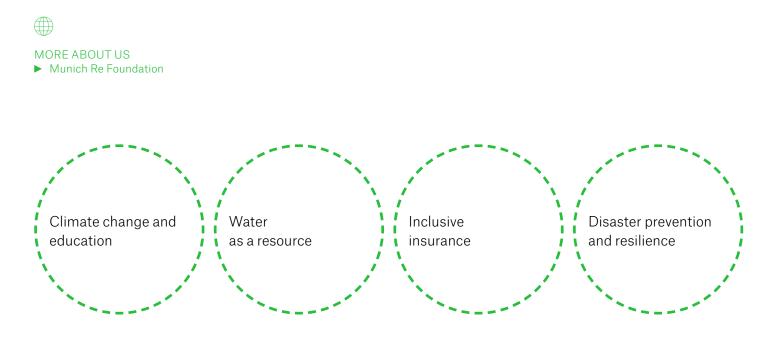
disaster prevention systems established with partners worldwide 15

Summer Academies on climate change with 600 participants organised



participants at 16 International Conferences on Inclusive Insurance and 22 Learning Sessions With knowledge comes responsibility. Our founder, Munich Re, has been handling global risks for more than a hundred years. Acting responsibly means sharing that knowledge. People in risk situations are ultimately at the core of what the foundation's work is all about. The foundation's task is to minimise the risks to which they are exposed. We address the major global challenges: the fight against poverty, environmental and climate change, water as a resource and risk factor, demographic development and disaster prevention.

Our goal is to find long-term solutions, prepare people for risks and improve their living conditions. In dialogue with partners worldwide, we provide impetus and develop perspectives.





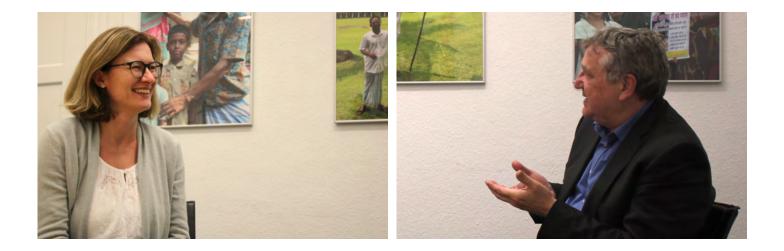
distributed

special events organised with 13,000 participants

co-financed by the foundation

Munich Re Foundation / 2020 report

surface area of over 4,000m²



The range of topics is endless

Change at the helm of the Munich Re Foundation: On 1 November 2020, RENATE BLEICH took over as Chair of the Foundation from THOMAS LOSTER, who headed the organisation since in 2005 and has now retired. We discussed the achievements of the last 15 years and looked at future focus areas of the foundation's work.

Ms. Bleich, you have been Chair of the Munich Re Foundation since November 2020. What were your first impressions?

BLEICH I found an open-minded team who gave me a warm welcome. That made my start a lot easier of course. I was looking forward to my new responsibilities, but quickly realised just how much the pandemic had hindered the foundation's work. Some projects have had to be put on ice, there is now only virtual contact with partner organisations, and many events such as the Dialogue Forums and the Conference on Inclusive Insurance have been moved to a digital format. And when you start in a new team it's not particularly helpful that you're constantly having to work from home. That has certainly been a drawback.

LOSTER I know that the team was looking forward to welcoming you as my successor and was pleased that you already have so much experience with many of our topics, such as climate change and sustainability. As Head of Sustainability at Munich Re, you were responsible for these topics and their development.

How did you see the foundation from your perspective as Global Head of Sustainability?

I was already following the foundation's projects when BLEICH I was working in Corporate Strategy at Munich Re. But we really only came into contact when I took over as Head of Sustainability. While we did not have any joint projects, my work and that of the foundation were really two sides of the same coin. The foundation is the concrete expression of Munich Re's social commitment and has guite a different level of freedom and range of options for launching relevant projects and selecting topics itself. In contrast, the main focus in Munich Re's Sustainability Unit was on meeting social responsibilities in our core business activities. We also needed to meet the requirements of external and internal stakeholders, such as the regulator, investors and employees, as well as meeting reporting requirements. So to that extent it was very different from work in the foundation, which is able to put social commitment into practice.

Mr. Loster, when the foundation was established the first objective you set was preparing people for risks and, wherever possible, improving their living conditions. Where has this been particularly successful and where would you have liked to achieve more?

LOSTER Back then, we were starting from scratch and first had to plan and design our projects. We started off in Africa, and I was astonished at how well things went despite the huge cultural differences. One of our first projects was the flood warning system in Mozambique. It is very satisfying to see how years later, in 2019, it proved its worth by saving lives during Cyclones Idai and Kenneth. Then later we launched further projects, among others in India and in Bangladesh.



The number of disasters with devastating consequences has increased dramatically in recent decades. Disaster prevention against floods and other risks is one of the foundation's core tasks (left Mozambique, right Bangladesh).

LOSTER I am happy to say that we never had an unsuccessful project in all those years. I was also surprised that the International Microinsurance Conference, today known as the International Conference on Inclusive Insurance, was never snatched from us by a commercial provider. As a foundation, we also lived up to our claim to demonstrably improve living conditions through other projects. I'm thinking, for example, of the fog nets or the EpiNurse project in Nepal, which has modernised and improved the local health system there. Of course there is also always a degree of luck involved, but I believe with us it was more a case of fortune favours the brave, because every one of our project managers was passionately committed to our work.



Inclusive insurance is a key component in offering insurance solutions to people on low incomes in developing and emerging countries, such as here in Zambia. We are working hard to advance this concept through our conferences.

In your experience, what are the crucial factors that materially influence the success of a project?

LOSTER In each project, I think it is important not just to focus on social aspects, but to incorporate economic and environmental factors as well. But the most important thing is that the enabling environment is right, in other words that you have favourable conditions. We never launched projects unless we were sure they would be accepted by local people and decision-makers. Another crucial factor is to ensure that the local partner organisations have a sound reputation and adequate capacity. If all these conditions are met, the project partners and the local people who will benefit take over responsibility. Ownership is then transferred and the projects continue to run smoothly even after the funder, in other words the foundation, is no longer involved.

The COVID-19 pandemic caused an upheaval in many areas of business and society, and pushed topics like climate change and the United Nations Sustainability Goals very much into the background. What might that mean for the future work of the foundation?

BLEICH I do not believe that COVID-19 will change our agenda. Naturally, the current priority is to combat the pandemic, and this is pushing topics like climate change out of the media spotlight. But that will change again as soon as the current crisis has passed. At the same time, there are a lot of different discussions about the lessons we can learn from this crisis to help us deal with the much greater challenge of climate change.



Fog nets are an effective way of providing clean drinking water in many dry regions of the world. Their use in combination with digital solutions offers a wealth of development opportunities.

BLEICH To that extent, COVID-19 is certainly a watershed, but not one that will affect the foundation's topic areas. Although that is not to say that we should not question from time to time our own strategy and the priorities we have set ourselves. We will be doing this over the coming months. The range of topics we could devote ourselves to is virtually endless. I will have to take a look at the UN's 17 Sustainable Development Goals, where there are a number of connecting points. However, the bigger question is what we should focus on given our limited resources.

Do you have any particular preferences?

BLEICH I think it is right to continue to focus on people at risk and topics like climate change. This is very appropriate given that our founder is a global reinsurer that deals with risks and addresses the topic of climate change in great detail on many different levels. It is a good combination if we as a foundation take care of the social commitment while the other side addresses the risks. And then there are also areas like climate risk insurance where both sides meet.

LOSTER The initiators of the foundation discussed what their most important topics might be in the 21st century and they decided on water and population trends. But naturally they also mentioned climate change as a potential field of activity and defined a wide range of topics in the Articles of Association. This allows the foundation to tackle current and urgent topics of our time in an effective way. LOSTER We had the advantage that the foundation's Board of Trustees was always in agreement with the niche areas that we targeted. The project managers developed some very solid project pillars, such as inclusive insurance, water collection from fog nets and the RISK Award, which promotes blueprints for effective disaster prevention. Even though one topic or another may change, I am sure that the foundation will continue to be successful under your leadership. Luck always plays a part and I sincerely wish you and your team all the luck in the world.

The Munich Re Foundation was able to establish itself very quickly in the community of national and international foundations. If you look to the future, where do you see the foundation in the next ten years?

