

THE CLIMATE JOURNAL

THE CAMPAIGN MAGAZINE OF THE RED CROSS YOUTH



WHAT IS COMING TO US

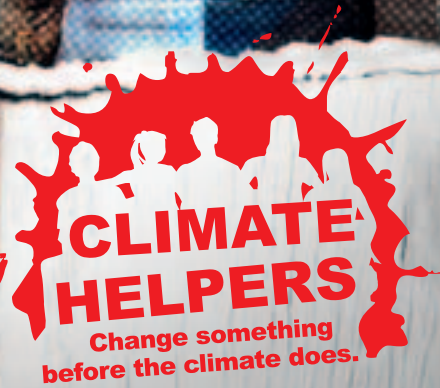
The climate is changing

CIVIL PROTECTION

Correct reaction to a disaster

ACTIONS NOT WORDS

Become active for a better climate



FOREWORD



Climate change is an important issue for the Red Cross and Red Crescent Movement. As a global aid organisation, we provide help to anyone in need. The effects of climate change are being clearly felt by people in newly industrialised and developing countries: Crops destroyed by drought or ramshackle homes unable to withstand storms mean their livelihoods are quickly lost. Even in the developed countries, climate change is becoming apparent through extreme weather events. However, more stable living conditions mean the people there are better equipped to protect themselves. Many of the German Red Cross' (GRC) projects aim to reduce the impact of natural hazards on the people affected and help them adapt to climate change. The German Red Cross Youth (GRCY) also contributes to this by informing people about the remedial measures necessary to appropriately respond to climate change – whether this be in distant regions or here in Germany. A related and equally important issue is that of climate protection. The German

Red Cross is also active in this field, campaigning to reduce greenhouse gas emissions. The Red Cross Youth' requirement to enforce climate protection directives across the entire association is a major initial step here because climate protection and adaptation measures are particularly effective if they are closely tied in together.

The GRCY campaign provides a wide range of options for school students, young people, GRCY members and interested parties to examine the issue of climate adaptation and protection and also to participate in related activities. This Climate Journal addresses all the important aspects of this topic and serves as a source of basic information on the campaign. The aim of the Climate Journal is to enlighten you on this highly relevant, enthralling matter. We hope it makes for an entertaining and educational read!

Dr Rudolf Seiters
President of the German Red Cross

Sponsored by:



CONTENTS

CLIMATE CHANGE

An issue for the Red Cross Youth 6

WHAT IS COMING TO US

The climate is changing 9

OVERCOMING CLIMATE CHANGE

Climate adaptation & climate protection 15

THE EFFECTS OF CLIMATE CHANGE IN GERMANY

20

CIVIL PROTECTION

Correct reaction to a disaster 24

HEALTH

Strain due to rising temperatures 30

THE EFFECTS OF CLIMATE CHANGE IN DEVELOPING AND NEWLY INDUSTRIALISED COUNTRIES

34

EDUCATION

A key to adaptation 46

CLIMATE-RELATED MIGRATION

The last resort 53

CONSUMPTION & CLIMATE PROTECTION

58

ACTIONS NOT WORDS

Become active for a better climate 63

AN OVERVIEW OF THE CAMPAIGN

68

GLOSSARY

70

THE GERMAN RED CROSS YOUTH

72

LEGEND


 Climate change	 Climate protection	 Health	 Climate-related migration
 Climate adaptation	 Civil protection	 Education	 Requirement


CLIMATE CHANGE


An issue for the Red Cross Youth


The year 2010 is the warmest in worldwide average since temperatures first started being recorded. At the same time, greenhouse gas emissions have risen more dramatically than ever before – by a hefty 70 percent since 1970. There are a multitude of initiatives asking people to take action to combat climate change but we also need solutions for climate adaptation and have to ask ourselves how climate change affects our everyday lives. Through its campaign, the German Red Cross Youth (GRCY) wants to generate more involvement and show how changes in the climate impact on people here and in other countries. The main focus is on climate adaptation: Who is particularly affected? How can we adapt and protect ourselves against extreme weather events? How can we help people who are affected much more severely? These are


just a few questions the campaign seeks to answer. When it comes to climate adaptation, we mustn't forget about climate protection. This is another important issue we want to address. This is because adapting to the consequences of climate change only makes sense if we simultaneously combat its causes. The campaign revolves around five aspects:

- 

> HEALTH <
- 

> CIVIL PROTECTION <
- 

> EDUCATION <
- 

> CLIMATE-RELATED MIGRATION <
- 

> CLIMATE PROTECTION <

For each focus area, the GRCY has formulated requirements which it hopes will send out clear signals to the public. The Climate Journal provides an overview of this, serving as the basis for the campaign's content and compiling methods and ideas for group sessions or classes. Page 69 also provides an overview of the entire campaign.



ROBIN WAGENER | 31 | President of the German Red Cross Youth:

"Climate change is already causing flooding in some areas, devastating storms and entire stretches of land to dry out. This will only get worse. Young people today will have also to live with it for a long time. At the Red Cross, we intervene where we are most needed. That's why we want this campaign also to reach out to as many young people as possible so that they can support us and become climate helpers."



MICHAEL SCHULENBURG | 21
 Genthin, Saxony-Anhalt:
"We will probably have to live with the consequences of climate change for a very long time. That is why I am participating in the campaign."



WHAT IS COMING TO US

The climate is changing

“The meteorological Equator seems to have shifted 20 degrees of latitude north. It’s as if the African desert were migrating north.” (Giampiero Marracchi, Florence Weather Research Centre) Global warming has been occurring for a long period of time. In recent years, it has been understood under the term “climate change”, which describes the rise in average temperature worldwide. However, the earth is not heating up evenly. Its average temperature in the 20th century rose by approximately 0.74°C. The period between 2001 and 2010 was the

warmest decade since weather first started being recorded. The world’s sea levels have risen by around 17 cm over the last century. Also even the water cycle has changed: Rainfall in the northern hemisphere increased by around 5-10 percent in the 20th century, yet regions such as North and West Africa are receiving much less rain. Mountain glaciers are constantly receding. This is an alarming sign, because their sensitivity to temperature changes acts like the earth’s “clinical thermometer.”

THE NATURAL GREENHOUSE EFFECT

The fact that there is even life on earth is due to the natural greenhouse effect, which works like this: Around 50 percent of the sun's rays penetrate the atmosphere and heat the earth's surface. The earth then radiates back this heat. While the sun's rays can break through the atmosphere, the earth's thermal radiation cannot. Greenhouse gases keep the heat in the atmosphere, causing it to be re-radiated back onto the earth – creating the greenhouse effect. Also just as well because otherwise the earth's surface would be -18°C and life could not exist. The average temperature is +15°C and the most important greenhouse gases are water vapour (H₂O), carbon dioxide (CO₂), ozone (O₃) and nitrous oxide (N₂O). These gases occur in the atmosphere without any human intervention and are responsible for the natural greenhouse effect.

The Intergovernmental Panel on Climate Change (IPCC) was founded in 1988 and investigates the effects of climate change. Its reports serve as an important basis for all climate policy decisions.

1

SOLAR RADIATION:
Up to 30 percent of incoming solar radiation (short-wave radiation) is reflected into space by the earth's atmosphere (clouds and tiny particles) and surface. The reflective power of the earth's surface depends on surface quality. Snow, ice and water reflect more energy than land.

2

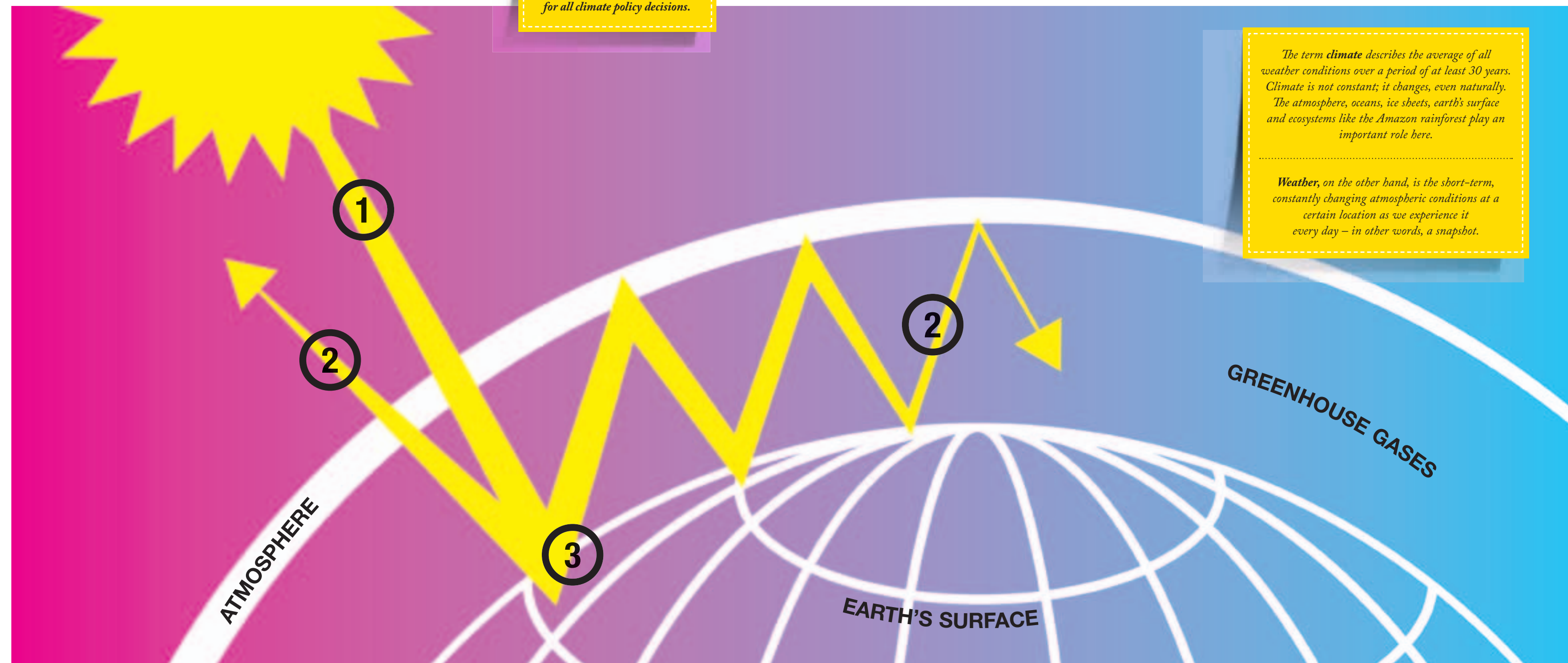
GREENHOUSE GASES:
Heat energy (long-wave radiation) leaves the earth's surface and enters the atmosphere. Part of it is absorbed by greenhouse gases, which in turn radiate energy back to the earth. The higher the concentration of greenhouse gases, the greater the volume of energy radiated back, heating both the earth's surface and the atmospheric layers close to it. The process thus feeds off itself.

3

HEAT ENERGY:
Solar radiation (short-wave radiation) which hits the earth's surface is converted to heat energy, warms the earth's surface and causes water to evaporate.

*The term **climate** describes the average of all weather conditions over a period of at least 30 years. Climate is not constant; it changes, even naturally. The atmosphere, oceans, ice sheets, earth's surface and ecosystems like the Amazon rainforest play an important role here.*

***Weather**, on the other hand, is the short-term, constantly changing atmospheric conditions at a certain location as we experience it every day – in other words, a snapshot.*



THE MANMADE GREENHOUSE EFFECT

Humans are largely responsible for the unnatural global warming. Vast quantities of greenhouse gases are released as a result of

- › burning coal, crude oil and natural gas and clearing forests (creating CO₂),
- › agriculture, e.g. cattle breeding and rice growing (creating methane),
- › air traffic and
- › industrial processes.

The gases intensify the greenhouse effect. Between 1970 and 2004 alone, humans caused a 70 percent increase in greenhouse gas emissions. CO₂ makes up approximately 55 percent of the anthropogenic (manmade) greenhouse effect, whilst methane, which is 20 times more harmful to the climate, makes up 15 percent.

Various countries' contributions to climate change differ greatly: The industrial states are considered the main cause of anthropogenic climate change. Over the last century, the USA and Europe were respectively responsible for 30.3 percent and almost 30 percent of all CO₂ emissions generated by humans. On the other hand, all developing countries combined were responsible for just 21 percent. However, developing and newly industrialised nations, particularly China, India and Indonesia, are now producing more and more greenhouse gases.



Tipping points:

The entire climate system can collapse once the 2-degree threshold has been exceeded. The desiccation of the Amazon rainforest and the thawing of permafrost soils can have catastrophic consequences for humanity.

GRIM FUTURE PROSPECTS

What will the climate be like in future? How does it influence people's lives? The following scenarios are conceivable, depending on the quantity of harmful gases humanity continues to churn out into the air:

- › Sea levels rising by 18-59 cm.
- › The worldwide average temperature rising by 1.8-4.0°C by 2100. The warming is not evenly distributed, but instead particularly severe in certain regions, e.g. in the far north.
- › More rainfall at higher latitudes by 2100, less rain in the tropics and subtropics (including the Mediterranean). The disrupted water cycle will more frequently result in heavy rainfall, flooding, storms and heat waves.

THE GLOBAL COMMUNITY NEEDS TO ACT! TO COUNTER THESE DEVASTATING EFFECTS, THE GLOBAL COMMUNITY MUST SET ITSELF AMBITIOUS GOALS AND IMPLEMENT THEM. GERMANY CAN AND SHOULD BE A PIONEER WHEN IT COMES TO CLIMATE ADAPTATION AND PROTECTION. THE GLOBAL RISE IN TEMPERATURE MUST BE LIMITED TO BELOW 2°C, OTHERWISE THE RISKS TO HUMANS INCREASE DRAMATICALLY.



