

# 2009 Forum Human Impact of Climate Change





Cover picture : Beltra Daniel. A barge that has been stranded for 2 months on a sand bank of the Solimoes river between Teje and Mimiraua during one of the worst droughts ever recorded in the amazon region ; Amazon, Brasil, Gamma/Eyedeia.

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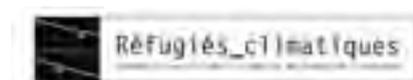
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“It is the fastest growing new challenge in humanitarian terms. It is also one of the riskiest challenges ever faced.”

Walter Fust

## Introduction

by Walter Fust, CEO/Director General of the Global Humanitarian Forum

This report documents the second annual forum event of the Global Humanitarian Forum and our focus on the human impact of climate change. Leaders from different walks of life gathered in Geneva for the occasion to formulate a common response to the severe and growing impact that climate change is causing around the world today.

The conference took place just one month following the publication of the Forum's first Human Impact Report, entitled “The Anatomy of a Silent Crisis”. In the past, climate change had always been framed as a future problem not yet affecting people. This publication caught many by surprise by stating that climate change is already killing over 300,000 people every year.

Other so-called humanitarian problems may be more deadly than climate change, such as malaria or HIV/AIDS. But in a context of rapid population growth, stronger competition for resources, and continually unmet development aid promises, it is already difficult for poor communities and foreign assistance actors to keep pace with the many challenges in health, education, nutrition, security, and migration to name just a few. Against this backdrop, climate change is not only an additional burden. It is the fastest growing new challenge in humanitarian terms. It is also one of the riskiest challenges ever faced, since its direct and diffuse impacts are woven throughout the breadth of human society.

This reach was well-represented at the 2009 Forum. Topics broached ranged from the displacement of people to human rights to demographics to public goods to media and to insurance, among others. One session, on interdependence, specifically explored the difficulties of dealing with a global phenomenon as interconnected as climate change.

Likewise, the event's participants also testify to the comprehensive nature of this concern: from civil society or global business leaders, to concerned or affected heads of state and ministers, to outspoken young adults and academics, to leading technocrats of the international trade, humanitarian and development communities.

And climate change is not only an all-encompassing threat. It is also an indiscriminate threat-multiplier. Its impacts are capable of overwhelming many of the most vulnerable communities of this planet, with devastating effects for development and ultimately national, regional and global security. The potential for mass societal problems in health and migration, for instance, are all too real. This will have devastating impacts on the greater political situation of already fragile regions. And it is exactly the world's most fragile regions that are the world's most vulnerable to climate change – be they the drylands of North Africa, the Middle East and Central Asia, the small island states of the Pacific, or the Sahel region of Sub-Saharan Africa.

Just six months prior to the Copenhagen Climate Conference, where a new international climate change agreement is to be fleshed out, the 2009 Forum delivers a strong message to negotiating parties. Latest research suggests truly ambitious international targets for emission reductions and financing will be necessary to tame climate change and limit its impacts. While the seemingly unrealistic scale of such targets caused frustration with some, others pointed to the larger-scale means and cooperation that was mobilized to combat the current global economic crisis.

Whatever the scale of the response, little can be achieved unless there is strong international cooperation. Climate vulnerable nations in particular were urged to speak out with a strong common voice, industrialized countries to take the lead, and emerging economies – in many cases the next frontline countries in the struggle against climate change – to make serious contributions.

Since our inaugural annual forum in June 2008, which introduced the human face of climate change to the wider humanitarian community, there has been a visible improvement in understanding of the issue among wide-ranging partners. Few now doubt the need for a fair and robust agreement to be achieved in Copenhagen. But the humanitarian and development fields must take measures today in order to deal with the immediate impacts of climate change and be prepared for worse to come. We cannot wait until the effects of a Copenhagen agreement are being felt – particularly when there is so little certainty about how that agreement will look like and in what way it will be implemented after 2012, when it is set to become operational. No matter what the outcome in Copenhagen, policies and efforts must change since science suggests greater impacts of climate change over the next 5-10 years are unavoidable, due to the way in which our climate system functions. It is our response to climate hazards that will determine whether or not we can prevent further climate disasters.

All countries of the world are already affected by climate change today. The enormous differences in the damages caused, however, will rapidly diminish as global warming increases. And in a globalized world, the battles of one region cannot be played out in isolation from another part of the world. Climate change is an enormous emerging threat to all humanity.

And so the strongest signal that the 2009 Forum conveys is the sheer urgency to act. The “tck tck tck” of the Global Humanitarian Forum's time for climate justice campaign should ring loud in the ears of people and their representatives everywhere.

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## Event Summary

- > The second annual centerpiece event of the Global Humanitarian Forum
- > An international conference focused on the global human impact of climate change and new challenges for humanitarianism and sustainable development that this impact entails
- > Held 23–24 June 2009 in Geneva, Switzerland
- > Chaired by Kofi Annan, President of the Global Humanitarian Forum
- > The event was attended by over 400 high-level representatives and leading people from a broad range of different sectors public and private, including government and military, humanitarian, development and civil society actors, media, scientists, academia and think tanks, as well as participants from the telecommunications, pharmaceuticals, insurance, finance, and engineering industries
- > Through 4 plenaries, 15 focus sessions, and 5 parallel workshops over two days, the event's programme comprised four key focus areas as follows:

### Climate change and displacement of people

Adapting to climate change is possible up until land is rendered entirely uninhabitable through sea-level rise and flooding, or severe water stress and desertification. Leading up to and beyond this point, people and communities must move and it is disputable whether or not that even constitutes “adaptation” as commonly understood. If many tens of millions of people, including entire nations, are forced to move because of climate change, this type of displacement would constitute a challenge possibly unparalleled in human history. The international community, in particular, stands unprepared.

### Adapting to climate impacts

While entire nations may disappear, much can be done to protect the lives and livelihoods of the majority of people living in marginal regions afflicted by climate change. Such efforts require sophisticated expertise and technical measures, fundamental changes to emergency response systems and higher levels of community involvement.