BLEICH I think the foundation will play its part in ensuring the success of the Decade of Action called for by the UN to achieve the Sustainable Development Goals. I will be happy and satisfied if we manage over the next ten years to push ahead with projects that aim to improve the situation of people at risk. The diverse range of topics is a good basis, and I am sure that, as a team, we can make a valuable contribution.

Ms. Bleich, Mr. Loster, thank you very much for this discussion.

Renate Bleich

A graduate in Economic Geography, Renate Bleich joined Munich Re in 2003 and, after working in various positions in the Organisation and Strategy Divisions, was most recently Global Head of Sustainability with responsibility for developing and implementing the Group's sustainability strategy. A particular focus of her work is climate change.



CLIMATE CHANGE AND EDUCATION



The opening of the 2020 Summer Academy was a hybrid event, with some of the presenters attending the opening live in Bonn (from left to right: Sönke Kreft, MCII, Koko Warner, UNFCCC, Thomas Loster, Munich Re Foundation, Xiaomeng Shen, UNU-EHS, Himanshu Shekar, UNU-EHS).

2020 SUMMER ACADEMY Online

Summer Academy "Global climate risks and trends — Climate change and social security systems" 21—25 September 2020 500 participants Policymakers, scientists, journalists and NGO employees Project partners: UNU-EHS, LMU Munich, MCII, UNFCCC, GIZ Indonesia, BAPENNAS of the Republic of Indonesia

2020 DIALOGUE FORUMS

"Climate change, climate protection — is there still hope?" Berlin and Munich, December 2019 — February 2020 3 events with around 600 participants 2 events (March and April) had to be cancelled due to corona.

DIALOGUE FORUM SPECIAL

"Car-free urban quarters: soon to be in Munich too?" Munich, 12 November 2020

(digital) 240 participants Project partners: M:UniverCity and Strascheg Center for Entrepreneurship at Munich University of Applied Sciences, Network Klimaherbst Munich e.V.

STUDENT PROJECTS

Munich Energy School Munich, 2019/2020 school year Publication of 7 short videos and various teaching materials for download on the topic of renewable energy Workshop with 30 students Further planned workshops had to be cancelled due to corona. Project partner: Green City e.V.

PAREMIA

Analysis of nationally determined contributions (NDCs) of selected countries and the development of proposals for more effective measures Project completion: April 2021 Project partner: Germanwatch e.V.

PRESENTATIONS ON FOUNDATION'S TOPICS

47 specialist presentations by foundation staff at universities and schools, at conferences and other events, with an audience of around 4,200 people

JOINT UNIVERSITY PROJECTS

Munich University of Applied Sciences

Online seminar "Water, climate, environment — sustainable management strategies of global challenges" Munich, ongoing seminar in winter and summer term

15-18 students per term

Eberswalde University for Sustainable Development Online themed week of the "Global Change Management" master's course Munich, 30 March – 3 April 2020 32 students University of Erlangen, Department of Geography Online project seminar "Climate Adaptation, Paris 2015 and COVID-19" Erlangen, 15—19 June 2020 8 students

2020 DIALOGUE FORUMS Climate change, climate protection—is there still hope?

The Earth has already warmed significantly, sea levels are rising and the Arctic ice is melting. There is no doubt whatsoever that anthropogenic climate change represents one of the greatest challenges of our age. How we can protect our climate is the subject of heated discussion at both national and international level. The 2020 Dialogue Forums also looked at the issue of climate protection. Unfortunately, the coronavirus pandemic meant it was not possible to hold all of the planned events in 2020.

The Dialogue Forums in 2020 looked at the issue of climate change. The January Forum was the last to be held as an in-person event. From left to right: Christoph Bals (Germanwatch), Claudia Kemfert (DIW), Christian Walter (LMU) and Rita Schwarzelühr-Sutter (BMU) with moderator Hanne May (dena).



Even though an increasing number of countries have set themselves binding carbon reduction targets, time is running out. By 2030, for example, Germany needs to reduce its carbon emissions by 38% compared to 2005, and it has approved a climate package to achieve this target. Petrol prices will rise, the phasing out of coal consumption is to be completed in 20 years' time, and flying is likely to become more expensive. Climate researcher Ottmar Edenhofer, Director of the Mercator Research Institute on Global Commons and Climate Change (MCC), believes these measures do not go far enough. He warned that the cost and consequences of inaction would only be felt in 20, 30, or even 40 years' time. This view was supported by Klaus Müller, the Executive Director of the German Consumer Federation. He argued that the federal government's climate strategy would be neither effective nor socially equitable because the financial relief measures would not reach the people they were intended for. In addition, he considered that the initial carbon charge of ten euros per tonne from 2021 would not be high enough for it to have a decisive impact.

Climate protection offers enormous opportunities

"German industry has been asleep for too long," said Antje Kapek, Berlin Chair of the parliamentary party, Bündnis90/Die Grünen. She called for a different approach from politicians and business leaders. And as Claudia Kemfert from the German Institute for Economic Research (DIW) underlined, climate change also offers enormous opportunities. "The necessary investments of billions of euros are creating value and millions of new jobs around the world," she pointed out. She is convinced that the transition to 100% renewable energy is both technically feasible and economically viable provided the political will is there. At the same time, however, the Head of the Energy, Transportation and Environment department at the DIW is concerned that climate change could also trigger the next systemic financial crisis. She warned that, as the world continues to warm, we could see disastrous effects, accompanied by incalculable financial losses.





Top: Christoph Bals (Germanwatch) is convinced that implementation of the Paris Agreement will mark a turning point in the fight against the climate crisis. Bottom: Claudia Kemfert (DIW) believes climate protection will even bring economic benefits as "the investments required are in the billions and are creating value and millions of new jobs around the world".

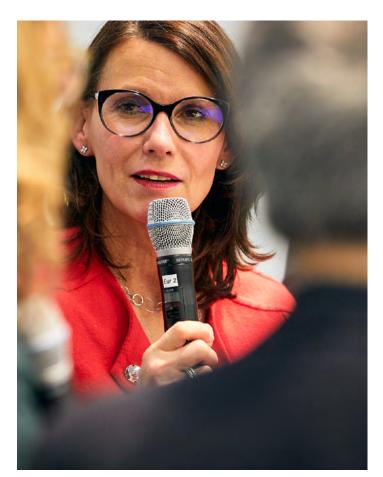
2020 DIALOGUE FORUMS

"Climate protection is a task of society as a whole."

RITA SCHWARZELÜHR-SUTTER Parliamentary State Secretary in the German Federal Ministry of the Environment

Rita Schwarzelühr-Sutter, Parliamentary State Secretary in the German Federal Ministry of the Environment, argued that multilateral solutions are essential to solve a global problem. But Christian Walter, Professor of Public Law and International Law at the Ludwig Maximilian University of Munich, pointed out that any such solutions needed to be on a voluntary basis. "If the 1.5-degree target in the Paris Agreement had been binding for all participants, many countries would not have even ratified it," he said.

Up to now, the plans of most governments are not enough to slow down global warming. The transport sector, where emissions stubbornly remain at 1990 levels, poses a particular problem in this context. On this subject, Klaus Bonhoff, Head of the Basic Principles department in the German Federal Ministry of Transport, referred to the overall package of 50 measures that his ministry had approved. These cover private and public transport, rail travel and synthetic fuels. "The objective is to develop more efficient mobility concepts," he explained.





Top: Rita Schwarzelühr-Sutter, Parliamentary State Secretary in the German Ministry for the Environment.

Bottom: Lex Hartman, CEO of ubitricity, warns that we are now at a crossroads in our approach to e-mobility. It is crucial that we now take the right path.

Sharing systems as an alternative

Claus Doll, mobility expert at the Fraunhofer Institute for Systems and Innovation Research, was convinced that the mobility transition means more than simply turning our backs on fossil fuels. "Mobility is a fundamental component in our culture and we should not be focusing solely on the topic of energy," he said. Citing such examples as sharing systems for vehicles, he reminded the audience that there were a lot of changes happening at city and community level to create a more liveable environment. "We should not be too dogmatic and dictate to individuals how they should move around," he added. "We need fewer and more efficient vehicles and there needs to be a mix of all types of mobility." As well as electromobility, he believed this approach should include other options such as regenerative fuels, hydrogen and bioethanol.