Sources and further information:

• S. Rahmstorf, H. Schellnhuber: "Der Klimawandel", Munich 2007. • IPCC: "Climate Change 2007. Synthesis Report": www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf
 • Germanwatch: "Globaler Klimawandel: Ursachen, Folgen, Handlungsmöglichkeiten", Berlin 2008: www.germanwatch.org/klima/gkw11.pdf • Everything about climate change and the challenges faced by the German Red Cross: www.drk.de/weitweit/entwicklungszusammenarbeit/katastrophenvorsorge/klimawandel.html



Unlike the dinosaurs,
who were surprised by a
falling meteorite and became extinct,
we can adapt to the climate.
We have the time that these giant
creatures did not have to prepare
ourselves for changes and
protect ourselves effectively.
We should use it wisely.

OVERCOMING CLIMATE CHANGE

Climate adaptation & climate protection

Climate change sometimes has considerable consequences for people in different regions. They have to adapt to environmental changes. Society and governments need to take preventive measures to protect population groups at particular risk. Building dykes and disaster risk reduction are just two examples of climate adaptation measures.



Climate adaptation is the term used to describe measures which seek to respond to climatic risks and thereby protect people.

CLIMATE ADAPTATION AND PROTECTION GO HAND IN HAND!

Climate protection plays an important role when it comes to countering climate change and its consequences. Adapting to climate change only makes sense if we simultaneously combat its causes. That is why climate protection always involves climate adaptation measures. The common motto is: protecting the climate while overcoming the consequences through adaptation. To do this, governments, industry, society and NGOs must formulate and implement common goals.

THE EFFECTS OF CLIMATE CHANGE

Climate change affects everyone – but not in equal measure. The table on the following page shows the effects of global warming on nature and humans in different regions. The situation is clear: developing and newly industrialised countries are affected much more severely than Germany.

In terms of the effects, a distinction is made between subtle climate change and extreme weather events such as floods or severe storms. Subtle climate change only becomes apparent over a longer period of time, e.g. when freshwater recedes.



Climate protection is a collective term for measures which seek to mitigate or prevent global warming, e.g. by reducing greenhouse gas emissions.



INTERVIEW WITH CONNY HÄUSLER | 56

Divisional manager of the GRC's East Africa regional office in Nairobi, Kenya

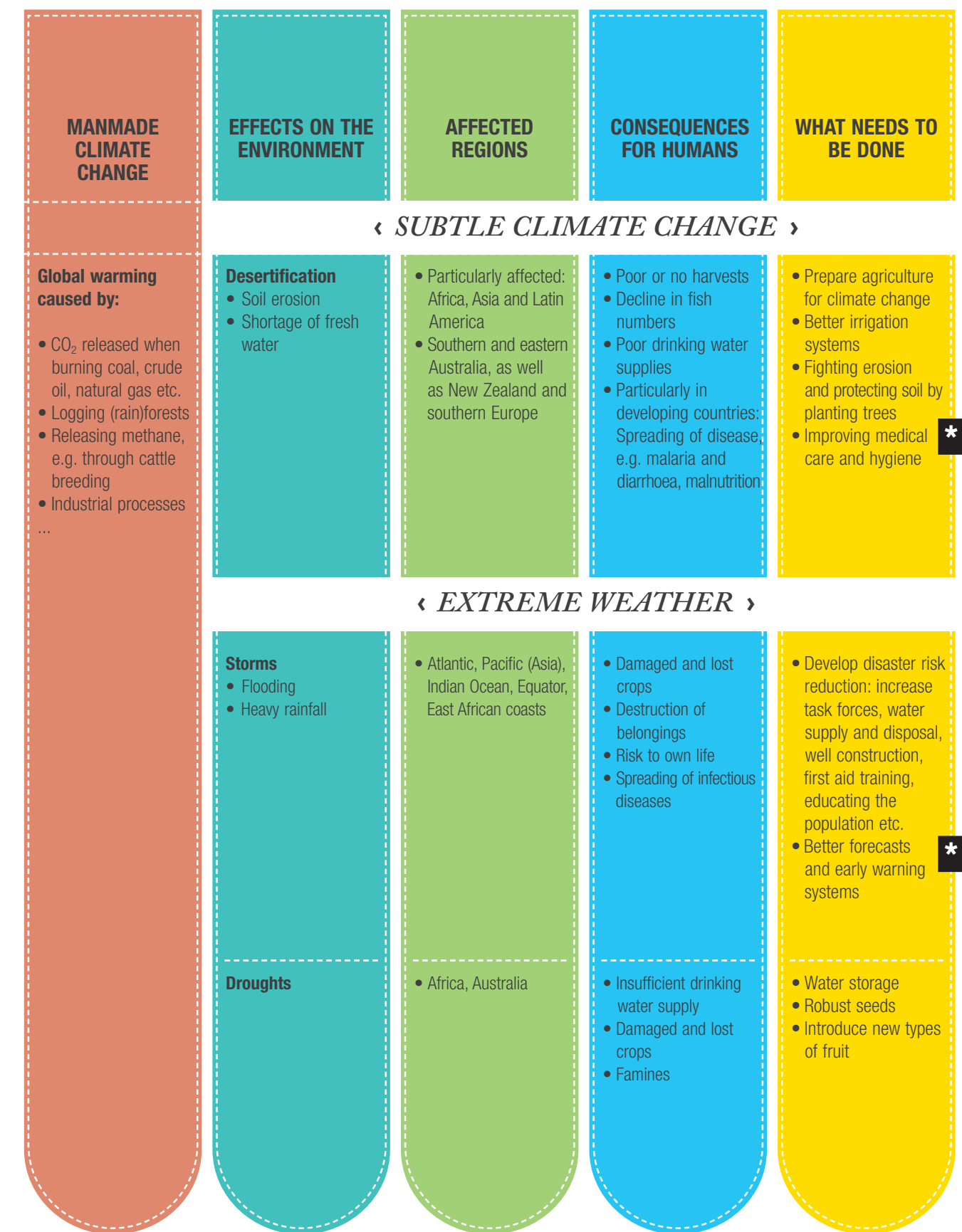
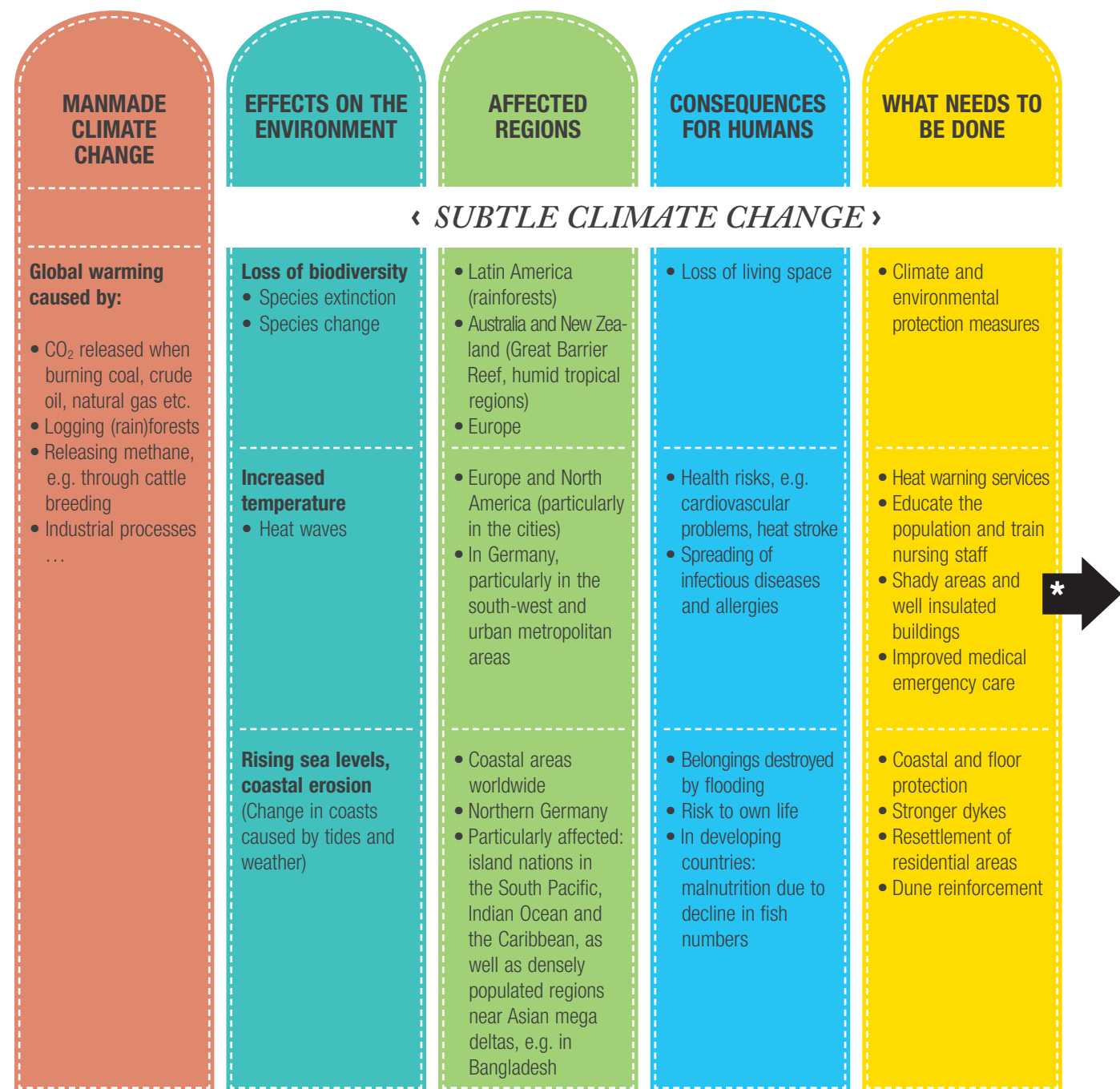
What are the main problems faced by people in East Africa?

Many people in Somaliland move with their cattle from one pasture to another as (semi) nomads. Droughts have meant that some of the pastures they have been frequenting since time immemorial no longer exist. Very few people know how water can be stored or fertile soil preserved. Although drought periods can now be predicted with relative reliability, people in the remote villages don't have any way of accessing this information, because internet, TV, radio and newspapers are not very prevalent.

What would help the people to be better prepared for droughts?

For a start, they could do with training on how to grow food for their cattle and store supplies. Robust seeds would enable them to survive the drought periods better. Planting trees is also important; it protects fertile soil and ensures that wood, the most important source of energy, is in constant supply.

Interview conducted by Ina Detzler, GRCY education officer in Rhineland-Palatinate, who was in Kenya as a campaign ambassador.



➡ The consequences of climate change increase poverty in developing countries and threaten human safety: escape is then the last resort.

WHAT'S HAPPENING WHERE?

The consequences of climate change vary greatly, manifesting themselves in local temperature increases, major heat waves, drought periods and extreme weather events. Altered behaviour and prevalence of flora and fauna are also a reflection of climate change. This world map categorises the signs of change geographically, highlighting the dramatic developments worldwide.

PERMAFROST SOILS IN ALASKA
 Temperatures in Alaska have risen by 3–4°C over the last 50 years. The melting permafrost is causing roads and buildings to sink and municipalities are becoming uninhabitable.

CANADA'S POLAR BEARS
 Within a decade, the Arctic sea ice will recede by approximately 8 percent, further limiting the polar bears' habitat.

NORTH AMERICAN MOSQUITOS
 The mosquito hibernation period is starting nine days later than 30 years ago, meaning the insects can transmit diseases over a longer period of time.

BLOSSOMS IN WASHINGTON
 On average, the tree blossoming season is starting four or five days earlier.

ATLANTIC HURRICANES
 2005 saw more category 5 hurricanes than ever before.

TROPICAL ANDES
 Countless mountain glaciers across vast areas have receded throughout the 20th century.

FLOODING IN BOLIVIA
 Approximately 17,500 people were affected by heavy rainfall and flooding in spring 2006.

DROUGHT IN SOUTHERN BRAZIL
 The drought of 2006 caused a number of soy crops to be lost.

ICE SHELVES
 In 2002, 3,250 square kilometres of ice shelves broke off from the Antarctic Peninsula, accelerating glacier flow rate and ice sheet recession.

SOUTH ATLANTIC HURRICANE
 In 2004, the first ever hurricane to be documented in the South Atlantic hit the coast of Brazil.

FLOODING IN BRAZIL
 160 people were killed by floods and mudslides in 2004; tens of thousands were left homeless.

HEAT WAVE IN EUROPE
 Some 70,000 people in Europe died from the heat in 2003.

DROUGHT IN SPAIN
 Winter and early spring 2005 were the driest in Spain since recordings started in 1947.

EUROPEAN ALPS
 In 2003, glacier thickness decreased by almost double the rate of record year 1998.

EUROPEAN BUTTERFLY MIGRATION
 The distribution areas of 22 European butterfly species shifted 35–240 km north over the course of the 20th century.

EUROPEAN AUTUMN
 In many countries north of the Alps, the autumn of 2006 was the warmest since weather recordings first started.

DROUGHT IN THE HORN OF AFRICA
 In 2006, more than 11 million people suffered from starvation as a result of drought in Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Somalia and Tanzania.

FLOODING IN THE HORN OF AFRICA
 2006 brought the worst flooding in 50 years. There were more than 600 deaths in Ethiopia alone.

MELTING IN SIBERIA
 The average temperature in West Siberia has risen by 3°C since the 1960s, causing permafrost to melt.

DROUGHT IN CHINA
 Severe drought in northern China in 2006 significantly damaged 12 percent of the country's agriculture, affecting several million people.

ASIAN SUMMER MONSOON
 Heavy rainfall and flooding in parts of northern India, Nepal and Bangladesh claimed approximately 1,800 lives and left millions homeless in 2004.

DROUGHT IN AUSTRALIA
 Rainfall declined significantly or even stopped completely between 1998 and 2007, limiting cattle breeding and prompting water restrictions in the cities.

FLOODING IN CHINA
 Heavy rainfall in 2006 led to massive flooding and landslides affecting 17 million people.