From left to right (center of image): Bertrand Piccard of Winds of Hope, Klaus Schwab of the World Economic Forum, Ivan Pictet of Pictet & Cie, President of the Republic and Canton of Geneva Martin Hiller and Swiss Federal Councillor Micheline Calmy-Rey



Mary Robinson of Realizing Rights, President José Ramos-Horta of Timor-Leste, Nane Annan and Chief Advisor to the former President of Ghana Mary Chinery-Hesse

Virtually all measures also imply some cost, and the world's poorest communities, first and worst affected by climate change, cannot afford to cover that additional expense. As a result, human suffering is on the rise.

### Copenhagen and beyond

The main provisions of the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC) - the world's foremost agreement on climate change - expire in 2012.

Following the Bali Action Plan, a global climate deal after 2012 is currently under negotiation, and due to be agreed upon at the 2009 UN Climate Conference in Copenhagen. A global agreement will require polluters to assume responsibility for climate change and provide assistance for those worst affected and most in need. An unparalleled opportunity for the international community to tackle climate change, negotiations have nevertheless demonstrated political support far short of even basic expectations, jeopardizing the possibility for a resolution to the climate crisis.

### New frontiers: evolving responses

Humanitarianism must also evolve to cope with climate change. Climate change is an additional burden on a humanitarian system already struggling to deal with its vast mandate. To manage this new reality, wide-ranging humanitarian efforts must be improved and expanded. Numerous possibilities for enhancing the system exist, particularly by increasing the involvement of actors from outside the traditional humanitarian circle and by harnessing the benefits of cutting-edge technologies.

# Key Recommendations

In light of the growing human impact of climate change and the pressures of this crisis for humanitarian and development work, the following is a list of key recommendations made by the different discussion groups at the 2009 Forum.

## Climate vulnerable coalition

- > Those nations most vulnerable to the impacts of climate change should form a common front in order to increase awareness on the impact and risks of climate change, share expertise relating to climate change policy, and influence the development of safe and equitable international climate change policy, in particular with the strongest possible impact on the 2009 UN Climate Conference at Copenhagen

## Future international climate change agreement

- > The principle of contraction and convergence with a population base year should provide the basis framework for global greenhouse gas emission reductions
- > “No deal is better than a bad deal”: it would be more constructive to avoid conclusion at the 2009 UN Climate Conference at Copenhagen of any climate change agreement that would not provide for basic levels of safety, equity and predictability
- > All parts of civil society should make a concerted attempt to create wide multi-stakeholder partnerships for concentrating pressure for a successful conclusion to the Bali Road Map and the Copenhagen Conference

Martin Frick of the Global Humanitarian Forum,  
Jacques Forster of the Graduate Institute Geneva,  
Michel Camdessus of the Africa Progress Panel,  
Mary Robinson of Realizing Rights  
and Alois Hirschmugl of the Austrian Armed Forces



### Climate change policy

- > Participation of civil society should be ensured at all levels of policy development in order to best benefit from local knowledge regarding adaptation and mitigation efforts, as well as to minimize iniquities
- > Humanitarian actors should speak with a common voice for safe international climate change policy
- > Climate change policy development should include strong representation of women
- > Climate change policy must take into due account and reinforce health equity

### Climate change financing

- > Low-income nations should present financing requests for adaptation and mitigation in two phases, beginning with a lower-level initial request for a five-year period
- > Financing for adaptation must be additional to existing Official Development Assistance commitments

### International trust-building

- > Currently the cause of animosity, international climate change negotiations should be recognized as an opportunity for cooperation around the common challenge of global climate change
- > Highly-developed nations should be prepared to accept rapid greenhouse gas emission targets and the establishment of a predictable mechanism for substantial financing for low-income countries to implement safe and sustainable climate change policy
- > Low-income countries should be willing to accept performance conditionality on financing related to climate change policy

### Climate change awareness

- > Priority should be given to increasing general public understanding of climate change and its impacts, including through the inclusion of the topic within school curricula

### Safe climate change

- > 350 parts per million of CO<sub>2</sub> concentration or equivalent in the atmosphere should be considered an ultimate objective of climate change policy

### Humanitarian and development system

- > Due to ineffective structural characteristics of development and humanitarian assistance, artificial divisions in financing, governance and operations of humanitarian and development efforts should be removed where this will contribute to enhancing the general efficiency of the system

### Development policy

- > Climate change policies for adaptation and mitigation should be mainstreamed into development policies and programmes

### Population stabilization

- > Population stabilization should become a priority for sustainable development, including a strong focus on the empowerment of woman and girls

### Climate Displaced People

- > Efforts should be undertaken to address the lacuna in international protection and assistance mechanisms and laws for people displaced as a result of climate change (Climate Displaced People), including with respect to sovereign territorial losses for low-elevation countries threatened by global sea-level rise

- > Environmentally Displaced People should be considered the operative framework for dealing with Climate Displaced People because of practical difficulties in isolating on an individual basis the extent of the role of climate change in any given case

#### Civil-military cooperation

- > Substantial funding should be made available for improving civil-military cooperation for first-phase humanitarian relief efforts, including for the provision of appropriate training, information sharing and more effective institutional procedures
- > A charter of guidelines determining the parameters of civil-military cooperation should be developed

#### Security of humanitarian workers

- > The international community should act in concert strongly condemning violence against humanitarian workers and pressuring governments to ensure that perpetrators of attacks on humanitarian workers do not enjoy impunity
- > In order to assist in the de-politicization of humanitarian assistance work, humanitarian funding mechanisms should be separated from counter-insurgency and anti-terrorism
- > Funding should be made available to journalist unions in countries where journalists are at high risk of attack, in order to improve their defence in the local context



Amartya Sen of Harvard University



“Leadership cannot be left to political leaders alone.”

Kofi Annan

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## Kofi Annan

Kofi Annan, President of the Global Humanitarian Forum

We came together this year to highlight the human impact of climate change. We heard from nations across the world – from political leaders, from representatives of civil society and business. From the young leaders of tomorrow, too. The diversity of people and organizations who have contributed to our discussions underscores a fundamental truth about climate change – that it is a truly global problem and one whose impact is already being felt today. Together we have worked hard to fill in the gaps in information and to drive practical solutions, moving the debate from discussions about the abstract and the future to the devastating impact on people now.