Marion Jungbluth, Head of the Mobility and Travel team at the German Consumer Federation, pointed out that simply changing the type of engine a vehicle uses would achieve little. She said that the most important thing was to offer people mobility, but without the need to have their own car. For that reason, her federation was advocating a legal entitlement to a "home mobility connection". "Just as households have service connections for electricity, drinking water, waste water and waste disposal, they must also be connected to the mobility system," Jungbluth explained. In this context, she believed that digitalisation was key. Using apps, people could organise mobility on demand, such as car pooling and car sharing arrangements. Mobility services like these could even meet the needs of people living in rural areas. But simply banning people from doing things and then leaving them to their own devices would not work. She warned that viable alternatives first needed to be developed before we make cars more expensive and that it would be a fatal mistake just to talk about doing without cars.





Bottom: Klaus Bonhoff, Director General for Policy Issues at the Federal Ministry of Transport and Digital Infrastructure in Berlin, talks about the German government's policies on transforming public mobility.

Top: Kristina Haverkamp, Managing Director of dena, presented February's Dialogue Forum on e-mobility.

2020 DIALOGUE FORUMS

PROJECT PARTNER

- dena
- ► MCC
- M:UniverCity
- Strascheg Center for Entrepreneurship
- Münchner Klimaherbst

PROJECT WEBSITE

Munich Re Foundation



Many cities are now doing more to protect the climate and reduce road traffic. For example, the city of Munich temporarily made Schwanthalerstrasse a car-free zone in summer 2020.

Special Dialogue Forum: Car-free districts

Particularly in cities with serious traffic congestion, a transport revolution means more than simply focusing on the means of transport. The key question is how we can use space differently and better than before to create a more liveable city. Car-free districts could be one way to achieve this goal. In Europe, the city of Barcelona is considered a pioneer in this field. But not all city dwellers agree with restrictions on car traffic. For that reason, Clemens Baumgärtner, spokesperson for Labour and Economy for the City of Munich, believes that, at the present time, car-free cities are simply wishful thinking. "If we talk about urban politics," he said, "we need to face reality."

Hannah Henker, a city resident who has involved herself in car-free projects, disagreed with this view. "Trying out solutions is more important than just studying the problem," she said. She advocated taking some bold steps, but without neglecting people's genuine concerns. People need to perceive the positive effects of reducing car traffic. By way of an example, Andrea Benze, Professor of Urban Development and Theory of the City at Munich University of Applied Sciences, pointed out that public space could then meet its function of promoting social cohesion more effectively. "Public space plays a key role in human encounters and creates the conditions required for an inclusive city and the cohesion of its citizens," she argued. The Summer Streets project, which created car-free and green zones in Munich for a limited period, was a generally positive experience for the city. Benze therefore proposed a different approach. "We don't have to change everything from one day to the next. Instead, we can make the car-free city a more tangible concept through pilot projects." That could increase the level of acceptance of car-free districts, which, to a certain degree, involve changing habits and comforts we have become attached to. But climate protection will only work if we are prepared to make sacrifices and do without certain things.

PROJECT PARTNER

- Munich University of Applied Sciences
- Eberswalde University, Global Change Management
- University of Erlangen, Institute of Cultural Geography

PROJECT WEBSITE

Munich Re Foundation

UNIVERSITY PARTNERSHIPS Climate change, sustainability and COVID-19

Information and knowledge lay the foundations for future-oriented decisions. An enlightened society understands how the world operates, what keeps it together and what makes it liveable. It also understands that false information and ignorance pose serious risks to sustainable development. For this reason, as a foundation we want to use our university partnerships programme to contribute to education and the generation of knowledge at universities, higher education institutions and schools. In collaboration with the students, we develop concepts on specific issues. Here are some of our topics for 2020:

- Improve biodiversity protection in the EU's agricultural landscapes
- Net-zero emissions for investment in the financial sector Is it possible?
- Rethinking the insurance of climate risks
- The city as an increasingly important player in relation to climate change
- The German Climate Action Programme 2030 and the impact of COVID-19

Fred Krüger (left) from the University of Erlangen tells foundation staff and students on a field trip how cities can prepare themselves for risks such as climate change. The field trip took place in summer 2020 after lockdown restrictions had been eased.





The new videos from the Munich Energy School explain in an exciting and easy-to-understand way how electricity is obtained from renewable energies. Each video deals with a particular source of energy: water, sun, wind, biomass and geothermal.

MUNICH ENERGY SCHOOL New video series on water, wind and solar energy

Since 2009, the Munich-based environmental organisation Green City e.V. has been running interactive school workshops on the topics of climate protection, energy conversation, renewable energies and careers in the fields of environment and sustainability as part of its educational project Munich Energy School. Since the pandemic made it impossible to hold workshops in schools this year, a series of videos has been produced for the students. They explain in an exciting and easy-to-understand way how electricity is obtained from renewable energies.

The seven short videos take up the content that would otherwise have been taught in primary schools in the project week entitled "Sun — full of energy". They can be used by teachers as supplementary material in lessons, or they can be watched at home by the children with their parents. The focus is on providing a fun approach to learning, and on conveying environmental topics in an interesting and ageappropriate way. In addition, the lesson material on renewable energies for grades 2 to 5 can be downloaded. Various aspects of energy and sustainability are explained in worksheets, puzzles and an interactive quiz, together with answers to many questions on climate protection.

Munich Re Foundation has been supporting the Munich Energy School since 2011. We are pleased that the cancellation of the workshops due to coronavirus has produced such a valuable outcome.

DOWNLOADS

 Green City, Information on the video series and teaching materials

PROJECT PARTNERGreen City

PROJECT WEBSITEMunich Re Foundation



Rivers, lakes and the sea with their diverse natural offerings are in many regions a vital source of income for many people in Southeast Asia.

2020 SUMMER ACADEMY How social protection can promote sustainable development and help to manage climate change

Many countries have social systems that protect people against a range of risks. Yet more than half of the world's population does not even have a minimum level of protection. COVID-19 has shown how vulnerable societies and their protective systems are. At the digital 2020 Summer Academy, we looked at how social protection systems are structured around the world, and how they can be used to support adaptation to climate change.

> "Social protection is defined as the set of policies and programmes designed to reduce poverty and vulnerability by promoting efficient labour markets, diminishing people's exposure to risks, and enhancing their capacity to protect themselves against hazards and interruption/loss of income." — Definition of the Asian Development Bank 2001

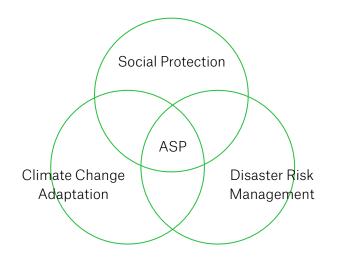
There are many kinds of social protection systems and they influence large areas of our lives. Traditionally, they mainly cover unemployment assistance, health and pension systems. The International Labour Organization (ILO) estimates that only around 20% of the world's population is adequately protected by such programmes at present. This means that, in the event of a disaster or a shock, people are supported and receive assistance to reintegrate them into the labour market. However, some 55% of the world's population do not even enjoy a minimum level of social protection, even though the United Nations holds this to be a fundamental human right. And rightly so, because COVID-19 has shown that such systems can cushion the worst effects of the pandemic.

Link to climate change

Up to now, there has not been enough discussion worldwide about the extent to which social systems can support strategies for adapting to climate change, with the aim of making people less vulnerable to existential and health risks or loss of income. At the Summer Academy, we therefore raised the question of how social protection and adaptation can be better combined — an objective that is also being pursued by the United Nations Framework Convention on Climate Change (UNFCCC).

Dimensions of adaptive social protection

Climate change and natural disasters pose numerous challenges for sustainable social and economic development. Adaptive social protection (ASP), as one element of social protection systems, can reduce vulnerability, and thus enhance the resilience of individuals, households and communities.



One way of combining these two worlds is the approach known as adaptive social protection (ASP). Sönke Kreft, Executive Director of the Munich Climate Insurance Initiative (MCII), explains: "Adaptive social protection aims to enhance people's resilience to multiple covariant risks that are caused by natural hazards and threats from climate change. The objective is to improve adaptation to climate change and the management of disaster risks by integrating social protection." This will require separating out the instruments that are relevant for the various areas (illustration below left).