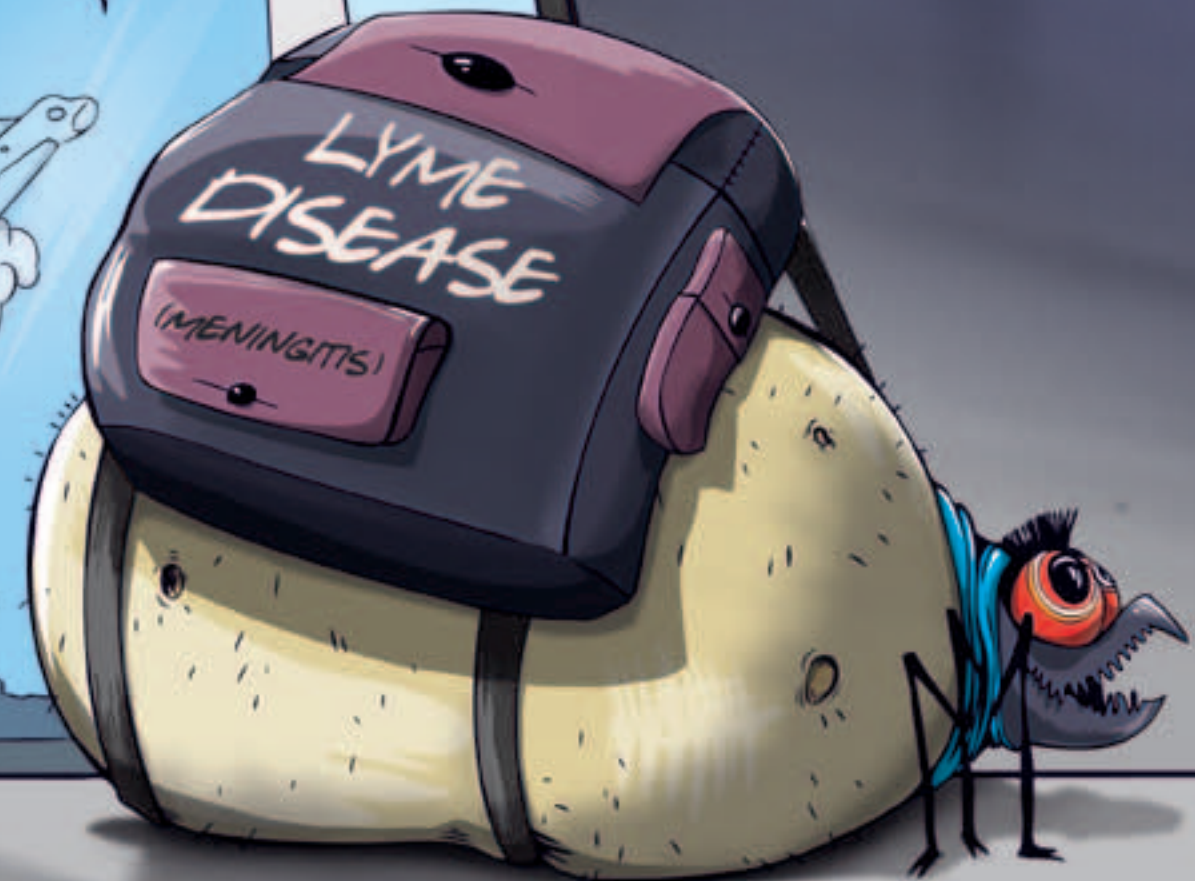
CORAL BLEACHING
 In 1998, the Great Barrier Reef and many other coral reefs were affected by the worst bleaching ever documented.

FLOODING IN NEW ZEALAND
 Heavy flooding in 2004 claimed many lives, caused considerable material damage and destroyed farming and pasture land.



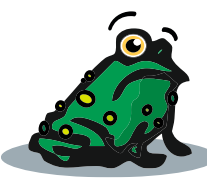
THE EFFECTS OF CLIMATE CHANGE

in Germany



In 2003, Germany recorded its highest temperature since weather readings first began: 40.2°C. For some 100 years, climate change has been making itself felt here through a 0.9°C rise in annual temperature. Winter rainfall is increasing, while snow cover is declining. Heat waves, heavy rainfall and squalls have been becoming more frequent over the last 20 years. These phenomena are occurring for longer, more often or more intensely. Concrete consequences of climate change in Germany are:

- › Rising sea levels, e.g. caused by more frequent storm surges on the North Sea coast and flooding at the river mouths in the Baltic
- › Extreme weather events (heat waves, storms, heavy rainfall)
- › Melting glaciers
- › Flooding



This wide variety of changes in climate has a serious impact on natural ecosystems and humans. Biodiversity is being lost, which is weakening the ecosystems and this vulnerability is particularly apparent in the Alps and wetlands, where there is a danger of water loss. Germany's coasts, on the other hand, are at risk of flooding, posing a threat to the Wadden Sea. These changes are already affecting people's everyday lives. Climate change endangers safety, natural life, health and economic livelihood.

In 2008, the Federal Government enacted the German Climate Change Adaptation Policy (Deutsche Anpassungsstrategie), which lists the risks posed by climate change to Germany and suggests important measures for limiting possible damage. It is primarily a case of better protecting Germany against the consequences of climate change, describing the challenges Germany needs to overcome and the actions required. This affects areas such as health, energy and tourism industries, as well as biodiversity, coastal protection and flood protection.

LIVELIHOODS AT STAKE
Farmers are having to grow new products and some areas can't even be used for farming anymore. Pests are another threat to agriculture and forestry, as they can cause serious damage and harm humans. The rising sea levels are triggering more storm surges on the North Sea coast, generating the risk of drinking-water salinity and endangering settled areas.

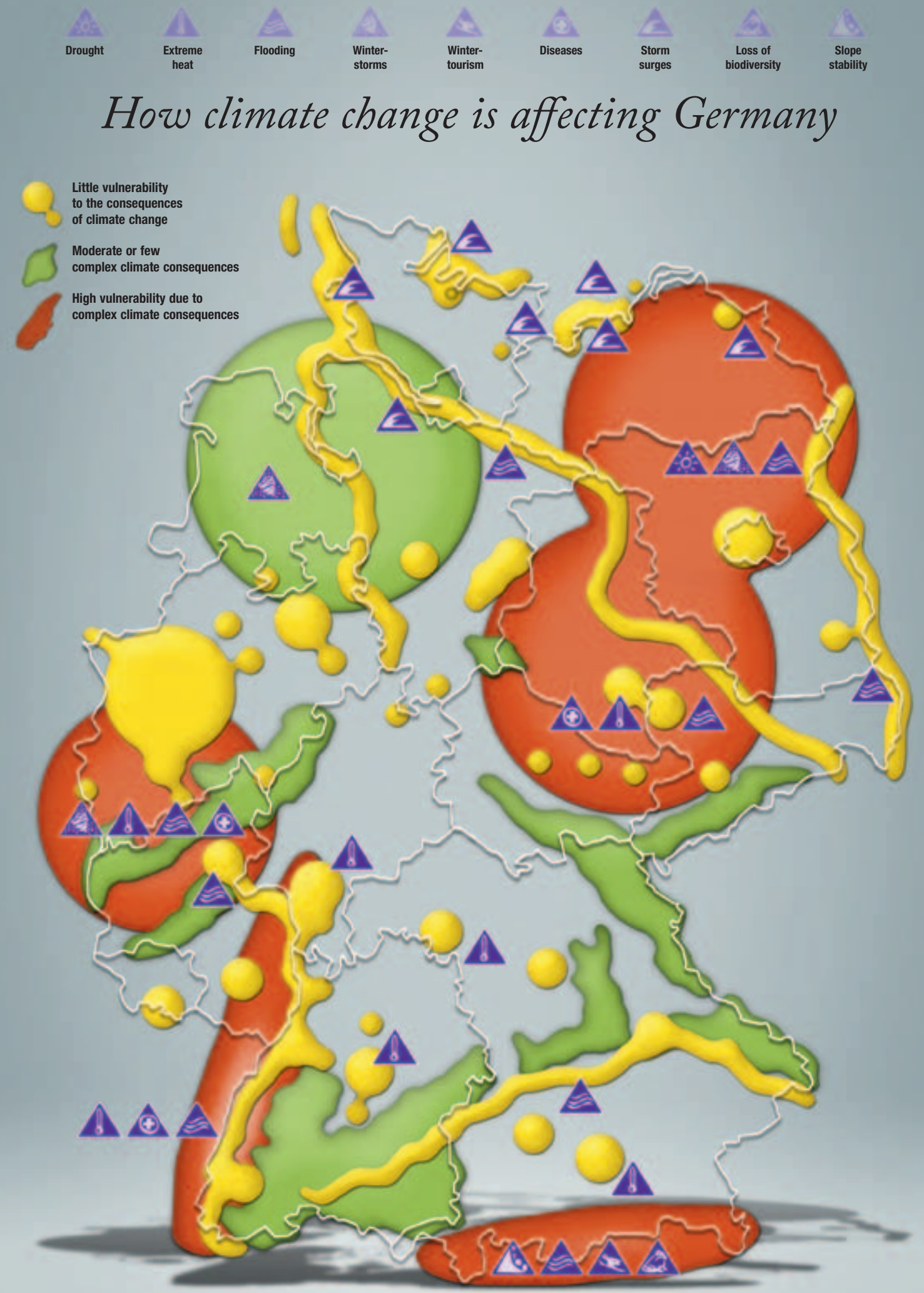
HEALTH UNDER THREAT
The higher temperatures are particularly problematic to health, creating favourable conditions for the migration and spreading of parasites from southern regions, e.g. ticks which transmit Lyme disease (meningitis). The number of sandflies capable of triggering leishmaniasis (a parasitic disease) is also increasing. Furthermore, rising temperatures heighten the risk of contracting infections (salmonella) or allergies through food and water.

ECONOMY AND SAFETY AT RISK
Climate change is also affecting agriculture, fishing and tourism. By 2050, for instance, it is expected that half of today's ski fields in the Alps will have disappeared due to de-glaciation. Germany is additionally exposed to major safety risks in terms of electricity production, infrastructure, transport etc. For example, in the "heat wave summer" of 2003 and the summer of 2006, some nuclear and coal-fired power stations had to temporarily cease operations, as the rivers were too hot for adequate cooling. The conventional power plants were unprepared and electricity prices rose dramatically. The low tides during these hot summers also severely restricted shipping on the Elbe and Rhine, while the melting asphalt impeded road traffic. Many states, regions and municipalities in Germany have now developed plans to adapt to the consequences of climate change, or are in the process of doing so. As the effects differ greatly from region to region, the adaptation projects too are very diverse.

You can see how temperatures and rainfall has changed in Germany since 1930 by visiting www.deutscher-klimaatlas.de

You can find an overview of the country's various adaptation projects here: www.anpassung.net

Sources and further information:
 • The effects of climate change in Germany: www.germanwatch.org/klima/kliedu07.pdf and www.germanwatch.org/klima/ab-deu.pdf • Federal Ministry for the Environment, Nature Conservation and Nuclear Safety: "Dem Klimawandel begegnen - Die Deutsche Anpassungsstrategie", Berlin 2009: www.bmu.de/klimaschutz/downloads/doc/42783.php



Source: Prof Dr Rüdiger Glaser



CIVIL PROTECTION

Correct reaction to a disaster

Accidents, storms, flooding and power outages can affect anyone! To protect against this, Germany has an extensive aid system: Rescue services and the fire brigade provide direct on-site assistance, the task of the federal states is civil protection and the federal government provides extra staff, rescue helicopters and vehicles. The federal states and municipal governments thus co-operate as partners to protect the people against risks, prevent hazards, or prepare ways to overcome these. Dealing with the effects of climate change in Germany, particularly extreme weather events like flooding and storms, poses new challenges when it comes to protecting the population. Federal States and municipalities are developing their own strategies to counter climate change, with the assistance of the federal government. Aid organisations such as the German Red Cross, whose main priorities include civil protection, also have to address new tasks as a result of climate change. For this reason, the organisation has decided to strengthen civil protection measures and protect the environment.



Civil protection is a collective term for all establishments operating in the sphere of disaster control, self protection and civil defence. Its task is to protect the people from risks, prevent hazardous events, cope with them and limit their consequences.



THE BROCHURE "FÜR DEN NOTFALL VORGESORGT" ("EMERGENCY PRECAUTIONS") describes what each individual can do in the event of a disaster:

www.bkk.bund.de/SharedDocs/Downloads/BBK/DE/Publikationen/Broschueren_Flyer/Brosch_FdN.pdf?__blob=publicationFile

SAFETY INSTRUCTIONS

CLIMATE HELPERS
Change everything. Save the climate.

- Precautions and self-help
- Back-up documents
- Hygiene
- Emergency call + First Aid
- Medicine cabinet
- Flood
- Power outage
- Storms
- Radio
- Preventive fire safety
- Emergency supplies
- CBRN hazards

wegen
Hochwasser
gesperrt

WHICH NEW TASKS IS THE CIVIL PROTECTION FACED WITH AS A RESULT OF CLIMATE CHANGE?

There's still a lot to do: relief equipment and tactics need to be checked, e.g. the technical equipment and co-operation among all relevant authorities. More research is also required. We can only react appropriately if we know what sort of changes will be occurring in

Germany as a result of climate change. People must be aware of the risks and know the correct reaction to a disaster. Finally as well, our (early) detection systems need to be improved.

TEVIN HARRIS | 19
District Youth President
in Esslingen, Baden-Württemberg
and member of the campaign project group:
*"Civil protection in extreme weather events
resulting from climate change is particularly
important for us young people, because we're
the ones most likely to be affected by flooding
or heat waves down the track.
We need to take action –
to protect ourselves and others..."*



HOW THE GERMAN RED CROSS REACTS TO CLIMATE CHANGE: HELICOPTER-BASED WATER RESCUES



Helicopter-based water rescue exercise at the eastern base in Saxony on 8 June 2011.