Climate change is a grave and all-encompassing threat – to our health, our security, our prosperity and quality of life. Climate change is affecting every continent and accelerating faster than previously had been thought. And it is having a catastrophic impact on the lives of millions of people. It is the poorest countries and poorest people who are, and will, suffer most.

We must also send out a loud and clear message on the need to slow down and reverse climate change, to help its victims and to put the world on a path to sustainable development. The clock is ticking. Every year we delay, the greater the damage, the more extensive the human misery – and the higher the cost, pain and disruption of inevitable action later.

If there is one key message that I would like to come out of this conference it is that none of us is immune to its impact. Everyone, and every country, has a responsibility. Yes, some may be more responsible than others, but we are all in this together. A failure to recognize that could be one of the costliest mistakes we ever make.

Ultimately, the most urgent action lies with world leaders. It is our leaders that have the responsibility and power to put in a place a new framework for reducing carbon emissions at the United Nations Climate Conference in Copenhagen this December.

The agreement they strike must be based on climate justice: it must be global, it must be fair, it must be safe and it must be binding. It must recognize that the world's poorest are carrying the heaviest burden for a problem that they have done least to create.

It is up to each of us to ensure that our leaders do not squander this historic opportunity. Leadership on this issue cannot be left to political leaders alone but requires an almost complete and total mobilization of society. We all have a role to play. We have a responsibility as individuals, the private sector, foundations, universities, and more.

So, let's band together, let's campaign, let's put wind on the sails of our political leaders, and we will be amazed at how many of them will show remarkable leadership when they know that we are all there with them.

As well as putting pressure on the world's political leaders for agreement in Copenhagen, however, we also have to draw attention to new challenges climate change will bring, and how we will respond as organizations and individuals.

One of the reasons that the human impact of climate change has not received proper attention is because many of the problems it exacerbates – such as poor health and poverty – have their roots elsewhere. But as extreme weather events become more common, the resources and systems to tackle these disasters will be put under new and intolerable strain. We will need to find extra resources and put in place better coordination and cooperation so we can provide the urgent help which will be needed.

Adaptation to these impacts will require significant financial support. This may be more easily secured if poorer nations can speak collectively about their climate change needs. I hope that the ongoing work of the Global Humanitarian Forum, and similar bodies, can provide a platform for solidarity on this issue.

Many other issues must also be dealt with. How will we give longer-term protection to those forced to leave their land and communities due to climate change? The number of displaced people is set to grow. Their plight is as great – and more permanent – than those forced to flee conflict or persecution. But they have no protection under international law. We must find ways of addressing this.

We need new partnerships and to make better use of the expertise, networks and resources that are available. The Weather Info for All initiative launched by the Forum and presented at this event is an example of how the private and public sectors can work together to deliver real practical benefits. Collecting accurate information about weather and climate across Africa will give farmers better guidance about when to plant and harvest crops as well as helping alert communities about severe storms.

We have the knowledge, the resources and the technology to reduce the pace of climate change and safeguard people and countries from its impact. What is needed is the vision, courage and will to act. I believe this Forum is showing the way by bringing organizations and people together.

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“A farmer in the Mekong Delta who sells his daughter to a human trafficker for the money to buy new seed to replace what was washed away by flood waters (...) These stories show the real cost of climate change and are typical of many who see migration as the only way out.”

Micheline Calmy-Rey



## Micheline Calmy-Rey

Swiss Federal Councillor and Minister of Foreign Affairs **Micheline Calmy-Rey** spearheaded the initiative to found the Global Humanitarian Forum as a part of her presidency of Switzerland in 2007.

An increasing number of humanitarian issues are closely tied to broader political, social, economic and environmental trends today. Rapid changes in the globalised world are demanding an enhanced capacity to address humanitarian challenges, to save lives, protect human dignity, and promote welfare.

Humanitarian challenges cannot be tackled in isolation. A multidisciplinary approach is crucial to solving problems. Not only international humanitarian organizations, governments and non-governmental bodies, but also the private sector, academic institutions and think tanks, as well as civil-society and other international organizations (including financial institutions) are all asked to collaborate more efficiently and effectively in the very short term. For this, we need new solutions.

This humanitarian forum provides a unique multi-stakeholder platform which should help us promote dialogue, generate synergies, forge new partnerships and move the global humanitarian agenda ahead.

Climate change is one of the most significant humanitarian concerns emerging today. In its first report nearly 20 years ago, the United Nations Intergovernmental Panel on Climate Change (IPCC) mentioned climate change as a likely cause of migration problems. Today, this is reality.

Climate change increases existing ecological, economic, political, social and health risks, and its biggest impact is on countries and population groups already exposed to high levels of risk.

In the past few years, scientists have built up a considerable body of knowledge on the subject of climate change. Slowly from the statistics and graphs we see human faces emerging, and stories that reveal its impact on people: a woman in Burkina Faso who is no longer able to cultivate her field as a result of desertification; a farmer in the Mekong Delta who sells his daughter to a human trafficker for the money to buy new seed to replace what was washed away by flood waters; a homeless family in Myanmar that lost all its possessions in the cyclone. These stories show the real cost of climate change and are typical of many who see migration as the only way out.

Climate change, loss of biodiversity, conflicts over increasingly scarce resources, these ecological and social crises above all make one thing clear: the bonfire of resources that made possible the development of countries in the North cannot be repeated, especially not with a world population that is already enormous and is still growing.

25% of the world's population consumes 75% of its resources. This general rule still holds true.

Environmental crises show in a drastic way the conflict between economic expansion with its demands on natural resources, and ecological limits. The global environmental space is finite. The risks that arise from global warming fall disproportionately on the weakest members of society, who already survive on the bare minimum. The poorest segments of society are particularly vulnerable to environmental deterioration. They are exposed to risks that threaten their very existence, including poor harvests, sickness and hunger, and they have little or no possibility of adapting. The more scarce the natural resources, the more urgent the question of their distribution and the question of equity become. Any decision on what is to be considered a dangerous impact is a political and ethical issue: what right has each country to what nature can offer, and to what extent? How much can any country take for his well-being?