500 billion dollars needed

Terry Cannon, researcher at the University of Sussex's Institute of Development Studies (IDS), explained that roughly one billion people worldwide rely on (government) assistance in the form of adaptive social protection. Based on existing programmes, he estimates that investment of US\$ 500 per person per year will be required, or US\$ 500bn in total. Emerging and developing countries would receive the lion's share of these funds. Despite the fact that, under the loss and damage programme of the international climate conferences, the international community agreed to provide US\$ 100bn per year from 2020, an enormous financing gap remains that will need to be bridged with credits. One consequence of this is that emerging and developing countries will become even more dependent on wealthy funders.

For a variety of reasons, national governments are frequently not in a position to meet their responsibilities on adaptive social protection. This may be due to unstable political conditions, a lack of resources, the absence of infrastructure, poorly equipped institutions, or simply because of a lack of know-how. In such situations, other stakeholders need to step up. Insurance companies have always played a key role, but the private sector can become active in many other ways. Small and medium-sized enterprises (SMEs) in Vietnam and Indonesia, for example, act as "patrons" for their employees and invest in measures such as flood protection. AtmaConnect, a nongovernmental organisation (NGO) from Indonesia, is taking a different approach. It has developed an app called AtmaGo that is used by more than 6 million people to participate in disaster risk management training. Thanks to its efficient networking, the NGO is able to prevent around US\$ 100m of disaster damage each year and save some US\$ 4.6m in health costs.

2020 SUMMER ACADEMY

What can we learn from COVID-19?

Faced with the COVID-19 pandemic, virtually all affected countries have adopted countermeasures, some quite quickly and others more slowly. Why can they respond like this in a pandemic situation, but not in response to the climate crisis? The big difference is that climate change primarily affects poor countries, and invariably the population groups in these countries that are particularly vulnerable. And these people have the least chance of actually influencing matters at a global level. But COVID-19 shows that it is possible to push through changes virtually overnight. A large international majority has recognised the need for action. And this is a dynamic that we need to exploit to solve the climate crisis.



This Indonesian woman uses the AtmaGo app, which serves as a disaster management system, a job search app and is primarily intended for use by women. The app plays a major role in the empowerment of women in Indonesia.



Climate change and education

GERMANWATCH CLIMATE CHANGE PERFORMANCE INDEX (CCPI)

The CCPI tracks the climate protection performance of 57 countries, which together account for more than 90% of global greenhouse gas emissions. It compares the countries' progress with the scientific guidance. Countries that are doing well in their efforts to keep global warming to 2°C (or better) are shown in green. Countries that are not doing enough are shown in yellow, orange or red.

RATING

- Very high (none)
 High
 Medium
- Low
- Verv low
- Not included in assessment

PAREMIA Climate protection targets must be more ambitious

2020 was the final deadline for countries to communicate to the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) their binding, nationally determined contributions (NDCs) to mitigating climate change and to begin implementing these goals.

PAREMIA (Partnerships for ambitious resilience and mitigation action)

Unfortunately, this climate protection milestone was rather overshadowed by the COVID-19 pandemic. But this makes it all the more important to analyse the efficiency and effectiveness of the climate protection measures. Are we putting the IPCC targets into practice? Are we on track to limit global warming to an increase of two degrees or, even better, to 1.5 degrees? Or are the political measures that have been adopted too weak?

Our project partner, Germanwatch, looks at all these questions in its PAREMIA study. The NDCs of selected countries, including Chile, India and South Africa, have been analysed and potential ways to improve them have been explored. Useful approaches that have proved their worth elsewhere have been highlighted and communicated to relevant institutions in Germany. The learning process is intended to work in both directions. Due to the coronavirus pandemic, there was a delay in collecting the empirical data. This is why the project results are only being published at the start of 2021. Virtual discussions on the findings are planned with the German Federal Ministry for the Environment (BMU) and the Federal Ministry for Economic Cooperation and Development (BMZ). The study will be presented in the form of a public, digital forum scheduled to take place in March or April 2021. ●



WATER AS A RESOURCE



Project visit to the school in Veladero: Teachers are delighted that the school will have easier access to clean drinking water in future. The fog water will also help to water the school's vegetable garden.

"By 2050 global demand for fresh water is projected to grow by more than 40% and at least a quarter of the world's population will live in countries with a 'chronic or recurrent' lack of clean water."

ANTONIO GUTERRES Secretary-General of the United Nations (in Voice of America, 2017)

FOG NET PROJECT CLOUDFISHER in the Bolivian highlands

Alto Veladero, Bolivia Winner of the tender Project start in September 2019 Duration until 2021 Construction of 14 new Cloud-Fisher Midi collectors with a net surface area of around 350 square metres (suspended due to coronavirus) Project partners: WaterFoundation, Zabalketa, Instituto de Capacitación del Oriente (ICO), Oswald Foundation

FOGNET ALLIANCE

Since August 2017 Global partnership and network of researchers, water experts and international organisations on fog net technology

Project initiators and founding members: WaterFoundation, Munich Re Foundation

FOG NETS IN BOLIVIA COVID-19 leads to interruption of project

The coronavirus pandemic is no respecter of borders — and Bolivia is no exception. A health emergency was declared in the country back in mid-March 2020, as the coronavirus brought public life to a standstill. Consequently, construction of the first fog collectors in the Alto Veladero project region, which was scheduled for April, had to be postponed until further notice.

Industrial designer Peter Trautwein from the WaterFoundation tests the wind direction in the project area. The wind forces the fog through the nets. The net fabric used and the precise direction of the fog collectors are crucial in ensuring a high volume of water can be harvested.



Clean drinking water from fog collectors

Since autumn 2019, the Munich Re Foundation has been supporting the installation of fog nets in Bolivia in collaboration with the WaterFoundation and the Oswald Foundation. We have also been working closely with Zabalketa, an aid organisation based in northern Spain that already has a wealth of experience with the use of fog nets in Peru and Bolivia. Zabalketa won our invitation to tender and launched the project.

In the Alto Veladero region at the foot of the eastern Andes of Bolivia, there is virtually no rain at all from April to November. Rivers and wells dry up, and drinking water needs to be rationed and collected from remote mountain springs that are only accessible after long journeys on foot. On top of the water shortage, the region also suffers from water pollution. The 14 new fog collectors have a surface area of 350m² and are intended to provide drinking water for the village school and inhabitants of Alto Veladero, as well as for people in the village of Sivingalito. Besides guaranteeing a continuous and reliable supply of water in the region, the new fog net system should also improve the quality of the water. Apart from drinking, the water collected can also be used in agriculture for livestock farming and irrigation. It is urgently needed everywhere.

Arrival of the construction materials in Vallegrande

At the start of the year everything still looked to be on track. In December 2019, a large shipment of materials for the construction of 14 modern CloudFisher units, comprising netting, galvanised aluminium poles, collection channels and various other components, set off on its long journey from Hohenbrunn in Bavaria to the highlands of Bolivia. Following one or two logistical setbacks and challenges, including lengthy customs negotiations, the materials finally arrived safely in the municipality of Vallegrande in March 2020, where they were received by our local project partner, the Instituto de Capacitación del



Preparations for installing the new fog nets are complete. The course of the water pipes has been calculated, the construction materials have been delivered and the water tanks have been cleaned. Construction can begin as soon as the coronavirus situation allows.

FOG NETS IN BOLIVIA

Oriente (ICO). However, because of the pandemic, the construction materials had to be stored by ICO and have been waiting to be used ever since.

If everything had gone according to plan, industrial designer Peter Trautwein from the WaterFoundation would have installed the first fog collectors together with the ICO team at the end of April 2020. Everything had been prepared by the ICO team. The villagers and chairmen of the water committees were informed about the upcoming activities, the individual water requirements of the families in the villages were ascertained, the consent of the landowners was obtained and much more besides. But all these plans were thwarted when COVID-19 came along.

COVID-19 puts a stop to project work

Unfortunately, Bolivia's economic, social and political situation makes it particularly vulnerable to the effects of the coronavirus pandemic. The measures taken to stem the spread of the virus have brought the country's economy to a virtual standstill. Within a short time, hospitals had almost reached full capacity, and the healthcare system has been overstretched ever since. The political situation was unstable because new elections had been repeatedly postponed. The first infections in the region of Alto Veladero were reported in March 2020, and since then there has been a steady stream of new cases. Our project partner ICO has made its offices and training rooms in Vallegrande available to the local health authorities. The facilities are used to care for infected persons. Most of ICO's staff are working from home, trying to support the local population as best they can.