Flooding in particular is on the rise in Germany as a result of climate change: Out of 56 disasters recorded over the last ten years, 52 were floods. In cases like these, it's

all about providing rapid assistance to those acutely affected. The German Red Cross responds to this with helicopter-based water rescues – a co-operative project initiated jointly by GRC and DLRG water rescue service, fire brigades and federal police. Since 2006, the water rescue service has been training suitable air rescuers, who are lowered from the helicopter on a rope to rescue people floating in the water or who have taken refuge on rooftops.

But there are also other examples demonstrating how German Red Cross staff prepare for climate change. For instance, volunteers provide drinks to people stuck in traffic on hot days. This is because the increasingly hot summers also pose a major challenge for civil protection.



WHAT WE WANT!

DESPITE THE AID SYSTEM IN PLACE, THE PEOPLE THEMSELVES ALSO NEED TO KNOW THE CORRECT REACTION TO A DISASTER. VALUABLE TIME IS OFTEN LOST WAITING FOR HELP TO ARRIVE. IT CAN INSTEAD BE USED WISELY – BECAUSE JUST A FEW MINUTES CAN MEAN THE DIFFERENCE BETWEEN LIFE AND DEATH. IT'S NOT JUST FEDERAL POLITICS WHICH IS RESPONSIBLE FOR MEASURES ON HOW WE IN GERMANY CAN BETTER ADAPT TO EXTREME WEATHER. IT'S ALSO THE RESPONSIBILITY OF FEDERAL STATES AND MUNICIPALITIES TO EDUCATE THE POPULATION ON THIS. WE CAN ALL DO SOMETHING ABOUT THIS BY FINDING OUT AND INFORMING OTHERS ON THE CORRECT REACTION TO A DISASTER, OR REVIEWING OUR FIRST AID SKILLS.

THAT'S WHY WE'RE ASKING THE MUNICIPAL, STATE AND FEDERAL GOVERNMENTS TO INTRODUCE PROGRAMMES TO PREPARE CHILDREN AND YOUNG PEOPLE FOR EXTREME WEATHER EVENTS. THE PROGRAMMES MUST PARTICULARLY BE RUN AT KINDERGARTENS AND SCHOOLS.

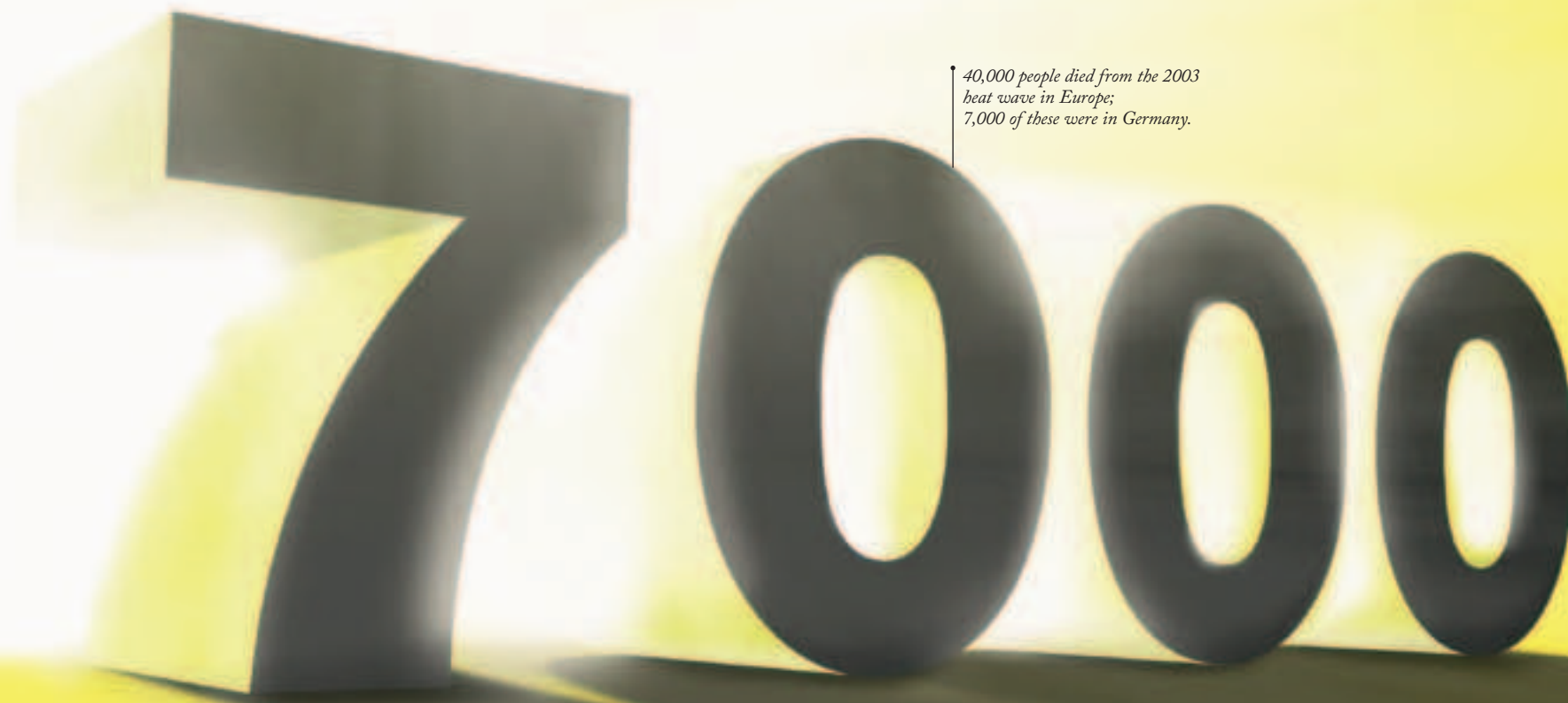


Sources and further information:

- Facts on civil protection and practical tips on what to do in an emergency, provided by the Federal Office of Civil Protection and Disaster Assistance (BBK): www.bbk.bund.de
- BBK: "Klimawandel – Herausforderungen für den Bevölkerungsschutz", Bonn 2011: www.bbk.bund.de/SharedDocs/Downloads/BBK/DE/Publikationen/Praxis_Bevoelkerungsschutz/Band_5_Praxis_BS_Klimawandel_Herausforderung_f_BS.pdf?__blob=publicationFile
- German Red Cross headquarters: "Krisenmanagement-Vorschrift des Deutschen Roten Kreuzes (K-Vorschrift)", Berlin 2011.

DID YOU KNOW THAT ... IF SEA LEVELS ROSE BY ONE HAMBURG WOULD BE AFFECTED? ... IF SEA LEVELS WOULD BE AFFECTED? ... IF SUMMER TEMPERATURES COULD MELT? ... DAMAGES CAUSED BY THE 2002 ELBE ... 21 PEOPLE DIED IN SAXONY ALONE AS A RESULT

METRE, 88 PERCENT OF BREMEN AND 30 PERCENT OF ROSE BY TWO METRES, THE ENTIRE NORTH SEA COAST ROSE BY 3°C, 80 PERCENT OF THE ALPINE GLACIERS FLOOD TOTALLED APPROXIMATELY 10 BILLION EUROS? OF THE ELBE FLOOD?



40,000 people died from the 2003 heat wave in Europe; 7,000 of these were in Germany.

HEALTH

Strain due to rising temperatures

We like it when the sun shines. But when we think back to the heat-wave summer of 2003 or July 2010, we see that sun can quickly become a curse: 40,000 people across Europe died in 2003; with 7,000 in Germany alone – primarily from heart attacks, cardiovascular problems, kidney diseases, airway disorders and metabolic diseases.

A heat wave is when there is very intense heat for a long period of time, posing an extreme threat to health.

Those particularly affected were women over 70, people from low-income families and the chronically ill. Germany, with its ageing population and a society where child and youth poverty is growing, is thus particularly vulnerable to climate change. But there are also indirect problems which can negatively affect our health, such as

- › the declining quality of drinking water,
- › the increasing prevalence of allergies,
- › the spreading of infectious diseases,
- › greater air pollution and
- › greater exposure to UV radiation, increasing the risk of skin cancer.

INFECTIOUS DISEASES AND ALLERGIES

Global warming is increasing the risk of diseases transmitted by animals (vectors) in Germany. Greater rainfall and the milder climate is causing mosquitoes, ticks and other bugs to become more prevalent. In Germany, the greatest threat comes from diseases transmitted by ixodidae, such as Lyme disease and tick-borne encephalitis.

Along with worldwide trade and tourism, it is the warmer climate which is responsible for foreign diseases spreading across the country. One example of this is the Asian tiger mosquito, which particularly likes to inhabit used car tyres. If the climatic conditions at the new location are right and there are enough biotopes, the mosquito becomes domesticated and can spread diseases like dengue fever. In Italy the Asian tiger mosquito sparked an epidemic in 2007, with 200 people infected.

Allergies are also occurring more frequently, because the warming and increased CO₂ content are causing the pollen season to start earlier and last longer – by approximately 12 days overall in the last 30 years. Some newly introduced plants, such as common ragweed, can also trigger asthma.

THE TEMPERATURE IS RISING – AND EXTREME HEAT IS BECOMING A PROBLEM

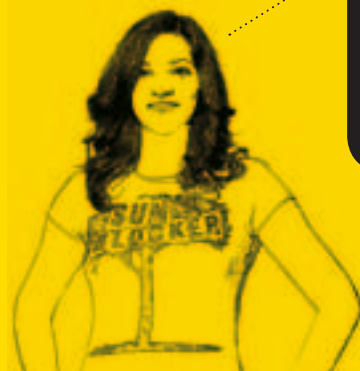
Extreme heat is one of the biggest health risks in Germany, sometimes resulting in heatstroke, lack of fluid, sunstroke and heat cramps. Healthy teenagers and adults are not generally at risk if they have enough to eat and drink. The elderly, infants, the disabled and the chronically ill, on the other hand, are at greater risk. Pre-existing illnesses such as diabetes and cardiovascular disorders, as well as the consumption of alcohol, drugs and excess caffeine, can prevent the body from adapting appropriately. On hot days, the body balances its temperature by releasing heat through sweat, thereby losing fluid and minerals. This is the reason that it's so important to drink! But older people rarely feel thirsty. They don't drink enough and also sweat less. This puts a huge strain on their body, often resulting in heat exhaustion and dehydration.

Some regions in Germany will be particularly affected during times of extreme heat. Major metropolitan areas and cities located in valleys or basins are at greater risk than rural regions, though Bavaria and the Upper Rhine Plain can also expect to notice more warming than the rest of Germany.



TIPS ON HOW TO PROTECT YOURSELF IN EXTREME HEAT

- Stay in the shade
- Wear loose clothing and cover your head
- Drink 2-3 litres a day (water or diluted juices)
- Avoid alcohol and drinks containing caffeine
- Eat light, salty food
- Avoid physical exertion



NIKOLA RECH | 22 | GRCY Trainer and member of the campaign project group:
 "Getting involved in the campaign means countering the health-related consequences of climate change and knowing how to help in emergencies. In doing so, we can make an important contribution to humanity, to health protection and to climate adaptation. Everyone can do something!"

	HEATSTROKE	SUNSTROKE	HEAT CRAMPS	SUNBURN
CAUSES	Body temperature can rise to 41°C in 10 minutes. Heatstroke can kill within 24 hours.	Intense exposure to the sun's rays results in inflamed meninges and causes dangerous swelling in brain tissue.	These normally occur in people who sweat a lot, causing the body to lose a lot of fluid. The low salt content in the muscles results in painful cramps.	Direct exposure to the sun burns unprotected skin. In severe cases, this results in fluid-filled blisters. Risk of skin cancer!
SYMPTOMS	Extremely high body temperature Hot, red, dry skin Headaches and dizziness Drowsiness and intense thirst Cramps and loss of consciousness	Severe headaches Neck stiffness Sensitivity to light Nausea and vomiting Clouding of consciousness	Heat cramps can also be a sign of heat exhaustion: Muscle cramps in the stomach, arms and legs (usually when playing sport)	The skin becomes red, painful and feels warm or hot.
WHAT SHOULD YOU DO?	Call a doctor immediately! Give water. Take the affected person somewhere cool. Loosen tight clothing and apply cold packs.	Take the affected person somewhere cool and shady. Cover in cold, wet cloths. If there is no improvement, call an emergency doctor.	Sit down and rest immediately. Drink juice or similar. Do not play any sport for the next few hours. If the muscle cramps last for more than an hour, consult a doctor.	If an infant is in pain, consult a doctor immediately. Apply cold packs and immerse the affected areas in cool water. Apply moisturiser. Never pop blisters!

Why are tree-planting campaigns a good idea? Trees combat climate change by drawing the greenhouse gas CO₂ out of the air and storing it in their plants. This improves air quality. Planting campaigns can raise awareness about how to address the climate crisis and show that everyone can do simple things to fight it. The tree symbolises the notion of taking action against climate change and working for climate justice.



WHAT WE WANT!

AFTER THE 2003 SUMMER HEAT WAVE, EARLY DETECTION SYSTEMS WERE DEVELOPED, SUCH AS THE WARNINGS ISSUED BY THE DEUTSCHER WETTERDIENST (GERMAN WEATHER SERVICE). HEAT-RELATED ILLNESSES AND DEATHS CAN BE REDUCED AND EVEN PREVENTED WITH BETTER HEALTH SYSTEMS AND MORE EDUCATION FOR THE POPULATION (INCLUDING FROM MEDICAL NURSING STAFF). BUILDINGS SHOULD ALSO BE WELL INSULATED – WHICH SAVES POWER AND COOLS ROOMS. BUT GREENER URBAN AND LANDSCAPE PLANNING IS ALSO ESSENTIAL: SEALED AREAS IN CITIES ARE A PARTICULAR PROBLEM. MUNICIPAL TREES ARE IMPORTANT CLIMATE REGULATORS WHICH STORE WATER AND ABSORB DUST AND NOISE.

THAT'S WHY WE'RE ASKING THE MUNICIPAL GOVERNMENTS AND SCHOOL SPONSORS FOR MORE TREES AND SHADY AREAS AND MORE PUBLIC DRINKING FOUNTAINS TO PROTECT OUR HEALTH.