More than 60 years ago the United Nations proclaimed the Universal Declaration of Human Rights.

*"All human beings are born free and equal in dignity and rights."* (Article 1).

*"Everyone has the right to life, liberty and security of person"* (Article 3).

In a globalised world it is increasingly the discourse of human rights that sets the terms of reference for disputes over power and its victims. Climate change has a critical significance for the well-being and dignity of every person and is a striking example for the transnational character of threats in our world. They surpass the jurisdiction of single states. It is therefore crucial that attempts be made to share the environmental global space fairly among all world citizens, and to take into account the future generations as well. From a human rights perspective fundamental rights should have priority over demands for a higher standard of living – in the North as well as in the South. This is particularly applicable to climate policy, which determines: the amount of the global environment that will remain available to the poor countries; the extent to which emissions will affect poor countries and population groups; and the extent to which poor population groups have access to resources.

Developing a climate policy based on the principle of fairness and a better relationship with nature is one of the critical tasks which the international community must face. Our generations will be measured by how we address this challenge.

We are hampered by a deep-rooted lack of trust – a lack of trust between the industrialized and developing countries. Many industrialized countries believe that the developing countries are doing too little and applying undue pressure. Many developing countries believe that the industrialized countries have defaulted on the promise of financial and technological assistance. They see little long-term responsibility.

When it comes to climate and the global biosphere, the nations of the world are linked. Environmental and resource crises spill over territorial borders. This alters the fundamentals of foreign policy. While a proper understanding of what is in the national interest will of course remain the basis for foreign policy action, today such action must be linked to the well-being of all world-citizens, and the respect of a “global common”. That means assuming an equal right to the Earth’s atmosphere.

In conclusion, I would like to make the following five observations:

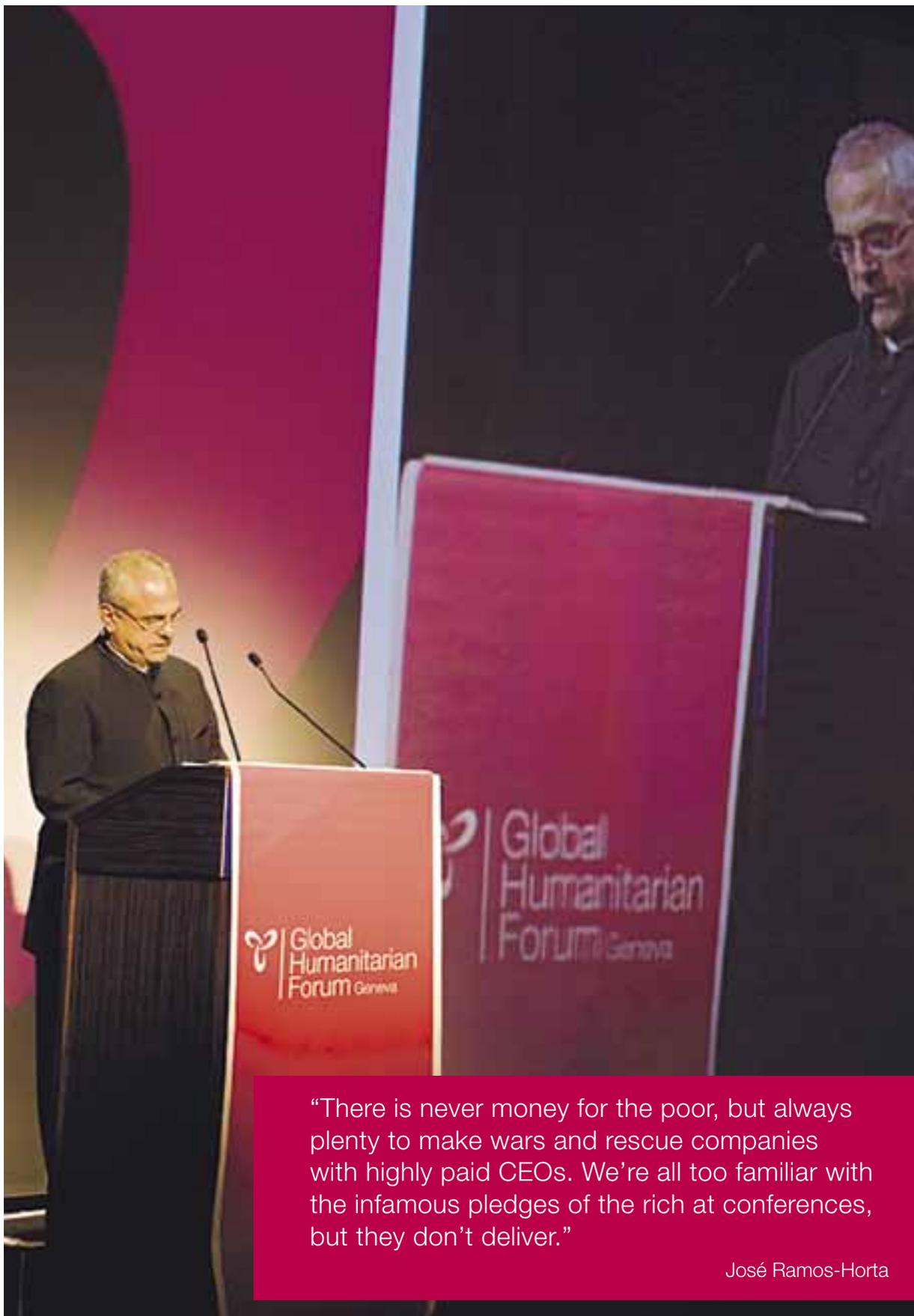
1. Environmental policy is a pre-condition for combating poverty. Both considerations must be linked in a general policy that is coherent at all levels, from local to global, and with the participation of civil society actors.
2. Furthermore, there is need for an alliance between the industrialized nations and the developing countries, so that we may combat environmental problems and poverty together. The industrialized nations must change both their consumption habits and their production methods, and help the developing countries to find an environment-friendly path to growth.
3. Poverty and environmental problems must be given the same priority as security questions. If we respect natural living conditions and are successful in combating poverty we will reduce the number of refugees created by poverty and environment-related problems.