Unfortunately, the situation in the country makes it impossible to install the fog collectors at present. But we remain in close contact with our project partners, Zabalketa and ICO, and work will resume as soon as the situation permits. Then people in the Alto Veladero region will finally be able to benefit from the fog nets and have clean water to drink.



PROJECT PARTNER

WaterFoundation

- Zabalketa
- ► ICO

PROJECT WEBSITE Munich Re Foundation

ICO staff inspect the weather station at a planned project location. Regular evaluation of wind, humidity and temperature data makes it easier to select project locations with the best potential for high water yields.

Project overview

INCLUSIVE INSURANCE



In total, over 500 regional representatives attended our Inclusive Insurance Learning Session in Cameroon, either in person or online. External experts made their presentations via videoconference. "At this critical moment, inclusive insurance can play a vital role in getting the Sustainable Development Goals back on track by protecting lives and livelihoods, reducing poverty, increasing financial inclusion, and empowering women."

ACHIM STEINER Administrator of the United Nations Development Programme

INTERNATIONAL CONFERENCE ON INCLUSIVE INSURANCE Digital Edition

2—6 November 2020 Over 2,000 registered participants from 126 countries Project partner: Microinsurance Network

INSURANCE FOR DEVELOPMENT Online Training

28 September — 30 October 2020

80 participants from 35 countries Project partner: The ILO's Impact Insurance Facility

LEARNING SESSIONS CAMEROON

"Days of Insurance and Microinsurance of the Far North" 29—30 September 2020 in Maroua, Cameroon 500 participants from ministries, financial institutions, associations, health organisations and community stakeholders Project partner: Ministry of Finance of Cameroon

ICII 2020—DIGITAL EDITION Microinsurance in times of pandemic—now more than ever

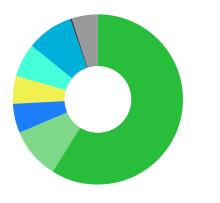
The COVID-19 crisis is threatening the livelihoods of poor people throughout the world. In many countries, insurance cover against key risks remains largely unavailable to most people. Two of the focus topics at this year's International Conference on Inclusive Insurance were how the industry will develop after COVID-19 and how affordable solutions can create added value.



Around 70 speakers from across the world contributed to the online version of the ICII's 18 sessions.

International Conference on Inclusive Insurance 2020





Source: Munich Re Foundation, own depiction

According to estimates by the World Bank, COVID-19 could plunge an additional 150 million people into extreme poverty. Achim Steiner, Administrator of the United Nations Development Programme (UNDP) and one of the keynote speakers at the digital conference, fears that global development efforts will suffer their first setback in 2020 for the first time in a generation. "At this critical moment," he said, "inclusive insurance can play a vital role in getting the Sustainable Development Goals back on track."

Affordable health insurance solutions on the rise

Just as in other industries, the pandemic has seriously affected the business operations of insurers. The experts agreed that the biggest challenges thrown up by the crisis related to sales and customer support, followed by the availability of suitable insurance solutions, which is still too low. At the conference, the Microinsurance Network presented the results from the latest "Landscape Study of Microinsurance". According to the 2019 data, affordable health insurance products, particularly for hospital stays, have further gained in importance. An additional factor is that an increasing number of relevant players are focusing on the insurance of climate risks. The topic of digitalisation is also becoming more important, although some degree of human interaction might still be needed in future. There were reservations as to whether the benefits for customers are commensurate with the high costs of certain products.

Insurance and finance industry	59.0%
Donor agencies, development and	
international organisations	9.9%
Microfinance and microinsurance providers	5.5%
Government and regulatory bodies	5.2%
Academics	6.3%
 Consultants 	8.9%
Media	0.4%
Other	4.8%

Rapid digitalisation required

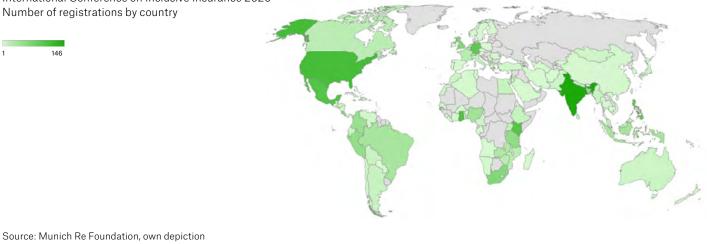
The experts agreed that the pandemic has underlined the need for digitalisation. The number and range of technological options along the entire value chain for insurance companies has increased significantly. Technology can act as an entry point for people with no experience of financial services. Mobile phones allow you to combine financial services and insurance products with other services, such as access to healthcare. Nevertheless, insurance policies still need to be explained and must be supplemented by personal contact.

Insurance providers and brokers from India report an increase in demand for fintech and e-commerce products. In turn, this helps insurers understand which products are suitable for special consumer groups. According to information from the National Insurance Commission of Ghana, 65% of products for inclusive insurance in the country are sold via mobile phones. New players, such as WhatsApp in India, are sounding out options for insurance and payment services, while automated chatbots are taking over an increasing number of human communications. Meanwhile, insurers in Asia are using Facebook for claims processing and digital marketing, and are increasingly relying on influencers instead of personal insurance agents.

On the other hand, the speed of digitalisation poses challenges for supervisory authorities and governments. A key role is played by regulatory framework conditions that leave sufficient room for innovation.

ICII 2020-DIGITAL EDITION

International Conference on Inclusive Insurance 2020



Keeping climate change in mind

The most vulnerable low-income groups face an even bigger challenge than the pandemic, namely climate change. Experts are calling for further development of the inclusive insurance market and the creation of affordable risk management solutions. Examples of agricultural insurance systems in India and Uganda have shown that public-private partnerships (PPPs) can reach millions of farmers. The main challenges in this area include the persistently high transaction costs and issues relating to long-term efficiency and sustainability.

Insurance products must also be integrated into a wider package of risk management and transfer solutions. The combination of micro, meso and macro solutions, such as the collaboration between insurance companies and the Caribbean Catastrophe Risk Insurance Facility (CCRIF), can enhance protection against natural disasters. Remaining critical aspects include the availability of reliable data and the affordability of the relevant products, which represents an obstacle to their wider distribution.

The next steps

The pandemic has illustrated the need for more costeffective risk management solutions. "What we need are long-term strategies," says Denis Duverne, Chairman of the Insurance Development Forum (IDF). The UNDP is hoping to launch a programme for the development of insurance solutions in at least 20 countries. National strategies for inclusive finance can make a crucial contribution in this context - and not just to mitigate the effects of climate change. The demand for health and medical products will transform the insurance industry. One thing is clear: ensuring access to insurance solutions will have to play a key role. Otherwise, even more people will slip back into poverty.

PROJECT PARTNER Microinsurance Network

PROJECT WEBSITE Munich Re Foundation

Inclusive insurance



Participants at the Inclusive Insurance Learning Session gather around an info stand to learn about the different risk management options that insurance offers.

MICROINSURANCE DAYS IN CAMEROON Using insurance to combat poverty

Midjiyawa Bakari, Governor of Cameroon's Far North Province, answers questions from the crowds of media.



The far north of Cameroon is an arid region exposed to high risks from climate change. Principal economic activities include growing cotton, maize and sorghum, and also livestock farming. An information event and conference under the patronage of Cameroon's Ministry of Finance and the Munich Re Foundation discussed how insurance can be used to promote economic development in the region.

There is widespread poverty in the north of Cameroon and combating the problem is a key focus of development strategies. The government intends to intensify the use of insurance cover to protect against natural disasters and health risks. Floods, fires and diseases in the tropical season regularly make it virtually impossible for people to earn a living. In an effort to explore solutions to these problems, a forum was organised for the end of September 2020 in Maroua, the capital of the Far North Region.

Combating the roots of poverty

The aim of the event was to increase awareness among the local population of how insurance can help safeguard their livelihoods. Presentation topics included regulatory framework conditions to enhance customer protection and improve claims payment procedures, and the latest reforms to integrate more than 2 million low earners in the region into microinsurance services. Participants at the event included private individuals, the Heads of SMEs, food producers, microfinance organisations, civil servants, mutual healthcare organisations and various interest groups. One of the discussion topics was the weak solvency requirements for microinsurance distributors. The regulation allowing microinsurance claims to be assessed on an index basis was also looked at carefully from an insurance perspective. The main focus here is on reducing the costs associated with claims assessment and on preventing possible fraud.