Sources and further information:
 • Many practical tips for tree-planting campaigns: Felix Finkbeiner: "Children, now we save the world. Tree by tree", Munich 2010. Info on the tree-planting campaign initiated by Felix Finkbeiner: www.plant-for-the-planet.org • Tips on protecting yourself in extreme heat and all you need to know about weather and climate: www.dwd.de • How Germany wants to counter the health-related effects of climate change: www.bmu.de/files/pdfs/allgemein/application/pdf/broschuere_dem_klimawandel_begegnen_bf.pdf • Umweltbundesamt and Deutscher Wetterdienst: "Klimawandel und Gesundheit", Dessau-Roßlau 2008: www.umweltbundesamt.de/sites/default/files/medien/publikation/long/3925.pdf • Umweltbundesamt: "Gesundheitliche Anpassung an den Klimawandel", Dessau-Roßlau 2009: www.umweltbundesamt.de/sites/default/files/medien/publikation/long/3753.pdf



THE EFFECTS OF CLIMATE CHANGE

in developing and newly industrialised countries

The poor are the worst affected, despite hardly being responsible for the change. Climate change endangers or destroys their livelihood, increases poverty, prevents development and threatens safety. It's harder for people in developing countries to adapt to the altered

environment, because they usually lack the money and a proper government needed to support suitable climate adaptation projects. Armed conflicts often break out when the environment is destroyed and food and drinking water run short, causing many people to flee – a vicious circle!

Pakistan experienced serious flooding in July 2010 as a result of unusually heavy monsoonal rains; over 14 million people were affected.



Seven year old Hiyan stands among the ruins of his home outside Yangon, Myanmar, following Cyclone Nargis. © UNHCR / May 2008



MORE FREQUENT, INTENSE EXTREME WEATHER ›

Disasters are becoming more prevalent worldwide. People in developing countries are often helpless when it comes to heavy rainfall, flooding or storms. 20 million people lost their belongings in the 2010 Pakistan floods, demonstrating the dangerous effects of climate change.



HEALTH CARE IS INADEQUATE ›

Climate change causes the spreading of diseases which are further aggravated by poor sanitation. These particularly include cardiovascular diseases, diarrhoea, infections and lack of food. The level of health care in developing countries is usually poor, which intensifies starvation and poverty. In rural regions, hospitals are often very far from the villages and health insurance – if it even exists – is something only the wealthy can afford.



Kadija Mohammed, 78, from Mogadishu, Somalia: "Never in my entire life have I seen a drought as bad as this." © UNHCR / S. Modola / August 2011



WATER IS BECOMING SCARCE ›

Changes in rainfall quantities is meaning fewer and fewer sources of fresh water. Water shortages are rising dramatically, particularly in the Mediterranean, Latin America and southern Africa. 1,3 billion people already have no proper access to clean water – a problem which has intensified over the last three decades due to climate change. Dry regions are getting even drier, e.g. in southern Africa. Over 3 billion people may be without access to clean water by 2080.



DEPENDENCY ON AGRICULTURE ›

As small-scale farmers, many people are dependent on weather and climate. Heat and a shortage of water particularly damage soils. Crops are destroyed and people lose their livelihoods. The risk of famines is growing! A drought in Guatemala in 2009 destroyed half the corn crops, causing over 2 million people to starve.



This boy's family had to flee their village in Sindh, Pakistan, in 2010 due to the severe floods. Together with the Pakistan Red Crescent, the German Red Cross produced clean drinking water in the refugee camp and provided medical care. © Dr Thorsten Klose



LOW LEVEL OF EDUCATION › In developing countries, good education often involves numerous hurdles, or may even be impossible. This means that the people are hardly told anything about climate change, nor do they know how to adapt accordingly. They are thus hit particularly hard by the effects and cannot protect themselves properly.



NO MONEY › The people also lack the financial resources to adapt better. There are only very few climate adaptation programmes run by federal governments. In most cases, there is no money for resistant seeds or weatherproof housing. Little funding is also available for reconstruction after extreme weather events.



Hallma and her friend found protection at the Mangalzé refugee camp north of the Niger. They fled from Mali with their families due to the high safety risks. © UNHCR / H. Caux / February 2012





GROWING RISK OF ARMED CONFLICTS › These poor conditions often give rise to armed conflicts, which are increasingly relating to the distribution of water and soil, or the handling of refugee flows. For many, the only option is to escape within their homeland or to other countries.

Effects of climate change on the Global South




 More frequent, intense extreme weather

 Water shortage

 Desertification

 Inadequate health care

 Inadequate food supply

 Rising sea levels

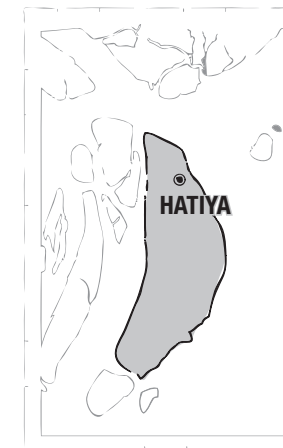
 De-glaciation

INTERVIEW WITH REDOYAN UZZAMAN EMON *from Choto Dail, Bangladesh*

IN HIS FREE TIME, REDOYAN, 15, IS INVOLVED WITH A VOLUNTARY STUDENT GROUP RUN BY THE BANGLADESH RED CRESCENT

How is climate change being felt the most in your region?

We get strong cyclones – strong storms which drive large tidal waves onto our island, causing major damage. I can still remember some of the cyclones we've had in the last few years, which triggered many diseases on the island due to the flooding. There is hardly any clean drinking water available after these sorts of storms and many people suffer from diarrhoea.



How does this impact on your life?

During Cyclone Sidr in 2007, the wind was so strong that our house was severely damaged. Our roof flew off and the part where our kitchen was collapsed. But even then, I was involved as a Red Crescent volunteer and was able to warn lots of the villagers about the storm. My father was very proud of me.

What are the main problems people have to cope with?

Unfortunately, most of the people on Hatiya are very poor and the poor always suffer the most from weather-related disasters. The farmers lose their fields and often all their seeds, meaning they are no longer able to work or provide for their family. Fishermen frequently lose their boats in storms and tidal waves, which means they can no longer go fishing and lose money. As a result, the people often get poorer and are even less capable of helping themselves.

What would help you and your family?

It would be good to have better weather forecasts for Hatiya, so that we could know well in advance when the storms are coming and quickly find safety. It's important to have the Red Crescent to promptly warn people and to have secure buildings where people and their cows, goats and hens can shelter during storms.

What are your hopes for the future?

I would like to work for the Red Crescent later on and help warn people about storms. I would like my parents and siblings to feel safe on Hatiya and no longer be afraid that our roof is going to blow off in the next storm.

Whirlwinds in the Indian Ocean near the East African coast and in the Australian region are known as cyclones.

Tropical whirlwinds in the Atlantic and North Pacific are called hurricanes.

Typhoons is the term given to tropical whirlwinds in the north-western part of the Pacific Ocean, i.e. in Asia.

Interview conducted by Dr Thorsten Klose,
Senior Advisor Disaster Risk Reduction & Climate Change Adaptation,
GRC headquarters

Sources and further information:

• Oxfam Germany and Heinrich Böll Stiftung: "Klima schützen, Armut verhindern", Berlin 2010: www.oxfam.de/sites/www.oxfam.de/files/klima_schuetzen-armut_verhindernsmall.pdf • German Advisory Council on Global Change (WBGU): "Welt im Wandel: Sicherheitsrisiko Klimawandel": www.wbgu.de/fileadmin/templates/dateien/veroeffentlichungen/hauptgutachten/jg2007/wbgu_jg2007.pdf • S. Rahmstorf, H. Schellnhuber: "Der Klimawandel", Munich 2007.

***DID YOU KNOW THAT ... 4 BILLION PEOPLE ARE DIRECTLY
ARE CONSIDERED TO BE PARTICULARLY AT RISK? ...
SANITATION FACILITIES? ... AT LEAST 150,000 PEOPLE
EVERY YEAR? ... MORE THAN 1,2 BILLION PEOPLE
ENOUGH FRESH WATER?***

***AFFECTED BY CLIMATE CHANGE? ... 500 MILLION PEOPLE
2,5 BILLION PEOPLE HAVE NO SECURE ACCESS TO
DIE FROM CLIMATE CHANGE-RELATED ILLNESSES
ARE ALREADY LIVING IN REGIONS WHICH DON'T HAVE***



EDUCATION

A key to adaptation

Many developing countries only have limited options when it comes to protecting themselves from the consequences of climate change, e.g. through effective civil protection. Education is thus one of the keys to adapting to climate change; it enables self-determination and is thus a pre-requisite for overcoming poverty. Education allows us to reach out to even those worst affected by the ecological damage: children and teenagers, who are particularly vulnerable in every respect. In order to provide them with a future and guarantee them the right to live a self-determined life in their home country, it is important to tell them about climate change as early as possible. They need to know how it influences their lives and how they can protect themselves. This motivates them to take preventive measures themselves.

CHILDREN AND TEENAGERS BECOME OPINION LEADERS

Once children and teenagers have been made aware of environment conservation and climate adaptation, they often become active themselves. As opinion leaders, they pass their knowledge on to their families and communities and encourage action, facilitating permanent public understanding of risks and hazards. Training teachers in disaster risk reduction and lesson material, all help educate the people. Good co-operation between schools, municipalities and other organisations like the Red Cross further heighten public awareness of the problem.

The millennium development goals were established in 2000. One of these was to provide all boys and girls around the world with free basic education by 2015 – an important requirement for adapting to climate change!

Photo: Oliver Matthys, IFFC



Together with Kindernothilfe (Christian organization for children's aid), the Red Cross Youth has composed a policy document on the topic of education in order to add more weight to the GRCY's requirement (page 49). It is aimed at political decision makers.

www.mein-jrk.de/klimabelfer

At the Shelkhanabad School in Pakistan, girls learn more than just reading and writing. It was here that the Pakistan Red Crescent also distributed winter clothing and blankets after the 2010 flood disaster.

MARIAL MAYOM | 29
 PR officer at the Red Cross in Juba, South Sudan: "Climate change is causing temperatures to rise even higher during times of heat, despite South Sudan already being extremely hot. This prompts food costs to skyrocket. More resistant seeds capable of coping with the changing weather conditions could be useful. But the people first need to know more about environment conservation and particularly about the costs caused by climate change. That's why I want there to be structures enabling all the people of South Sudan to go to school and for education to be made accessible to everyone."



WHAT DOES THE GERMAN RED CROSS DO?

Education plays a major role in disaster risk reduction, as evidenced by these two GRC project examples:

➕ ➡ 🇮🇩 GRC PROJECT IN INDONESIA:

The Indonesian Red Cross Youth has been providing information and education in disaster risk reduction at schools since 2007, with the support of the GRC. Through courses and exercises, children and teenagers learn about the dangers of natural disasters and are trained in First Aid. The ongoing headlines about new natural disasters demonstrate the vast need for environmental education in Indonesia.

➕ ➡ 🇵🇪 GRC PROJECT IN PERU:

The GRC has been supporting disaster prevention projects in Peru since 2007. Volunteers attend to 210,000 people in the high-risk Tumbes region alone, preparing them for disasters, teaching them how to act in emergencies and how the locals can themselves tackle the problem. Good education at schools is needed in order to guarantee long-term effectiveness. By putting on plays, the children learn, in a hands-on manner, what disaster risk reduction means and how important it is for their survival. They act out various disaster scenarios and learn how to act properly in an emergency. They then pass their knowledge on to their families and friends.



Children and adults learn the correct reaction to a disaster as part of an information event.

What are ecological children's rights?

This is the term used to describe the right of all children worldwide to grow up in an intact environment, lead a healthy life and develop positive future prospects. Children's rights are not possible without climate protection and environmental conservation!

WHAT WE WANT!

DR MANMOHAN SINGH, PRIME MINISTER OF INDIA, SAID IT PERFECTLY: "WE ARE MORALLY OBLIGED TO LEAVE BEHIND A SAFE, CLEAN, PRODUCTIVE WORLD FOR OUR CHILDREN ... OUR PEOPLE HAVE A RIGHT TO ECONOMIC AND SOCIAL DEVELOPMENT AND TO THE ERADICATION OF SHAMEFUL POVERTY ALL OVER THE WORLD."

ALL CHILDREN AND TEENAGERS ARE ENTITLED TO AN INTACT ENVIRONMENT WHERE THEY CAN DEVELOP FREELY. TO ENSURE THEY CAN RELY ON THIS, THEY FIRST NEED TO KNOW WHAT CLIMATE CHANGE IS AND LEARN HOW TO PROTECT THEMSELVES. SECONDLY, THEY NEED TO KNOW HOW THEY CAN CLAIM THEIR RIGHTS. AND THIRDLY, THEY MUST PARTICIPATE IN SOCIAL LIFE AND POLITICAL DECISIONS. THIS APPLIES TO MANY SOCIAL ISSUES – PARTICULARLY IN RELATION TO THE ENVIRONMENT AND CLIMATE CHANGE.

CHILDREN AND TEENAGERS CAN HELP SHAPE SOCIETY AND THEIR ENVIRONMENT – AND WE NEED TO GIVE THEM THE OPPORTUNITY TO DO SO! THE DEVELOPMENT PROJECTS RUN BY THE GERMAN RED CROSS AND OTHER ORGANISATIONS ARE AN IMPORTANT STEP TOWARDS CLIMATE ADAPTATION AND ECOLOGICAL CHILDREN'S RIGHTS. BUT THERE NEEDS TO BE MORE.

THAT'S WHY WE'RE ASKING THE RED CROSS/RED CRESCENT MOVEMENT AND CIVIL SOCIETY TO INTRODUCE EDUCATION PROGRAMMES WHICH SHOW CHILDREN AND YOUNG PEOPLE HOW THEY CAN RESPOND TO CLIMATE CHANGE, TO ENSURE THEY TOO HAVE A SAY IN THEIR FUTURE.