4. Only by linking world-wide efforts to combat poverty with environment policy will development be sustainable and bring benefits both to the developing countries and the industrialized world.
5. Therefore humanitarian challenges cannot be tackled in isolation and a multidisciplinary approach is crucial to find new solutions.

2009 will be critical. What we must do in this Forum is create a strong and positive signal for the Copenhagen Conference in December. Together there is much we can accomplish.

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“There is never money for the poor, but always plenty to make wars and rescue companies with highly paid CEOs. We’re all too familiar with the infamous pledges of the rich at conferences, but they don’t deliver.”

José Ramos-Horta

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## José Ramos-Horta

José Ramos-Horta, President of Timor-Leste

Timor-Leste fits in the category of least developed countries, post-conflict, vulnerable, fragile states. All the challenges we face are not different to those faced by many others who have been on the world stage far longer.

I am convinced and I am sorry that I might convey a bit of pessimism that leaders of the powers are going to take initiative and courageous steps in saving our planet.

Let me repeat. I do not believe. Let me explain the reasons for my lack of hope and faith. I ask: how many industrial countries have responded to the UN appeal more than 20 years ago to allocate a miserable 0.7% of their income for development assistance to poor countries? Only small Nordic countries have done so. There is never money to assist the poor, but there is always money to rescue banks and insurance companies, and bankrupted, corrupted, incompetent, and highly-paid CEOs.

How many countries have agreed to open up tariff markets with goods for developing countries? The rich advocate for trade but they heavily subsidize their farmers and industries and impose restrictive rules on agriculture imports from Africa, Asia and Latin America.

We cannot continue to denounce the rich for their greed and irresponsibility. We must try to do small things, actually, big things, with our own resources to save our own countries and rivers and lakes our seas and corals. We must stop logging and destroying our forests. We must plant millions of trees, preserve rain water and rivers. We must stop dumping plastic and other non-degradable and toxic materials into our own rivers and seas. We must prevent over fishing and preserve our fish stock.

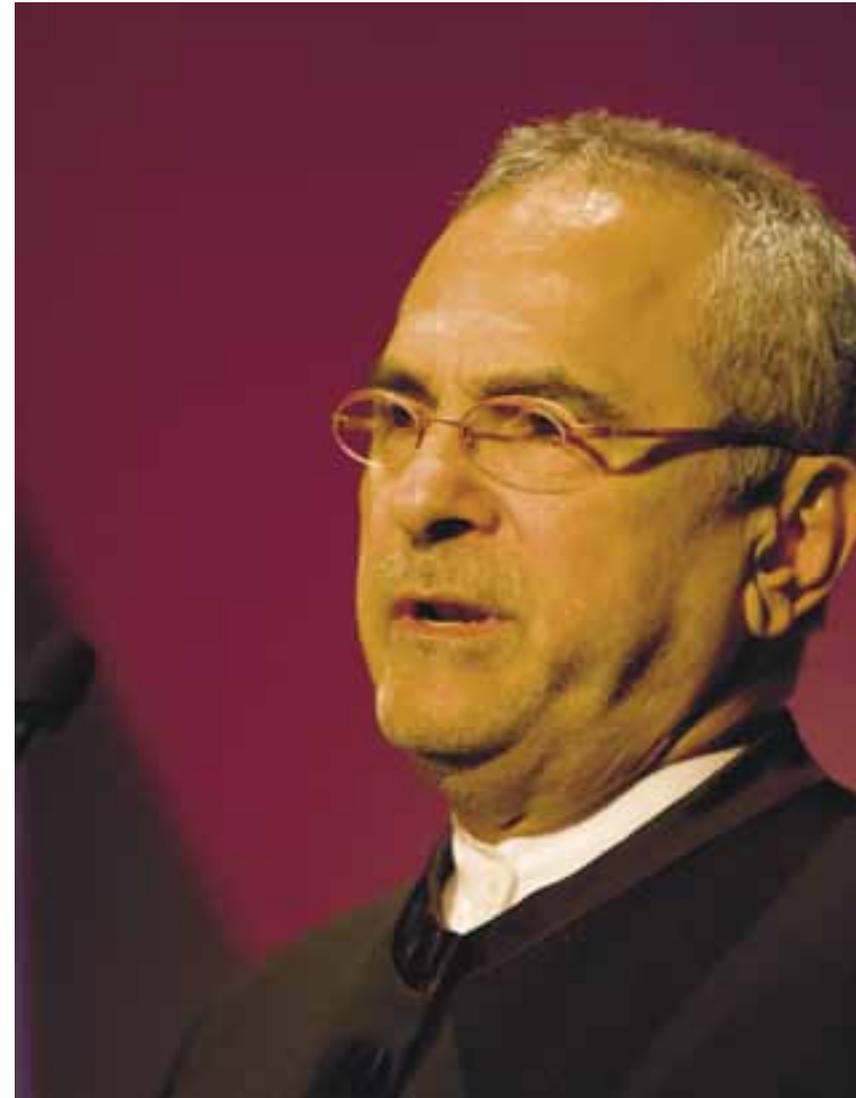
If we do this in every country, every island, and every tropical region from the Amazon to the Coral Triangle we will mitigate the impact of climate change. We might not have to witness the disappearance of some islands, people and cultures in the next decades.

I do not assign all the blame to the rich and the powerful. Maybe what we experience today is an unenviable consequence of developing the human mind: the science, the technology, industrialization. We could not have told the people in the 1800s not to build factories, and fuel them with coal and fossil fuels. We could not tell them not to manufacture locomotives, ships, cars and later airplanes.

Now we are 6 billion people sharing a shrinking planet with shrinking resources. Let us share the resources we have in each country, each island, each village and we might have enough for all. We might save our planet, we just might.