Innovative microinsurance products

At the forum itself and at exhibition stands, participants were able to get an idea of how microinsurance programmes have progressed in Cameroon, particularly in the northern regions of the country. An indexbased farming programme for thousands of cotton producers has been launched in these areas. Insurers also had an opportunity to present innovative micro-insurance products that are specially tailored to the needs of the local population. Last but not least, insurers were able to network with microfinance and association representatives with a view to forming future partnerships.

PROJECT PARTNER

 Ministry of Finance of Cameroon

PROJECT WEBSITE Munich Re Foundation

Munich Re Foundation / 2020 report

INSURANCE FOR DEVELOPMENT TRAINING Three questions to participants

The "Insurance for Development" training, hosted by the ILO's Impact Insurance Facility, took place from 28 September to 30 October 2020. Around 80 participants from 35 countries signed up for this online version of the training. The Munich Re Foundation sponsored the full or partial fees of 16 participants from the World Food Programme (which was recently awarded the Nobel Peace Prize), NGOs, microinsurance providers and representatives from supervisory authorities. We asked three grantees about the impact of COVID-19 on their everyday work and the key lessons from the seminar.

 PROJECT PARTNER
 ► ILO

 PROJECT WEBSITE
 ► Munich Re Foundation

MARIA AUGUSTA DE QUEIROZ ALVES Coordination for Personal Insurance, Microinsurance and Open Pension Plans, Superintendence of Private Insurance (SUSEP), Brazil



What is your role and responsibility in your organisation?

SUSEP is responsible for the supervision and control of the insurance, open private pension funds and capitalisation markets in Brazil. I work as a technical analyst in the coordination of micro, mass and life insurance regulation. Our duty is to propose and update regulation on those topics. I am currently involved in the review of the alternative distribution channels legislation and the update of the microinsurance rules.

What were your main lessons from ILO's training? The Insurance for Development course showed in a practical way that impact insurance can play an important role in social and economic development. Responsible insurance provision involves all core processes in the value chain and enables clients to use insurance effectively. Providing responsible insurance at scale will depend on combining efforts from the full range of stakeholders such as regulators, the insurance industry and distributors. Building business viability through a client-centric approach is key to success.

How did COVID-19 affect your daily work? What were the main challenges?

Thanks to the payment of emergency government aid during the pandemic, more than 21 million people opened their first digital bank account. This event created an important insurance access channel for the low-income population. Many people became more aware of the importance of insurance because they lost jobs or had their businesses closed, including micro and small businesses. The pandemic has accelerated the offering of innovative products such as coverage for remote medical appointments and pay-per-use insurance. •

PIETRO MAGNONI Junior Insurance Consultant, World Food Programme (WFP), Mozambique



What is your role and responsibility in your organisation?

I'm a Risk Transfer Specialist at the World Food Programme in Maputo. WFP is currently implementing an Integrated Climate Risk Management (ICRM) project, based on its R4 Rural Resilience Initiative, across four different provinces, targeting around 5,000 smallholder farmers. My responsibilities include general oversight of the introduction of the risk transfer component (a weather index insurance covering drought/dry spells), including product design, pricing and the creation of a sustainable distribution channel. Moreover, I manage the promotion and usage of informal savings groups and I'm currently prospecting FSPs (Financial Service Providers) for the provision of a formal credit for our project participants.

What were your main lessons from ILO's training? The training from the Impact Insurance Facility offered unique experiences and insights from a wide range of stakeholders and countries. The exchange and discussions that stem from the facility are always relevant and accurate, and provide a unique opportunity for interaction with key practitioners. While there is an obvious difference in the various markets and case studies that were discussed, the theoretical approaches proved to be very insightful. I look forward to the possibility of leveraging the network created by the facility and the Munich Re Foundation to increase my exposure to inclusive insurance, my experience and further grow professionally.

How did COVID-19 affect your daily work? What were the main challenges?

The pandemic has increased the challenges in the mobilisation of the target farmers for their specific training on conservation agricultural practices and has added logistical issues for the dissemination of our financial literacy strategy.

INSURANCE FOR DEVELOPMENT TRAINING

MONIRUL HOQUE Planning Manager — Microinsurance, BRAC Microfinance, Bangladesh



What is your role and responsibility in your organisation?

BRAC is the largest international non-governmental development organisation in the world. BRAC microfinance provides loans to over 7 million clients, of which 87% are women. I have managed the operational issues of the credit shield insurance project since its inception. Clients can opt in for credit shield insurance when applying for their loan. If the insureds pass away or have total and permanent disability while they have an active policy with BRAC, the household will not have to pay the outstanding loan amount from the incident date. Currently, I am working on research, coordination, monitoring and evaluation, digitisation, etc., including communications. I also work on new project development.

What were your main lessons from ILO's training? I have three major takeaways from this training: a) Learning good example cases from around the globe and utilising them for the existing project improvement and new ideas development; b) Continuously questioning the existing processes, even if they appear satisfactory. Also defining the fine line between profitability and client value in the organisation and designing the tools and strategies accordingly; and c) Seeing business processes from a top-view angle allows us to understand the improvement areas.

How did COVID-19 affect your daily work? What were the main challenges?

I found this situation an eye-opener for me in pushing myself towards new learning to remain agile. We successfully conducted remote training, enhanced the system and started Digital Claim from June 2020 amidst the lockdown. I see that this new way of working can save valuable time to invest in better opportunities. The major challenge was the inability to visit clients and field offices during lockdown, which is absolutely necessary. New project development and launching was severely affected as well.

Climate change, COVID-19 and the challenge for social protection

PRANAV PRASHAD

COVID-19 hits people in developing countries particularly hard. Social systems to buffer the consequences are often not sufficiently in place.



International labour standards and the UN recognise access to adequate social protection as a basic right. It is also widely considered to be instrumental in promoting human welfare and social consensus on a broad scale, and to be conducive to and indispensable for fair growth, social stability and economic performance, contributing to competitiveness.

As a fundamental principle in the Sustainable Development Goals, social security and protection responds to the universal need for protection against certain life risks and social needs. Effective social security systems guarantee income security and health protection, thereby contributing to the prevention and reduction of poverty and inequality, and the promotion of social inclusion and human dignity.

They do so through the provision of benefits, in cash or in kind, intended to ensure access to medical care and health services, as well as income security throughout the life cycle, particularly in the event of illness, unemployment, employment injury, maternity, family responsibilities, invalidity, loss of the family breadwinner, as well as during retirement and old age. Social security systems therefore constitute an important investment in the well-being of workers and the community as a whole, and facilitate access to education and vocational training, nutrition and essential goods and services.

In relation with other policies, social security contributes to improving productivity and employability, and to economic development. For employers and enterprises, social security helps to maintain a stable workforce that can adapt to changes. Finally, it reinforces social cohesion and therefore contributes to building social peace, inclusive societies and a fair globalisation by ensuring decent living conditions for all. However, today, as per the ILO, only 27% of the world's population has adequate social security coverage, and more than half lack any coverage at all -55% of the global population is completely unprotected. This is linked to insufficient progress in closing social protection financing gaps.

The impact of this lack of protection is accentuated in today's world that is reeling under the negative influence of climate change and COVID-19.

Catastrophic weather shocks, such as severe drought or flood, are an important cause of poverty among rural households in developing economies. Climate change, which increases the frequency and intensity of climate shocks, threatens to make shocks an ever more important part of the poverty dynamics.

As the risk of these shocks is forecasted to increase, national social protection budgets will struggle to keep up with the number of households in need. The World Bank's Shock Waves study estimates that, without policy adaptation, climate change will increase extreme poverty by 100 million.

Adding to the problem, the COVID-19 crisis has revealed the catastrophic impact of the lack of social protection coverage for 4 billion people around the world. Not only does it represent a major public health challenge but also has a serious economic and social impact. Globally, governments are facing a double challenge: they have to contain the health pandemic while responding to its economic and social effects. While vulnerable households employ coping strategies, such as the sale of productive assets or reduced consumption, they may only partially be effective even in the short term. A resilience-based approach to social protection that includes insurance can assist in a coordinated policy response to the unfolding crisis, ensuring that people can effectively access healthcare while supporting job and income security for those most affected. By increasing resilience, it has the potential to contribute to preventing poverty, unemployment and informality, thereby acting as a powerful economic and social stabiliser while stimulating aggregate demand in times of crises and beyond.