Sources and further information:
 • Articles on climate change, ecology and children's rights: www.kindernothilfe.de/Rubriken/Themen/Klimawandel.html • Holistic Child Development India: "Indian rural children speak on the impact on climate change": www.holisticchild.org/news5.html • Information and sample projects on the topic of natural hazards and education: www.unesco.de/katastrophenbildung.html • Federal Ministry for Economic Cooperation and Development (BMZ): "Klimawandel und Entwicklung", Berlin 2011: www.bmz.de/de/publikationen/reihen/infobroschueren_flyer/infobroschueren/Materialie209_Infobroschueren_01_2011.pdf

DID YOU KNOW THAT ... ACCORDING TO THE WORLD DEATHS IS DUE TO ENVIRONMENTAL FACTORS? ... ACCESS TO CLEAN DRINKING WATER? ... IN THE NEAR FUTURE, AROUND 5 MILLION CHILDREN WILL SUFFER FROM FOOD AND WATER SHORTAGES DUE TO CLIMATE CHANGE? ... ONE IN 2 CHILDREN HAS NO ACCESS TO CLEAN SANITATION FACILITIES? ... EVERY YEAR, DIE FROM DIARRHOEAL DISEASES?

HEALTH ORGANISATION (WHO), ONE IN THREE CHILD ONE IN FIVE CHILDREN IN THE GLOBAL SOUTH HAS NO ACCESS TO CLEAN DRINKING WATER? ... IN THE NEAR FUTURE, AROUND 5 MILLION CHILDREN WILL SUFFER FROM FOOD AND WATER SHORTAGES DUE TO CLIMATE CHANGE? ... ONE IN 2 CHILDREN HAS NO ACCESS BETWEEN 1,5 AND 2,5 MILLION CHILDREN UNDER FIVE



CLIMATE-RELATED MIGRATION

The last resort

Along with armed conflict and violation of human rights, climate change and environmental destruction are some of the other sad reasons forcing people to flee their home countries. According to the latest estimates, 2050 will see between 200 million and 1 billion people flee for climate-related causes. Even today, we are seeing rising numbers of those forced to look for somewhere else to live – whether this be because a hurricane has destroyed their house, or because their soil has been rendered infertile due to drought.

CAUSES OF CLIMATE-RELATED MIGRATION AND AFFECTED REGIONS

There are often many reasons why people migrate. As in Somalia in April 2009: According to media reports, 60,000 people were forced to flee to other regions because of the civil war. It was later found out that most of their cattle had succumbed to the long drought. The people had no basic food resource – and had to give up their homeland. Climate change and environmental destruction are thus two of many main reasons for migration. Migration due to climate is triggered by:

RISING SEA LEVELS

Islands and coastal regions, particularly in the South Pacific, Indian Ocean and Caribbean, may be permanently flooded. The so-called Sinking Islands (the South Pacific Carteret Islands, the Maldives, and Kiribati etc.) will eventually lose their land. Some island states have thus already started resettling their populations.

MORE FREQUENT STORMS

Strong storms can drive millions of people from their homeland within just a few minutes, though many residents of high-risk places such

as Calcutta, Lagos and São Paulo cannot afford to move to safer areas. Hurricane Katrina, which devastated New Orleans in 2005, did, however, show that even rich cities can find themselves at the mercy of Mother Nature.

SPREADING OF DROUGHT AREAS

The loss of farmland is particularly threatening the livelihood of many people in Sub-Saharan Africa, the Middle East and Central and South-East Asia. Recurring famines, like the one in the Horn of Africa in 2011, which affected 10 million people,

demonstrate the fatal consequences.

Rising sea levels, extreme weather and the spreading of drought-ridden areas, coupled with corrupt governments and poverty, make climate change a safety risk. "Climate change is intensifying the battle for resources – like water, food, grazing land – which then sparks conflicts," says Antonio Guterres, UN High Commissioner for Refugees. The 1994 Rwanda Genocide, for example, was partly caused by a decline in natural resources.

SUSANNE
NACHTSHEIM | 19
GRCY Group leader in Klotten,
Rhineland-Palatinate:

"I never cease to be shocked by the extent to which people all over the world, but particularly in developing countries, suffer from the effects of environmental disasters. That's why I think it's important the campaign addresses this problem."



The children and their families have made it to the Dadaab refugee camp in Kenya. Like many thousands of people, they had to leave their homeland due to the drought. UNHCR / J. Brouwer / August 2011



MELINA KRIENKE | 24
GRCY Group leader in Berlin and
member of the campaign project group:
"Climate-related migration is no myth;
it's an issue which affects people.
That's why it's so important that society
and politics don't turn a
blind eye to it!"

THE NUMBER OF CLIMATE REFUGEES AND WHERE THEY ARE FLEEING

Most climate refugees stay near their homeland, fleeing to other regions within their country, or to a neighbouring country. But the conditions there are often not much better. The truth is that Europe and North America are very rarely an option. For various reasons, there are no 100% reliable figures on climate-related migration. On the one hand, the consequences of climate change are difficult to predict and on the other, it is sometimes hard to ascertain who is a climate refugee and who isn't. Estimates thus range from 25-60 million (WBGU), to 150 million (IPCC), to 1 billion (Christian Aid). The figures most accepted are those published by Norman Myers, Professor of Environmental Science at Oxford University, who anticipates approximately 200 million climate refugees by 2050.

THE AMBIGUOUS LEGAL STATUS OF CLIMATE REFUGEES

This is due to the many reasons for escape and a lacking definition. Climate refugees are not classified as refugees under international law, nor are they recognised as such under the Geneva Refugee Convention. This means they are not protected by the UN's refugee agency (UNHCR) and cannot seek asylum.

SUPPORT AND PROTECTION FOR CLIMATE REFUGEES

It is high time that solutions were found for the millions of climate refugees, with the most important issue being that of preventing migration caused by the climate. If the people in affected regions are able to adapt to new environmental conditions, they won't have to migrate. When it comes to storms, however, on-site humanitarian aid is required. Assistance must be quickly provided in the form of food, medical supplies and shelter.

A refugee is someone who "...owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality ..." (1951 Geneva Refugee Convention)



WHAT WE WANT!

EXPERTS CANNOT AGREE ON HOW TO HANDLE THE LEGAL STATUS OF CLIMATE REFUGEES. SOME WANT THEM TO BE RECOGNISED AS REFUGEES UNDER THE GENEVA REFUGEE CONVENTION, WHILE OTHERS ARE AGAINST THIS. THE REASONS ARE TOO COMPLEX, BUT SMALL PROGRESS IS BEING MADE: IN 1998, THE UNITED NATIONS PASSED AN AGREEMENT FOR PEOPLE FORCED TO FLEE DISASTERS. IT ORDERS GOVERNMENTS TO PREVENT ANY CIRCUMSTANCES WHICH MAY DISPLACE PEOPLE. BUT THIS IS NOT ENOUGH: POLICYMAKERS MUST FIND SUSTAINABLE SOLUTIONS TO PROTECT CLIMATE REFUGEES, TO ENSURE THEY CAN LIVE IN DIGNITY.

THAT'S WHY WE'RE ASKING THE FEDERAL GOVERNMENT AND INTERNATIONAL POLICYMAKERS TO ENFORCE LAWS TO PROTECT AND ACCEPT CLIMATE REFUGEES.



Sources and further information:

• Refugee protection, asylum policy, Geneva Refugee Convention etc.: www.unhcr.de • (Climate-related) migration, integration and demographic development worldwide: www.migration-info.de • German Advisory Council on Global Change (WBGU), "Welt im Wandel – Sicherheitsrisiko Klimawandel", Berlin 2007: www.wbgu.de/fileadmin/templates/dateien/veroeffentlichungen/hauptgutachten/jg2007/wbgu_jg2007.pdf • Greenpeace, "Die verleugnete Katastrophe", Hamburg 2007: www.greenpeace.de/fileadmin/gpd/user_upload/themen/klima/klimafuechtlinge_endv.PDF • Diakonisches Werk der EKD e.V. für die Aktion Brot für die Welt, „Klimafüchtlinge' nach Kopenhagen“, Stuttgart 2010: http://www.brot-fuer-die-welt.de/fileadmin/mediapool/2_Downloads/Fachinformationen/Analyse/Analyse_12_deutsch_Internet.pdf

DID YOU KNOW THAT ... 192 MILLION PEOPLE TODAY ARE ... IN 2005, THE GOVERNMENT OF PAPUA NEW GUINEA ISLANDS IN THE SOUTH PACIFIC BECAUSE THE ISLANDS SEA LEVELS WOULD AFFECT 200 MILLION PEOPLE POPULATION LIVE NO MORE THAN 100 KM FROM THE LIVE IN GERMANY'S FLOOD DISTRICTS? ... 90 TO ASYLUM IN NEIGHBOURING DEVELOPING COUNTRIES?

NOT LIVING IN THE SAME PLACE THEY WERE BORN? DECIDED TO EVACUATE THE RESIDENTS OF THE CARTERET ARE FLOODED UNTIL 2015? ... THE 1-METRE RISE IN TODAY? ... AROUND TWO THIRDS OF THE WORLD'S COAST? ... APPROXIMATELY 3,2 MILLION PEOPLE 95 PERCENT OF ALL REFUGEES WORLDWIDE SEEK



RESIDENTS OF INDUSTRIALISED NATIONS – RECORD CONSUMERS AND PRIMARY POLLUTANTS

We live in a consumer society: In 2008 alone, 68 million cars, 85 million refrigerators, 297 million computers and 1,2 billion mobile telephones were sold worldwide. Every item consumed energy during production. This is not just electrical appliances and cars, but also clothing, toys, food, cosmetics – virtually everything! So big businesses are not the only ones to blame – we are too. This is because it's our consumer behaviour which determines the world economy. Which is why we also need to take responsibility.

16 percent of the world's population – residents of wealthy industrialised nations – are responsible for 78 percent of global consumption. Obviously, things cannot keep going like this. If everyone on the planet lived like the Germans, there would only be enough worldwide resources like drinking water and wood for 2,1 billion people. But there are currently almost seven billion people on earth. There are no two ways around it – lifestyles need to change. This doesn't necessarily mean total renunciation. Germany can and should be a pioneer by supporting renewable energies and promoting climate protection and conservation. Each individual can also make an active contribution: Anyone who pays attention to their personal consumption and lifestyle every day will quickly realise how effective simple measures can be.

THE FUTURE: CLIMATE PROTECTION TECHNOLOGY

The technology necessary for serious climate protection has long been available: For instance, there are studies which show that Germany may be able to supply itself completely using renewable energy by 2050, with costs not much more than those generated by conventional power plants. Coal-fired and nuclear power plants could be replaced by a combination of wind turbines, solar power, hydroelectric power stations, geo-thermal energy and biogas stations. What's lacking is the political will. This is because the mere fact that the technology exists doesn't help. Policymakers must provide incentives for this technology to be used extensively. Utilities based 100% on renewable energy will only work if energy consumption decreases as a whole. The motto is to "save energy".

The Climate-Alliance Germany is a group of over 100 environmental associations, churches and development organisations which are committed to protecting the climate. The alliance is calling on the federal government to implement its objective of reducing greenhouse gas emissions by 40 percent compared to 1990 by 2020: www.climate-alliance-germany.de



Carsten Laurent | 33
GRCY Group leader in Saarlouis, Saarland: "At the Red Cross Youth, we can get a lot of things going and get the German Red Cross involved as well, thereby raising awareness about climate protection."

INTERNATIONAL CONVENTIONS ON CLIMATE CHANGE

We have known about the climate problem for decades. Ever since the Earth Summit in Rio de Janeiro in 1992, there have been climate change conferences held virtually every year. But no progress has been made. It is very important to achieve the 2-degree goal. We cannot say what the consequences will be for nature and humanity if the earth's average temperature rises by more than 2°C. The obligations maintained by the Kyoto Protocol nations end in 2012. Diplomats have been trying hard to establish a succession plan for several years – to no avail, with efforts primarily being blocked by the USA and China. Experts thus predict that, for now, there will be no mandatory international agreement on climate protection – which is a disaster! That's why it's even more important to promote climate protection.

CLIMATE PROTECTION AT THE RED CROSS YOUTH AND GERMAN RED CROSS

As a major aid organisation, the German Red Cross also needs to do its bit to protect the climate. Climate adaptation is certainly a big issue in itself, but not enough attention is paid to climate protection. Both issues actually go hand in hand. The association has so far lacked relevant climate protection guidelines for its own establishments. Many full-time and volunteer workers are not aware how important climate protection is for us as an association and how our giant car fleets, trips, properties or consumer behaviour influence climate change.