My concept is that peace must start in the home within the family, the schools and the streets. Peace must mean the end of domestic violence against women and children. Peace must mean that we care about our elderly, the handicapped, HIV/AIDS victims, and the poorest of the poor. Peace means that we must have model of solidarity and share our resources with the people in need. And not that this is just a diplomatic speech, we translate it into action: even though we are a very new country with limited resources we made contributions to the people in China, Cuba, Burma and Indonesia affected by natural disasters with a total of close to 2 million US\$.

”



## Follow-up to 2008 Forum

### Plenary Discussion

## Weather Info For All

The objective of the Global Humanitarian Forum's Weather Info for All (WIFA) initiative is to radically improve Africa's weather monitoring network gap in the face of the growing impact of climate change.

### “Remarkable progress” to date

Together with telecommunications giant Ericsson, the WIFA project is installing automatic weather stations at new and existing wireless network sites across Africa. These sites are ideal as they provide the necessary connectivity, power and security. Data collected by the weather stations is sent to National Meteorological and Hydrological Services (NMHS), increasing crucial information necessary to accurately predict and manage climate-related events.

Improved weather information will assist farmers' decision-making processes relating to crop management and allow governments to develop targeted disaster management plans. The initiative is expected to ultimately help empower millions of people to cope with and adapt to climate change.

Within a year, the Initiative's first phase has successfully installed 19 automatic weather stations in Kenya, Uganda and Tanzania. These stations not only prove the concept of the initiative but also double the weather monitoring capacity in the Lake Victoria region, where thousands of people die every year due to storms and accidents.

Phase two will involve setting up 490 stations, extending the Initiative's coverage in East Africa. The objective is to deploy up to 5,000 stations all over the African continent.

“We have proven that we can build a system and that it can be sustained. The next challenge is to integrate fully into national networks. This innovative public-private partnership is sowing the seeds of a common public service platform that could lead to better social and economic outcomes across the continent.”

David Rogers,  
President of the Health and Climate Foundation



### Understanding climate change at local and regional levels

Climate change alters weather patterns, making it increasingly difficult for individuals to take informed decisions on wide-ranging issues from agriculture to health. At the heart of these difficulties is a pervasive lack of accurate meteorological information concerning, for example, temperature, rainfall and wind. This is most evident in Africa, where basic meteorological observation equipment is extremely limited.

Another partner to the initiative, the World Meteorological Organization (WMO), points out that existing global climate models operate at 300-kilometre resolutions – meaning one station providing weather data for a surface area of 300 kilometers. Knowing what crop to plant and when, would need a local resolution of 5 to 10 kilometers, whereas the African continent currently has 1/8 the required monitoring density. WIFA provides a practical solution to bridge this observation gap to help improve people's lives and livelihoods.

“The idea of using mobile network towers is brilliant because of its simplicity. We are putting up a cell tower every hour, 24 hours a day, seven days a week. The beauty of the initiative is that we are already there.”

Carl-Henric Svanberg, President and CEO of Ericsson

### A catalyst for cooperation

The initiative relies on the core business of telecommunications in an innovative take on public-private partnership. A longstanding enterprise in the African economy, Ericsson also views its contribution as an investment in future markets. Ericsson in turn is also tapping relationships with African operators, such as Zain, to host the weather equipment.

This innovative public-private partnership is sowing the seeds of a common public service platform that could lead to better social and economic outcomes across the continent. Beyond tangible meteorological data gathering and dissemination, the initiative also plays an important role as a catalyst to help spark cooperation among providers and users of weather and climate information.

### Challenges and opportunities

Prospects are bright, but there are some challenges to overcome if WIFA is to reach its full potential. In Tanzania, for example, a key challenge is data communication and server location. Partners in the initiative, however, view these technical issues as surmountable. The main challenge is to overcome past modes of operation. National meteorological services have not traditionally cooperated with the private sector. Changing that model through partnership with the telecoms sector is a major accomplishment of the initiative. Other opportunities can be expected as the network spreads. For example, by transforming how weather and climate information is acquired and disseminated, new opportunities to use the data will develop, such as insurance strategies to reduce the financial impact of weather-related hazards and enhanced disease surveillance systems.

“It is a good initiative and an opportunity to innovate in the way in which data is acquired and disseminated. This technology provides us with a good opportunity to acquire data at the level at which adaptation needs to be taken.”

Jeremiah Lengoasa,  
Assistant Secretary General of the World Meteorological Organization



Agnes Kijazi of the Tanzania Meteorological Agency, Jeremiah Lengoasa of the World Meteorological Organization, David Rogers of the Health and Climate Foundation, and Carl-Henric Svanberg of Ericsson (on screen)

The challenge now is to find the funding, one station at a time, to deploy the 490 stations in 2009-2010 and the remainder within the next decade.

### Lead participants

Agnes Kijazi, Director, Technical Services, Tanzania Meteorological Agency

Jeremiah Lengoasa, Assistant Secretary General, WMO

David Rogers, President, Health and Climate Foundation; Senior Advisor, Weather Info for All Initiative; Chief Executive, UK Met Office (2004-2005)

Carl-Henric Svanberg, President and CEO, Telefonaktiebolaget LM Ericsson; Board Chairman, Sony Ericsson

Moderated by Nik Gowing, BBC

## Plenary Discussion

# Human Impact Report: Climate Change – The Anatomy of a Silent Crisis

The Global Humanitarian Forum's *Human Impact Report*, launched 29 May 2009, was developed following calls from partners at the 2008 Forum for a reference document on the current global impacts of climate change on human society. The result is a report that has generated considerable controversy, but that has succeeded in its mission triggering broad discussion on the effects climate change is having on people around the world.

## A large-scale global crisis already today

Environmental, social and economic vulnerability intersect at their peaks for the poorest and most vulnerable. The report calculates that 300 million people are severely affected by climate change at a total economic cost of over US\$ 100 billion annually. More than 500 million people are living in extreme risk and more than 20 million have already been displaced.