Nevertheless, the ongoing challenge is how to target or prioritise social protection measures in the face of climate change and the COVID-19 crises between the already poor and those who are vulnerable to becoming poor. Can insurance as a facilitative resilience-building tool improve the impact of social protection measures?

In several constituencies, protection for agriculture and agriculture-dependent households is a growing concern. With the potential synergies to help build resilient and sustainable rural livelihoods, insurance as a mechanism of social protection offers the possibility to protect households against agricultural and climate-related risks.

Following a systems approach that promotes the cross-sectoral coordination and integration of social protection with agricultural and climate risk insurance, at-risk households can at least partially pay for their own protection through premiums, which increases the overall reach of limited national social protection budgets. If supported by subsidies, it can lead to a smaller and more stable impact on budget for transfers to the poor than does the full cost assetreplacement programme. With disruptions in supply chains, many small agriculture business owners, farmers and MFIs are unable to run their businesses and are now in debt. The limitation on face-to-face interactions adds to the problem. However, it opens the opportunity for cashless and digital transactions — for example Tanihub, one of Indonesia's AgriTech companies, stated that at least 20,000 new users have been added since the pandemic. This highlights the growing importance of AgriTech and InsurTech in the future.

Going forward, a holistic risk management approach with quantification and prioritisation of risks can prove beneficial not just for agriculture micro and small enterprises and financial service providers but for all stakeholders.

The COVID-19 crisis combined with ongoing climate change challenges, has confirmed the urgent need to build and maintain a social protection floor to continuously guarantee at least a basic level of social security within national social protection systems for all. It is therefore essential that the temporary measures introduced in the context of this crisis to close protection gaps are understood and utilised as building blocks for establishing rights-based national social protection floors, rather than remaining mere stopgap responses.



Pranav Prashad is Senior Technical Officer at the International Labour Organization's (ILO) Impact Insurance Facility.



A dyke in Dalbanga — financed by the state — protects people from floods and erosion. The inhabitants also use the open space to dry their crops.

Project overview

DISASTER PREVENTION AND RESILIENCE



Before COVID-19 made travel in Bangladesh impossible, objectives of the Floating Homes project were discussed at length with village representatives, like here in January 2020.

2019 RISK AWARD Resilient Floating Homes in Bangladesh

Corona-related interruption of the 2019 RISK Award winning project Dhaka, Bangladesh, 15 April 2020 Agreement to extend project on a cost-neutral basis Dhaka, Bangladesh, 7 July 2020 Project partners: University of Dundee, Resilience Solution Bangladesh

2021 RISK AWARD Nature and eco-based Disaster Risk Reduction	GIBIKA Securing livelihoods against climate change	2017 RISK AWARD EpiNurse in Nepal	2014 RISK AWARD Inclusion and Disaster Risk Reduction
Launch of the call for proposals for the 2021 application process End of the application phase, 14 December 2020 Project partners: UNDRR, GRF Davos	IntoAction publication of the project 3 June 2020 Project partners: UNU-EHS, ICCCAD	Completion of the 2017 RISK Award project with the release of IntoAction 20 September 2020 Project partner: Nursing Association of Nepal	Content and media support for the First Global Summit on Inclusive DRR Online conference: 27 and 28 October 2020 Project partner: ONG Inclusiva (RISK Award winner 2014)

Disaster prevention and resilience

RISK AWARD BANGLADESH Pandemic hampers Floating Homes project

COVID-19 has hindered the progress of our RISK Award Floating Homes project in Bangladesh in a number of ways. However, together with our project partners, we hope to be able to resume our work with the local communities in the first quarter of 2021.

In April 2020, these meetings had to be put on hold. Switching to digital media was not really a viable option in Bangladesh.



"Acceptance of 'alien' ideas from afar diminishes with purely digital contact and makes implementation of innovative projects so much more difficult."

ROUFA KHANUM

Head of the project partner Resilience Solution

Bangladesh was badly hit by the coronavirus, although the country was affected less severely than might have been expected in view of its 160 million inhabitants and high population density. The strict measures taken to stem the spread of the virus included bans on travel and visiting people. Many communities - often without adequate healthcare - cut themselves off from the outside world. This affected our RISK Award Floating Homes project and work on site has been at a standstill since spring 2020. Project lead Roufa Khanum, CEO of Resilience Solution, agrees: "COVID-19 is a massive hindrance to research and fieldwork. All workshops that we wanted to conduct with community representatives had to be cancelled. Switching to digital media is not a viable option in the regions we work in, as many people don't have electricity or internet and very few own a computer."

Social interaction is indispensable

According to Ms. Khanum, it is not just a matter of providing information. "The Floating Homes project should excite people and motivate them to think about alternative living concepts." The ultimate aim of the project is not for the NGO Resilience Solution and Dundee University to put in place a finished floating community centre on the island of Kutubdia in the south of the country. It is more about developing and implementing concepts in a participatory process with the village community. Social cooperation, mutual exchange and understanding are essential to realise this approach. Virtual communication cannot achieve this objective. "Acceptance of 'alien' ideas from afar diminishes with purely digital contact and makes implementation of innovative projects so much more difficult," she says.

The Resilience Solution project team getting advice on how construction materials can be sourced locally and how sustainable they are.



At the NGO's office in Dhaka staff discuss how best to manage the project digitally from April 2020 onwards.



RISK AWARD BANGLADESH



Before coronavirus: Children are one of the project's core target groups. Their needs and concerns will also be included in the project planning.

Climate change will not wait

A third point that concerns Khanum and her team is the new prioritisation of topics. Bangladesh was and remains a forerunner on the subject of climate change. That is why the Floating Homes project attracted such interest in the region. People there know that they will have to adapt to the consequences of climate change in the medium term — in their case to coastal erosion, heavier flooding, stronger cyclones and changing monsoon patterns. COVID-19 brought new concerns and fears, with the result that adaptation to climate change has taken something of a back seat. Roufa Khanum confirms this: "If this phase lasts too long, we will lose a lot of valuable time. Climate change won't wait until humanity has solved the COVID-19 issue." Together with our project partners, we hope to be able to resume work with the local communities in Bangladesh in the first quarter of 2021. Our objective remains to develop a viable concept for a floating, disaster-resilient community and innovation centre and, if possible, to implement the design in a pilot scheme. One thing is certain: the negative effects of climate change are becoming ever more evident especially in Bangladesh. •

PROJECT PARTNER University of Dundee Resilience Solution PROJECT WEBSITE

Munich Re Foundation

2021 RISK AWARD Using ecosystems to prevent disasters

Recent decades have seen a significant increase in the number of severe disasters. Preventing them is therefore more vital than ever, and local projects frequently show the most promise. The RISK Award is bestowed every two years to help finance future-oriented projects. The 2021 call for proposals looked for projects in the field of ecosystem-based disaster risk reduction.

Forests and mangroves along the coast can save villages from flooding. Protecting them and using them as flood barriers is vitally important. Here is an example of natural erosion prevention on the east coast of Zanzibar.



RISK AWARD 2021

Disasters triggered by natural hazards cost lives, destroy assets and impact economies. The United Nations Office for Disaster Risk Reduction (UNDRR) defines a disaster as a serious disruption of a community or society, causing widespread human, material, economic and environmental losses. In addition, the affected community does not have adequate resources of its own to remedy the disruption.

Increase resilience

Disasters often result from natural hazards interacting with social and economic systems. The scale of a disaster is largely determined by the way a society shapes its environment and by the level of resources it can muster to restore people's livelihoods. So if we wish to increase resilience to disasters, we need to consider not just the nature aspect (the hazard), but also the social and economic stability of the social system (exposure and vulnerability). Adaptation to climate change is also playing an increasingly important role.

The RISK Award has made the improvement of people's resilience to risks and disasters its primary objective, particularly in developing countries. A further goal is to promote innovation in order to reduce risks and to improve disaster management.

More and more often, disasters strike in places where ecosystems such as forests, wetlands, coastal and marine systems or drylands have been damaged. For example, deforested slopes are susceptible to landslides, while populated wetlands can exacerbate the consequences of flooding. Ecosystem-based disaster risk reduction (Eco-DRR) or nature-based solutions (NbS) can do more than simply reduce the disaster risk. Stable ecosystems can also help safeguard livelihoods and enhance local resilience to disasters and climate change.