The Kyoto Protocol

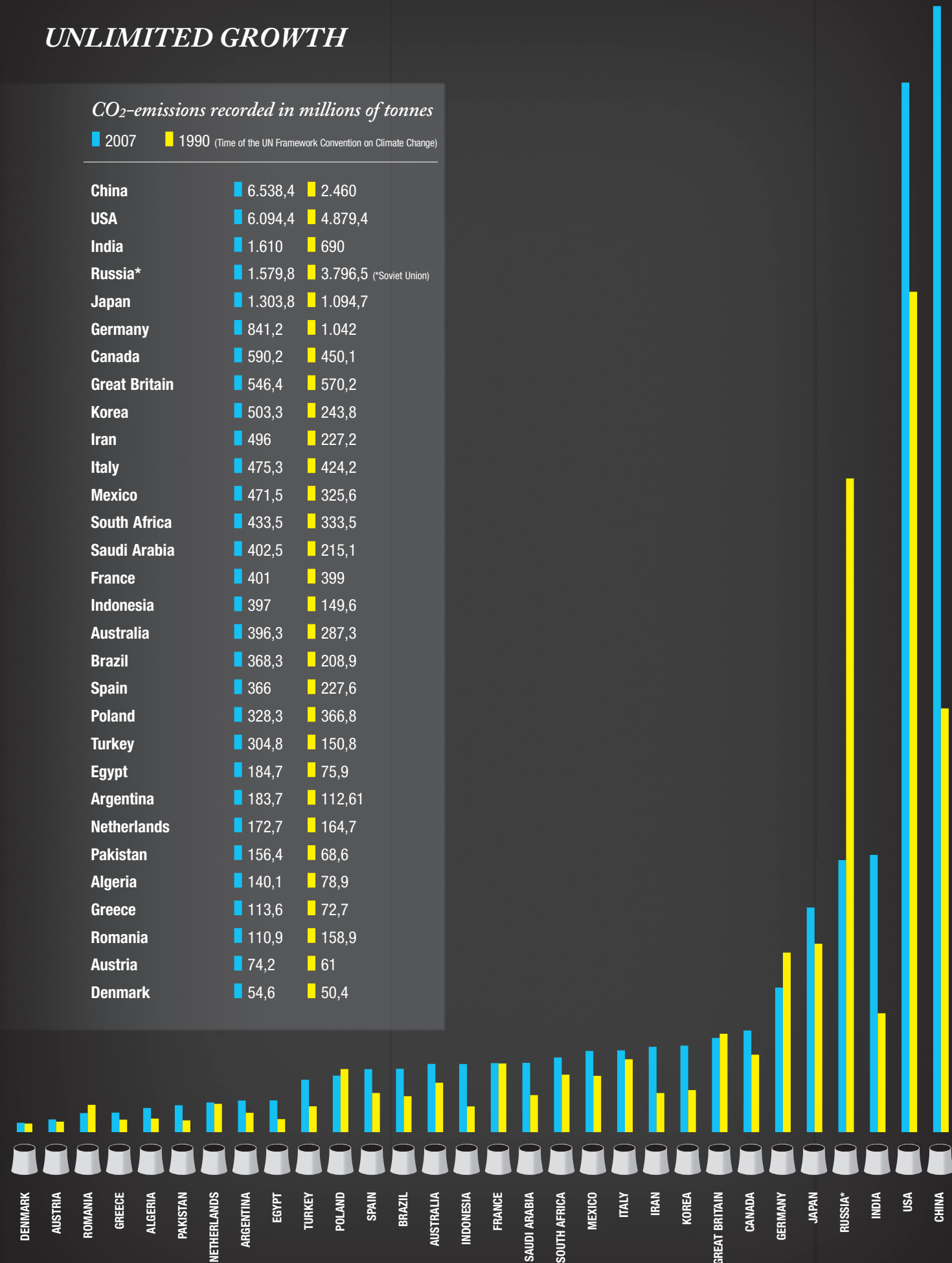
1997 saw 191 countries commit to reduce greenhouse gas emissions for the first time. Unfortunately, many nations failed to achieve their goals. The USA didn't even ratify the protocol.

UNLIMITED GROWTH

CO₂-emissions recorded in millions of tonnes

■ 2007 ■ 1990 (Time of the UN Framework Convention on Climate Change)

China	6.538,4	2.460
USA	6.094,4	4.879,4
India	1.610	690
Russia*	1.579,8	3.796,5 (*Soviet Union)
Japan	1.303,8	1.094,7
Germany	841,2	1.042
Canada	590,2	450,1
Great Britain	546,4	570,2
Korea	503,3	243,8
Iran	496	227,2
Italy	475,3	424,2
Mexico	471,5	325,6
South Africa	433,5	333,5
Saudi Arabia	402,5	215,1
France	401	399
Indonesia	397	149,6
Australia	396,3	287,3
Brazil	368,3	208,9
Spain	366	227,6
Poland	328,3	366,8
Turkey	304,8	150,8
Egypt	184,7	75,9
Argentina	183,7	112,61
Netherlands	172,7	164,7
Pakistan	156,4	68,6
Algeria	140,1	78,9
Greece	113,6	72,7
Romania	110,9	158,9
Austria	74,2	61
Denmark	54,6	50,4



WHAT WE WANT!

AS PART OF THE CAMPAIGN, WE WANT TO RECALL ONE OF OUR MAIN PRINCIPLES: TAKING ACTION FOR HEALTH AND THE ENVIRONMENT! THE RED CROSS YOUTH HAS DEVELOPED NUMEROUS METHODS AND TIPS TO ENABLE THE ASSOCIATION TO ADDRESS CLIMATE PROTECTION AND CONSUMPTION. WE INVITE ALL RED CROSS YOUTH MEMBERS AND DECISION MAKERS TO GET INVOLVED AND WORK TOGETHER TO PROMOTE THE ASSOCIATION.

THAT'S WHY WE'RE ASKING THE GERMAN RED CROSS TO IMPLEMENT CLIMATE PROTECTION GUIDELINES AND GET ACTIVELY INVOLVED IN CLIMATE PROTECTION.



Sources and further information:

• Information and tips on climate protection: www.klima-sucht-schutz.de • Tips from the Regional Youth Council of Lower Saxony on climate-friendly youth work: www.nextklima.de • Information and tips from the KJLB (Catholic Rural Youth Movement) on critical consumption: www.stilvollerleben.de • The EKM's (Evangelical Church in Central Germany) campaign on climate protection and consumption: www.klimawandel-lebenswandel.de



ACT



NOW!

**GET YOUR KICKS
AND SAVE THE WORLD.**

Over the next few pages, we'll tell you how.

ACTIONS NOT WORDS

Become active for a better climate

International policymakers need to finally wake up!

Industrialised nations like the USA, but also emerging countries, are finding it hard to set mandatory objectives for greenhouse gas emissions. The Kyoto Protocol is so far the only document governed by international law – but it is rarely applied correctly. The international community of states must thus speed things up when it comes to climate protection and adaptation. This includes climate-based reduction obligations which incorporate both the “major climate offenders” like the USA, as well as developing and newly industrialised countries.

MUNICIPALITIES AND CITIES BECOME ACTIVE

without waiting for policymaker decisions:

Freiburg shows how it's done: It is the most environmentally friendly city in Germany when it comes to recycled paper, using only this type of paper at schools and administrative offices. With a population of 250,000 the district of Marburg-Biedenkopf in Hesse wants to convert its entire power supply to renewable energy sources by 2040. It's also not the only one: A further 99 municipalities and regions have also committed to switching to renewable energy.

GERMANY AS A PIONEER

Germany should be encouraging climate-friendly measures in developing countries. The Green Climate Fund, pushed by countries like Germany at the UN climate conference in Durban, South Africa, in 2011, has made initial progress in this direction and seeks to support developing countries in issues such as climate protection and adaptation. But aid organisations, environmental associations and churches also need to get involved by influencing climate-related decisions and setting a good example through their work.

MULTIPLE USE MAKES IT POSSIBLE

Reuse material, whether this be at home or at school: Use rechargeable batteries, buy returnable bottles, print storage tins and cloth bags, print paper on both sides etc.

IT'S COOL!

Turn the heating down to 1-2 during the day.
You don't need to crank it up until you get home. It's also worth asking yourself whether every room needs to be warm. 18°C is adequate for bedrooms; you'll sleep much better.

CHANGING POWER SUPPLIERS – THE EASY WAY

All you need to do is send a request to a green electricity provider (e.g. Lichtblick or Naturstrom AG) and they will cancel your old contract free of charge.

UNPLUG IT!

Electrical appliances don't have to be kept on standby. Switching them off properly can save up to 88 Euros a year in electricity. You can also save power in your household: Using a matching lid for every pot, chopping vegetables finely before cooking, only using dishwashers and washing machines on a full load, not leaving refrigerator and freezer doors open unnecessarily, setting the refrigerator temperature to 7 instead of 5°C – which saves 15 percent on power, only turning lights on when necessary, or turning them off when leaving the room for a long period of time.

OPEN THE WINDOW

Short, sharp aeration – i.e. opening the window wide for just a short time – causes a lot less energy to be lost compared to if a window is tilted open all day. So: it's better to aerate properly once a day and turn the heating down.

RUN, RUN, RUN

Don't go everywhere by car. Those who walk or cycle are not only helping the climate, but also their own fitness!

BUSES AND TRAINS RATHER THAN FREQUENT FLYING

Every flight produces a considerable amount of greenhouse gases; short-haul flights in particular cause a lot of environmental pollution. That's why it's better to switch to buses and trains. If you have to fly, you can contribute to compensatory measures by making a voluntary payment: www.atmosfair.de

TASTY

Animal products such as meat, cheese and butter use up a lot more energy during manufacturing than fruit and vegetables, particularly if they are imported. But beware: German apples are only climate-friendly during the harvest period from September to May. From June through to the harvest in September cold storage guzzles lots of power, making apples from Chile or New Zealand more climate-friendly. Avoid meat once or twice a week saves and protects the climate.

LESS IS MORE

Save water by having shorter showers, using the half-flush on toilets, not letting dishes all at unnecessarily, rinsing the dishwasher once and only using the washing or washing machine on a full load. Turn off the shower when washing your hair, fit a water-efficient shower head and avoid dripping taps.

RUBBISH, RUBBISH AND MORE RUBBISH...

...but it doesn't have to be like that! Use refillable material (e.g. printer cartridges) instead of plastic bags and aluminium disposable bottles instead of disposable packaging etc. Don't always throw everything away; many things can be repaired. The unavoidable rubbish should be disposed of in the relevant bins. Every kilo of rubbish means 320 grams of CO₂ on average. Avoiding excess rubbish is a direct form of climate protection!

CLIMATE PROTECTION – EVERYDAY TIPS

Want to know more about how you can effortlessly protect the climate and environment? You'll find 77 more tips here: www.nabu.de/themen/klimaschutz/selbstaktivierenden/06740.html
Want to know how to make your events more climate-friendly? Learn more here: <http://mein-jrk.de/themen/klimabelefer/downloads-videos/>



**DR THORSTEN KLOSE,
GRC headquarters:**

“The challenges posed by climate change are enormous and have a direct impact on our primary task: to support the most vulnerable to disasters. Idleness is not an option. If we don't take the future climate risks into account in our work by further adapting to climate change, we cease to perform our primary task. But in doing so, we only remain credible if we also help minimise the cause of the problem through a climate strategy.”

THE GERMAN RED CROSS' CONTRIBUTION

In 2009, the German Red Cross commissioned a study which saw the German Committee for Disaster Reduction (DKKV) examine the impacts of climate change on the national and international work of the GRC. The result: climate change significantly affects almost all of the association's task areas, especially key aspects such as dissemination, civil protection and health.

As shown in the project examples on page 48, the GRC particularly tailors its work to climate change when it comes to international disaster risk reduction. But the national task areas also need to be adapted to climate change. For example, the need for blood preservation may increase in the mid-term due to the spreading of pathogens. Nursing staff, rescue services and sanitation services need to be trained in how to assist and react properly in various situations. This also includes providing them with the right equipment and material.

The German Red Cross needs to establish a climate protection scheme in all areas and the following measures are possible options for doing this: saving electricity, using climate-neutral, environmentally friendly paper, saving energy through sensible travel plans, introducing organic food or vegetarian days at canteens, promoting renewable energy by changing electricity providers, involving and training staff in climate protection, etc.

What's lacking is a comprehensive climate strategy run by the GRC in order to adapt to the consequences of climate change. Only with this strategy can the association fulfil its obligation to affected parties and uphold its responsibility to future generations. It must make every effort to limit the negative effects of climate change.

*The Red Cross/Red Crescent Climate Centre in The Hague advises all communities on climate-related issues:
www.climatecentre.org*

AT THE INTERNATIONAL RED CROSS AND RED CRESCENT CONFERENCE IN GENEVA IN 2011, THE GERMAN RED CROSS COMMITTED

- to establishing climate protection guidelines for the GRC headquarters and implementing 75 percent of these by 2015 and
- to incorporate climate adaptation measures into international disaster risk reduction by 2014.

WHAT I CAN DO

Given the extent of the climate crisis, individuals often feel a sense of helplessness. But getting involved to protect the climate is very easy: This is because it starts at home. The first step is thus to critically question one's own "natural", everyday behaviour, e.g.

... my behaviour as a road user: Do I have to go by car or can I also walk or cycle? Do I have to travel long-haul by plane every year or can I get where I want to go by train?

... my behaviour as an energy consumer: Do I turn my devices off standby mode after use? Do I pay attention to energy consumption when buying electronic devices?

... my behaviour as a food consumer: How much meat do I eat? Do I buy seasonal products? Do I tend to buy organic products or conventional products? Using energy wisely and sustainably should become a matter of course for me. If I'm aware of this, it's not hard to take the next step.

How to take action: I don't have to be a politician in order to get involved with climate protection and adaptation and inspire others to do the same. I can take action in a very practical way by participating in the GRCY campaign:

I can become an opinion leader by starting up online petitions and collecting signatures and taking part in specific activities, such as tree-planting etc. I can also organise my own projects, or organise them in other parts of the world. Everyone can do something to help the planet and its people and, like Russian author Anton Chekhov, proudly claim:

“Whenever I pass by the farmers' forests I saved from logging, or whenever I hear the rustling of the young forest I planted with my own hands, I realise that I also have a little bit of power over the climate and that, if people are happy in one thousand years' time, it will be partly thanks to me.”

Anton Chekhov, Russian author (1860-1904)

Sources and further information
 • Information and background on the impacts of climate change on the German Red Cross: www.drk.de/weltweit/entwicklungszusammenarbeit/katastrophenvorsorge/klimawandel.html
 • DKKV: "Herausforderung Klimawandel: Auswirkungen auf das Deutsche Rote Kreuz, national und international", Bonn 2009. • Introduction to International Climate Policy: www.bpb.de/themen/W4I2EB,0,0,Klimapolitik.html, www.bund.net/themen_und_projekte/klima_und_energie/internationale_klimapolitik/ • Federal Ministry for Economic Co-operation and Development (BMZ): "Klimawandel und Entwicklung", Berlin 2011.

AN OVERVIEW OF THE CAMPAIGN

The GRCY campaign “Climate Helpers. Change something before the climate does” is running from May 2012 to September 2014, during which time there will be a wide range of campaign activities and projects. Whether it be tree plantings, fundraising projects, workshops, campaign days or group sessions, there’s something for everyone! The campaign website www.mein-jrk.de/klimahelfer provides information on the current projects and how you can participate.