The report's projections are grim: 20 years from now in a business-as-usual scenario, worldwide deaths will reach 500,000 per year; people affected by climate change annually are expected to rise to more than 600 million and the total annual economic cost will increase to around US\$ 300 billion.

Today's impacts vary greatly from country to country, with 99% of casualties occurring in developing countries. This fact raises strong global justice issues, since the 50 least developed nations of the world account for less

than 1% of the greenhouse gas emissions that cause climate change. The populations most gravely at risk are over half a billion people in some of the poorest areas that are also highly prone to climate change – in particular, the semi-arid dryland belt countries from the Sahara to the Middle East and Central Asia, sub-Saharan Africa, South and South East Asia, and small island developing states. Nevertheless, the report indicates that no one is safe from climate impacts, with around 4 billion people living in zones vulnerable to climate change.

## Controversy and debate

The Human Impact Report has generated considerable controversy, which the Global Humanitarian Forum welcomes. Many critics have pointed to the methodology and criticised the data presented in the report as either exaggerated or underestimated. The Global Humanitarian Forum maintains the methodology is “plausible” but does not claim perfect accuracy.

The impacts of climate change on people and populations are extremely difficult to assess, as weather events have been affecting the lives and livelihoods of vulnerable populations since the beginning of time.

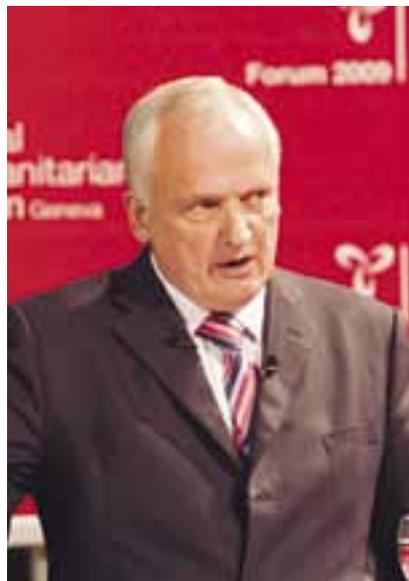
“The evidence is clear. The impact of climate change has been underestimated – it has serious effects on environmental determinants of human health. The problems are huge. The reason we are not getting good figures is because the problem has been neglected. We should have done this years ago.”

Margaret Chan,  
Director-General of the World Health Organization



As the report's authors repeat, we are at the beginning of understanding the data. The evidence indicates that the impacts of climate change, if anything, have been underestimated. Climate change has been talked about and debated for 20 years, but no real action has been taken yet to combat its impact. The Global Humanitarian Forum maintains it was better to publish a less-than-perfect report that gives an indication of the scale and breadth of the crisis, than to wait years longer for slightly more accurate data.

The report focuses public attention away from the typical “poster child” of the climate change debate – a polar bear stranded on an iceberg – and creates a new focus on people. It breaks the silence that has up until now persisted over human suffering linked to climate change. According to the report, a majority of the world's population does not have the capacity to cope with the impact of climate change without suffering a potentially irreversible loss of well being, as well as risking major loss of life.



“We have a long way to go to get the world to face up to the human impact of climate change. If we are going to get a deal in Copenhagen for adaptation people must understand that the poor and vulnerable are suffering now.”

Barbara Stocking,  
Chief Executive of Oxfam GB

Nik Gowing of BBC

Aggravated basic health concerns, such as malnutrition, diarrhoea and malaria – all highly climate sensitive in themselves – are the causes of the largest proportion of fatalities that can be linked to climate change.

### Necessity for swift action to avoid even greater impacts

Data available on the human impact of extreme weather events suggest the need for urgent action to improve resilience in key areas, such as on health issues and disaster risk reduction. NGOs and international organisations should be prepared for even more extreme weather events now and in the future. There are valuable lessons to be learned from people in many developing countries who are adapting to climate change on a daily basis. However, many people do not understand what is happening to them. They may adapt their daily lives to flooding by placing their homes on stilts and storing seeds in trees, but they likely do not understand that they are experiencing the effects of a global trend that is set to accelerate.

Likewise, the scale of the impacts today make a very strong case for the need to stem climate change before such impacts become overwhelming. The report points clearly towards the UN Climate Conference to be held in Copenhagen in December 2009, where there is a historic opportunity to tackle, in particular, the root causes of the problem.

To read the full report visit our website: [www.ghf-ge.org](http://www.ghf-ge.org)

### Lead participants

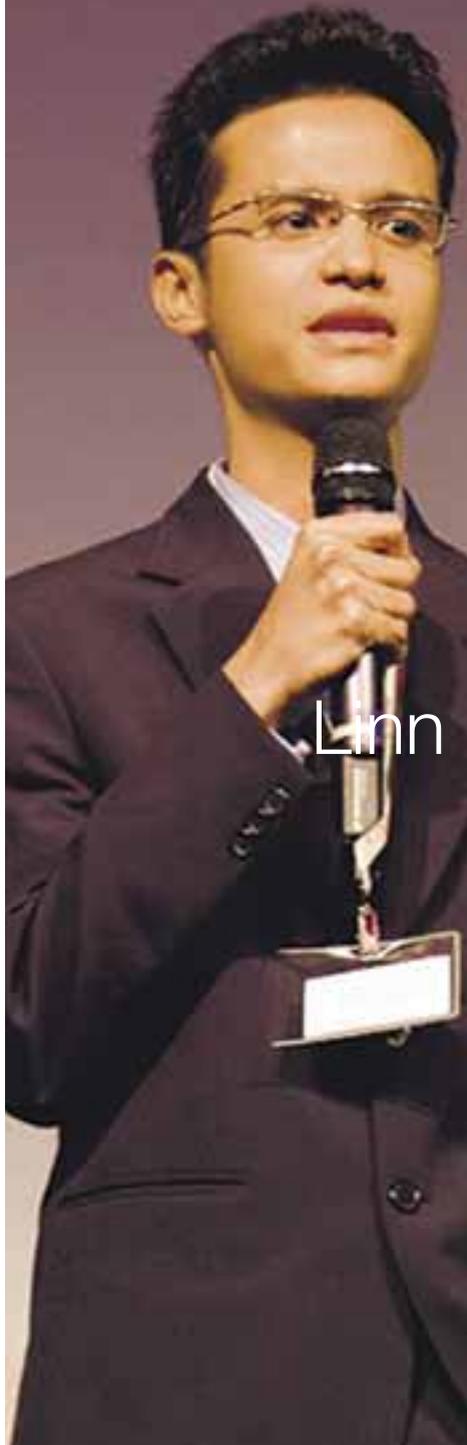
Walter Fust, Chair, Steering Committee, Human Impact Report; CEO/Director General, Global Humanitarian Forum