47 SUBMISSIONS FROM

The 2021 RISK Award, which is endowed with €100,000 in funding, is looking for projects in the field of NbS that also consider the aspects of social and economic stability. The foundation and its partners are convinced that nature-based solutions have a positive impact on disaster risks, sustainable development and the fight against climate change. With this in mind, the 2021 RISK Award is taking an approach that reflects three major UN frameworks, namely the Sendai Framework for Disaster Risk Reduction (2015-2030), the 2030 Agenda for Sustainable Development, and the 2015 Paris Agreement on Climate Change.

47 proposals from 24 countries had been received by the closing date for applications on 14 December 2020. The winner will be announced in May 2021. •



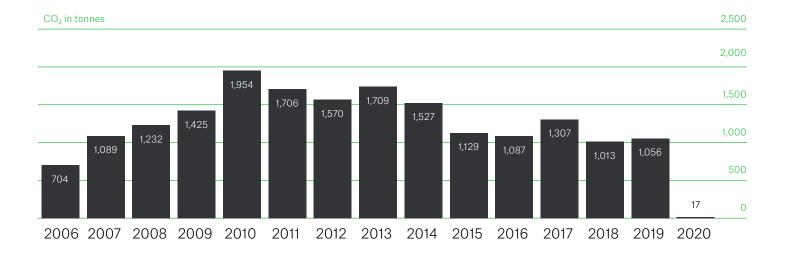
ENVIRONMENTAL PERFORMANCE 2020

We have been calculating our carbon footprint ever since the foundation was first established. It comprises the following components: emissions from business operations (electricity and heating in the offices), business trips made by our employees, and our projects. Most emissions in the projects category stem from travel by participants in order to attend conferences and seminars. Due to the coronavirus pandemic, our carbon footprint was dramatically reduced from 1,056 tonnes to 17 tonnes in 2020, as the majority of our events were held in digital format.

For business trips, we emitted 0.16 tonnes of carbon, while operation of the offices accounted for 16.3 tonnes. In calculating these figures, we have followed the methods used by Munich Re (Cf. Munich Re Sustainability Report). Just 0.66 tonnes of carbon were generated this year by events and projects (according to the old calculation method for live events). The bulk of these came from the Dialogue Forums at the start of 2020, when physical meetings were still taking place. Calculating the carbon footprint for digital events is a complex process. For our events, the total would have been in the range of double- to treble-digit kilo amounts. For the carbon offsetting calculation, we therefore decided to round up to one tonne in the "Projects" category. These emissions and the emissions from our offices and business trips are offset by our founder, Munich Re, through the purchase of carbon credits.

WEBSITE

 Munich Re Foundation Environmental performance



EMISSIONS SINCE 2006

We have been offsetting our CO_2 emissions every year since the foundation was established. Our goal is to further reduce CO_2 emissions.

Source: Munich Re Foundation, own depiction (2021)

Internal foundation issues

GLOBAL PARTNERS

INCLUSIVE INSURANCE	RISK AWARD	micro	Deutsche Gesellschaft	
Microinsurance Network	Global Risk Forum (GRF)	insurance <mark>n</mark> etwork	GIZ für Internationale Zusammenarbeit (GIZ) GmbH	MEFIN Network
German Society for International Cooperation (GIZ)	UN Office for Disaster Risk Reduction (UNDRR)		An and	
Mutual Exchange Forum on Inclusive Insurance (MEFIN) Network	Nursing Association of Nepal (NAN) University of Dundee	BMZ Receiption Admistry for Economic Cooperation and Development		IMPACT INSURANCE
Federal Ministry for Economic Cooperation and Development (BMZ)	Resilience Solution Bangladesh	(
International Labour Organization (ILO)/ Impact Insurance Facility	ONG Inclusiva	Georgia <u>State</u> University University Analysis of Risk	ç (o cenfri	
Georgia State University's Center for the Economic Analysis of Risk (CEAR)	SUMMER ACADEMY	•0		
Centre for Financial Regulation and Inclusion (Cenfri)	United Nations University, Institute for Environment and Human Security (UNU-EHS)	access to insurance initiative	WORLD BANK GROUP	C Milliman
Munich Climate Insurance Initiative (MCII)	Ludwig Maximilian University of Munich (LMU)	Ó	EA Consultants	
Access to Insurance Initiative (A2ii)	United Nations Framework	InsuResilience		GSMA
World Bank Group	Convention on Climate Change (UNFCCC)			
MicroInsurance Centre at Milliman	Munich Climate Insurance Initiative		ASIA INSURANCE REVIEW	
InsuResilience	(MCII)	AAI	DEDICATED TO ASIA'S INSURANCE INDUSTRY	
EA Consultants	German Society for International Cooperation (GIZ)			
GSMA	Indonesia			
International Actuarial Association (IAA)	BAPENNAS of the Republic of Indonesia			
Asia Insurance Review	CLIMATE CHANGE AND SUSTAINABILITY	Green 🎯 City	GRF	
Ministry of Finance of Cameroon	Germanwatch			
FOG NETS	Munich University of Applied Sciences		university	
WaterFoundation	Eberswalde University for	*	of Dundee	Resilience Solution Juliane Charges to Protect Life and Environment
Zabalketa	Sustainable Development (HNEE)			
Instituto de Capacitación del Oriente	University of Erlangen			
(ICO) Oswald Foundation			UNU-EHS Institute for Environment and Human Security	LMU
	Deutsche Energie-Agentur (dena)			
ENERGY SCHOOL	Mercator Research Institute on Global Commons and Climate Change (MCC)	United Nations Framework Convention or Climate Change	3	GERMANWATCH
Green City e.V.	M:UniverCity		Kementerian PPN/ Bappenas	
	Strascheg Center for Entrepreneurship (SCE)	HM	Eberswalde	
	Social Entrepeneurship Academy		second of the second	
	Network Klimaherbst Munich e.V.		Marcialor Research Institute an Global Commons and Climate Change	M \$ UniverCity

Social Entrepreneurship Akademie

Internal foundation issues

PUBLICATIONS 2020

Own Publications

2019 REPORT German and English REPORT 15th International Conference on Inclusive Insurance Coping with Climate Risk INTOACTION 8 Gibika Securing livelihoods against climate change INTOACTION 9 2017 RISK Award EpiNurse — Improving health care in Nepal







 İntoAction
 9

 2017 RİSK AWARD
 Epinurse – Improving

 Epinurse – Improving
 Epinurse

 Interview
 Interview

 Interview
 Interview

Publications from projects

SUMMER ACADEMY Sonja Ayeb-Karlsson, Dominic Kniveton & Terry Cannon (2020) Trapped in the prison of the mind: Notions of climate-induced (im)mobility decision-making and wellbeing from an urban informal settlement in Bangladesh





WEBSITE

 Munich Re Foundation Own publications

ONLINE ARTICLE

 Trapped in the prison of the mind

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Munich Re Foundation Königinstrasse 107 80802 München, Germany Telephone +49 (89) 38 91-88 88 49 (89) 38 91-88 88 info@munichre-foundation.org www.munichre-foundation.org Letters: 80791 München, Germany

Editorial team Munich Re Foundation: Martina Mayerhofer, Christian Barthelt, Renate Bleich, Dirk Reinhard

Andreas Schuck, Munich

Editorial support Melissa Merle, Munich Re Foundation Prof. Dr. Peter Höppe

Design Keller Maurer Design, Munich

PICTURE CREDITS

Mohammad Ponir Hossain, picture alliance Cover

Resilience Solution Bangladesh Pages 1 (left), 42, 43, 44, 45

Peter Trautwein, WaterFoundation Pages 1 (centre), 8 (left)

Ministry of Finance of Cameroon Pages 1 (right), 28, 32

Martina Mayerhofer, Munich Re Foundation Page 4

Thomas Loster, Munich Re Foundation Pages 6, 7 (left), 16

Dirk Reinhard, Munich Re Foundation Pages 7 (right), 8 (right), 29

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Glory Ndaka, World Food Programme Page 38

Christian Barthelt, Munich Re Foundation Pages 41, 46 "Our goal is to find long-term solutions, prepare people for risks and improve their living conditions. In dialogue with partners worldwide, we provide impetus and develop perspectives."

MUNICH RE FOUNDATION

Munich Re Foundation Königinstrasse 107 80802 München, Germany Telephone +49 (89) 38 91-88 88 Fax +49 (89) 38 91-7 88 88 info@munichre-foundation.org www.munichre-foundation.org Letters: 80791 München, Germany