WE WANT ...

... BETTER EDUCATION ON CLIMATE CHANGE.

... MORE SHADY AREAS AND TREES AND MORE PUBLIC DRINKING FOUNTAINS TO PROTECT OUR HEALTH.

... CHILDREN AND YOUNG PEOPLE TO BE BETTER PREPARED FOR EXTREME WEATHER EVENTS.

... LAWS ON ACCEPTING CLIMATE REFUGEES.

... THE GERMAN RED CROSS TO IMPLEMENT CLIMATE PROTECTION GUIDELINES AND GET ACTIVELY INVOLVED IN CLIMATE PROTECTION.

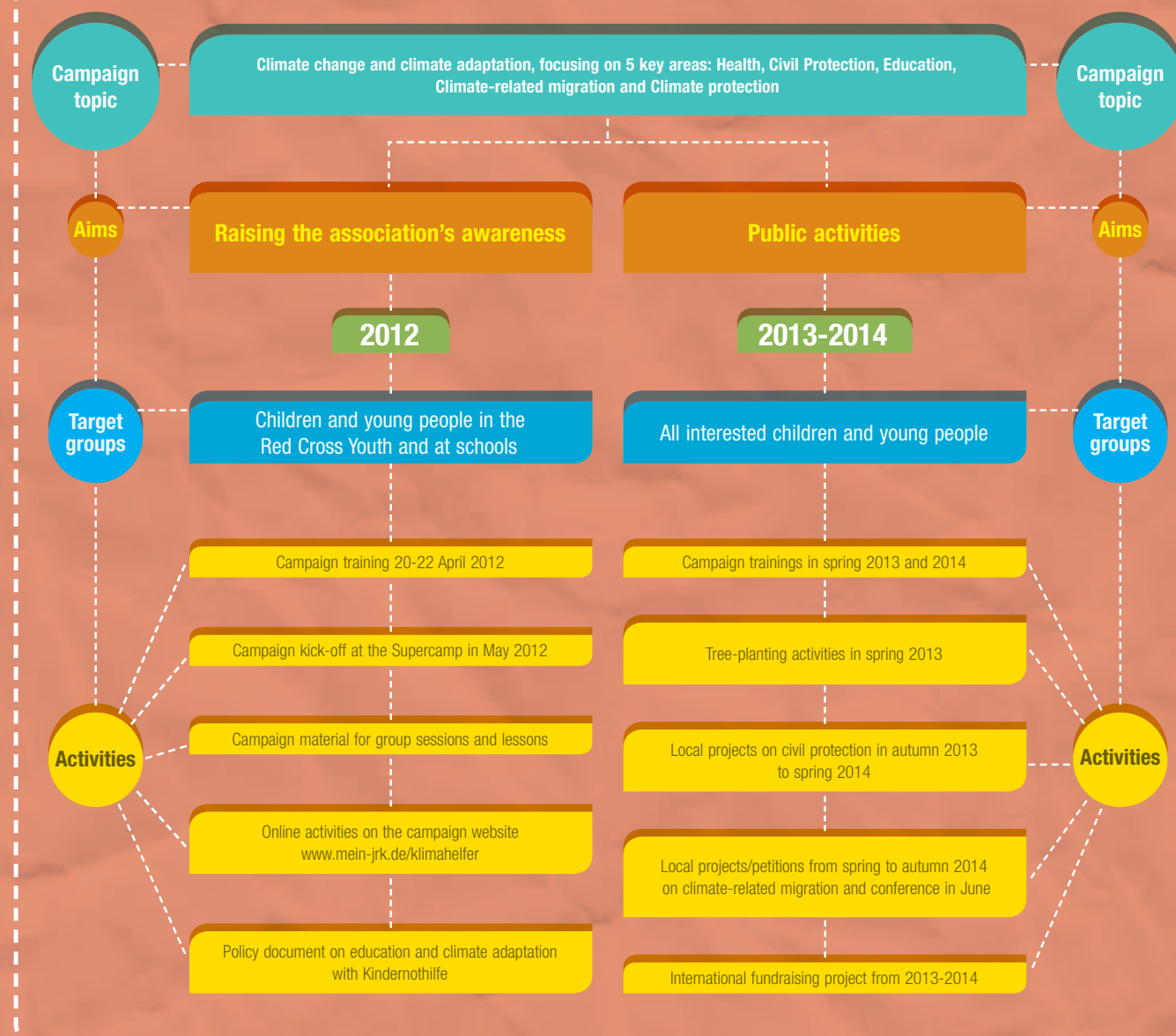
SERDAR AKIN,
Youth President of the BDAJ:

“Issues like environmental protection and climate change have long ceased to be side issues addressed purely by people with bulging wallets. More and more people and youth associations are now taking an interest in them. As a humanistic natural religion, Alevism particularly focuses on ensuring people live harmoniously with nature. As the umbrella association for Alevi children and young adults, we thus picked up on this topic several years ago and are duly raising awareness among our members. In this context, we are of course also very interested in working with the Red Cross Youth.”



The Red Cross Youth co-operates with the BDAJ (Association of Alevi Youths in Germany, www.bdaj.de). Together, we want to reach out to children and young people and inspire them to take action.

CLIMATE HELPERS. Change something before the climate does.



THE MATERIALS

Many different materials can be downloaded and ordered free of charge from the campaign website: www.mein-jrk.de/klimahelfer

- The Climate Journal forms the basis, providing information on the entire topic and requirements.
- The guide contains methods and project ideas for group sessions or lessons.
- The campaign trailer and film are ideal for group sessions, workshops, meetings etc. Both are available on the website.
- Young people can upload their own campaigns projects, participate in online campaigns and network with one another on the campaign website.
- And of course there is also the classic campaign materials: flyers, posters, stickers and t-shirts with various themes etc.

GLOSSARY

ANTHROPOGENIC (MANMADE) CLIMATE CHANGE

Agriculture, air traffic, the burning of coal, crude oil and natural gas etc. produce large volumes of greenhouse gases which intensify the natural greenhouse effect. The global average temperature thus rises – a phenomenon caused primarily by humans.

CLIMATE

This describes the average of all weather events over a period of at least 30 years. Climate is not constant; it changes, even from natural causes. The atmosphere, oceans, ice sheets, earth's surface and some ecosystems like the Amazon Rainforest play an important role. The natural climate system is "driven" by solar radiation.

CLIMATE ADAPTATION

Adaptation seeks to respond to climatic risks with the most flexible adaptation methods possible and protect high-risk sections of the population. Classic climate adaptation measures include national dyke construction and disaster risk reduction.

CLIMATE PROTECTION

This is a collective term for measures seeking to counteract global warming by preventing the causes and which mitigate or prevent the consequences. Climate protection measures focus on reducing greenhouse gas emissions and protecting natural CO₂-reducing habitats, such as oceans, tropical rainforests, wetlands etc.

CLIMATE JUSTICE

Climate change particularly affects those countries which have barely contributed to global warming. The countries primarily responsible for climate change (e.g. the USA, EU) should pay for the climate damage and adaptation costs arising in the particularly affected countries.

CIVIL PROTECTION

This is a collective term for all establishments operating in the sphere of disaster control, self protection and civil defense. Its task is to protect the people from risks, prevent hazardous events, cope with them and limit their consequences. Civil defence thus covers all non-police and non-military measures taken to protect the people from disasters, serious emergencies and the effects of armed conflict.

DISASTER RISK REDUCTION

Disaster Risk Reduction aims to reduce the damage caused by natural hazards like floods, droughts and cyclones, through an ethic of prevention.

EXTREME WEATHER EVENTS

These are short-term but serious deviations from a region's normal, statistics-based weather patterns. They will very likely become more prevalent as a result of climate change. But one single event cannot be directly attributed to climate change, as climate analyses always observe trends over several decades.

GREENHOUSE GASES

These are gaseous substances which contribute to the greenhouse effect and can result from natural or manmade causes. The most important greenhouse gases include water vapour (H₂O), carbon dioxide (CO₂), methane (CH₄), ozone (O₃) and nitrous oxide (N₂O).

GREENHOUSE GAS EMISSIONS

Greenhouse or CO₂ emissions describe the greenhouse gas emissions caused by humans.

GREENHOUSE EFFECT

Around 50 percent of the sun's rays penetrate the atmosphere and heat the earth's surface. The earth then emits this heat back towards the atmosphere. While the sun's rays can break through the atmosphere, the earth's thermal radiation cannot. Greenhouse gases keep the heat in the atmosphere, causing it to be re-emitted back onto the earth.

HEAT WAVES

These are periods of extremely high air temperatures lasting at least three days. They pose a particular risk to people through cardiovascular and respiratory diseases, or through anticipated lost crops and water shortages.

INTERNALLY DISPLACED PEOPLE

People who migrate within their own country are known as internally displaced people (IDPs). IDPs are among the world's most vulnerable people. Unlike refugees, IDPs have not crossed an international border to find sanctuary but have remained inside their home countries.

IPCC

The International Panel on Climate Change (IPCC) was founded in 1988 and aims to collate worldwide research on the effects of climate change. Its reports serve as an important basis for climate-policy decisions.

KYOTO PROTOCOL

The additional protocol enacted at the UN climate conference in Kyoto, Japan in 1997 is the only document bindingly governing greenhouse gas emissions. It has been in effect since 2005 and stipulates that, between 2008 and 2012, industrialised countries must reduce their annual greenhouse gas emissions by an average of 5.2 percent compared to 1990. It expires in 2012 and has so far been signed by 191 nations. Germany ratified the protocol in 2002, committing to reduce its greenhouse gas emissions by 21 percent compared to 1990 by 2012.

MIGRATION

The term migrants describe people who leave their home country voluntarily or involuntarily. The reasons for this range from poverty, to a new job, to family reunions.

REFUGEE

This is someone who "...owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country ..." (1951 Geneva Refugee Convention)

SOIL EROSION

Thus describes the excess erosion of soils caused by wind and water or inappropriate management (overgrazing, logging etc.).

SOIL DEGRADATION

This describes the deterioration in soil quality until it is completely unusable. This can be caused by changes in climate or inappropriate management.

SUBTLE CLIMATE CHANGE

This describes the effects people don't notice directly, as opposed to extreme weather like flooding or severe storms. They only become apparent over a longer period of time, e.g. the decline in fresh water.

TIPPING POINTS

These are drastic changes in the climate system, which can have disastrous consequences for humanity. Examples include the drying out of the Amazon Rainforest and the thawing of permafrost soils. Once the 2-degree threshold has been exceeded, the probability of reaching such tipping points is higher.

VECTORS (DISEASE TRANSMITTERS)

These are animal transmitters of infectious diseases. Vectors transport a pathogen from the host to another organism, without infecting itself.

WEATHER

Weather is the short-term, constantly changing atmospheric conditions at a certain location as we experience them every day – in other words, a snapshot.



MORE INFORMATION ON THE RED CROSS YOUTH IS AVAILABLE AT www.jugendrotkreuz.de

German Red Cross headquarters
National Red Cross Youth office
Carstennstrasse 58
12205 Berlin
Tel.: 0049-30-85404 390
Fax: 0049-30-35404 484
Email: jrk@drk.de



THE GERMAN RED CROSS YOUTH

The German Red Cross Youth (GRCY) is an independent youth association run by the German Red Cross. Over 110,000 children and young adults aged 27 and under voluntarily participate in 5,500 youth groups across the country. Origins, nationality, religion or gender are irrelevant at this association, because humanity is the top priority. The Red Cross Youth considers itself an open youth association which thrives on the diversity of its members. Its numerous services are aimed at various target groups.

Humanity, impartiality, neutrality, independence, voluntary service, unity and universality are the seven principles guiding Red Cross Youth members. Through campaigns and activities within Germany and abroad, they give life to the Red Cross idea. They get involved socially and

politically, advocate peace and international understanding and stick up for health and the environment. International work is another focus area of the Red Cross Youth. Every year, GRCY members organise international gatherings with young people from all over the world and support aid projects for children and young people abroad.

As a competent partner, the GRCY currently assists over 2,500 schools across Germany in first aid service. It offers a wide range of services relating to health education, violence prevention, mediation, humanitarian international law and social involvement.



Photo: Sebastian Schürer



Photo: Mario Andriya

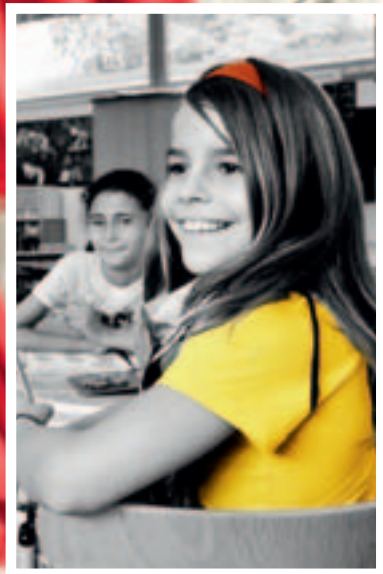


Photo: Mario Andriya



CREDITS

PUBLISHER

German Red Cross headquarters
National Red Cross Youth office
Carstennstrasse 58
12205 Berlin

Tel.: 0049-30-85404 390

Fax: 0049-30-85404 484

E-Mail: jrk@drk.de

Internet: www.jugendrotkreuz.de, www.mein-jrk.de/klimahelfer

Responsible according to the press law: Ines Große

Editor: Jessica Fritz

Editorial assistants: Alexandra Hepp, Viola Dannenmaier

Technical inspection: Ecolo Agentur für Ökologie und Kommunikation

Proof-reading: Wieners+Wieners GmbH

Illustration and layout: Strachwitz&Gerhard GmbH

Printing: Köllen Druck & Verlag GmbH

Translation: Lingua-World

➤ **CAMPAIGN TRAILER AND CAMPAIGN FILM**

*show the effects of climate change on people and how we
can take action.*

Both films are available at www.mein-jrk.de/klimahelfer

*Everyone can do their bit and get involved for a humanitarian world!
So become a Climate Helper – and change something before the climate does!*