Margaret Chan, Director-General, World Health Organization

Barbara Stocking, Chief Executive, Oxfam GB

Moderated by Nik Gowing, BBC

## Climate Witnesses in kind cooperation with the British Council



“We’re the foot soldiers in this war; we know what happens if we don’t act.”

Linn Kyaw Swar

### Linn Kyaw Swar (Myanmar)

19-year-old Swar is survivor of the May 2008 cyclone Nargis that devastated Myanmar. He recounted his families experience during the storm. His family clung to a coconut tree as the cyclone hit together with another man who was forced to relinquish his youngest daughter to the storm’s fury, never to be seen alive again. “On just the first day my country had 100,000 casualties,” said Linn Kyaw Swar. “Never before has there been such a devastating catastrophe.” Uprooted trees meant no shade in a hotter-than-usual summer. He initiated a tree planting project, to plant thousands in that area. “I can plant 100 trees in a day with 10 colleagues,” he said. “But this is no long-term solution to climate change. We’re the foot soldiers in this war; we know what happens if we don’t act,” he said. “But now we all need to step up.”

“People hear about it but who even knows that they are listening?”

Lavanya Julaniya



### Lauren Law (Canada)

17-year-old Law spoke of contemporary attitudes and lifestyle practices in Vancouver, British Columbia. In the industrial inner city, a walk to supermarket is often the only outdoor experience. Law spoke of her personal tipping point to action when she saw a man “walking” his dog by driving his motorcycle in circles around a parking lot. “This is what we do with the luxury of a first-world country?” she asked. To spark a paradigm shift, she started working with innercity children to raise environmental awareness. “Reach out to those who don’t know about climate change!” she urged.

“Climate change is as serious as AIDS or youth unemployment or even apartheid.”

Koti Happy Khambule

## Koti Happy Khambule (South Africa)

19-year-old Khambule spoke of dealing with climate challenges in South Africa. In South Africa, people say they have many problems other than climate change. But the irony is that many migrants driven to cities by natural disasters elsewhere are finding the same conditions as those they were trying to escape. When Soweto, a district of Johannesburg, flooded two years ago “it was a shock to the whole of Soweto and the many migrants who have settled there.” Khambule initiated a project to plant trees to minimize the effects of future flooding in Soweto. “We’ve learned that the problem of climate change is as serious as AIDS or youth unemployment or even apartheid,” he said.

“Murder over water is not rare anymore.”

Lavanya Julaniya

## Lavanya Julaniya (India)

The 17-year-old from New Delhi spoke of the heat in Northern India, which is killing more people every year. Climate refugees are created by water needs. In Bhopal, lakes and wells have dried up. While the rich safeguard their water supplies with security guards, the poor walk miles for contaminated water. “Murder over water is not rare anymore,” she said. “Surely this is not the future you want to give us.” Children are passionate and want revolution. Treaties and laws aren’t the answer. “We need to mobilize everyone to preserve water and create local solutions. Should we be doing this alone, or should you be joining us?”

Plenary Discussion

## Nations at Risk – leader's debate

This session explored the risk to nations of multiple stresses compounded by climate change and from physical changes such as sea-level rise. It also discussed strategies at-risk nations might use to deal with climate related challenges and to obtain support for disaster risk reduction and climate change adaptation at the December 2009 UN Framework Convention on Climate Change (UNFCCC) Conference in Copenhagen.

### Rising seas threaten the existence of small island nations

Small island nations, such as Tuvalu, Kiribati and the Maldives share a common geographical characteristic. On average, their territories are about two metres above sea level. The most immediate and dire danger small island nations face from climate change is rising sea levels caused by the melting of polar ice caps. Rising seas inundate villages, destroy agricultural fields and salinate water supplies. If sea levels keep rising, entire populations of these states may have to abandon their traditional homelands and seek new lives as migrants or refugees in other lands.

“We are faced with the reality that at some point we will have to leave our islands.”

Anote Tong,  
President of Kiribati

A photograph of Loren Legarda, a Senator of the Philippines, speaking into a microphone. She is wearing a white blazer and has a red flower in her hair. The background is a plain, light-colored wall.

“We need direct, tangible assistance for adaptation.  
We need concrete projects.”

Loren Legarda,  
Senator of the Philippines

How much time do these threatened island nations have? Even a few years ago, people thought these islands would have all of the 21<sup>st</sup> century to deal with the problem and formulate responses. Now, however, tipping points may have been reached. The 4<sup>th</sup> International Panel on Climate Change report was not reassuring, and more recent predictions and scenarios give very little reason for comfort for these nations. Today, it appears as if these nations will be in crisis in less than 50 years. Political leaders from these countries believe that action must be taken today.

### Vulnerable nations feel overwhelmed

Many developing nations are at risk from multiple stresses exacerbated by climate change. These include weak governance and fragile institutions, poverty, illiteracy and unemployment, as well as floods, droughts and desertification. With so many problems, politicians in these nations wonder where to start.

There is often a direct relationship between climate change related incidents and other problems. For example, two years ago there was unpredicted flooding in Ghana that destroyed crops and farmland, affecting about one-third of the nation's population. These floods seriously set back development efforts. The unpredictability of floods and droughts causes great difficulties for developing country governments.

The Philippines, an archipelago of 90 million people, is also at risk. It experiences on average 20 typhoons per year. El Niño events have caused increased poverty. Changing and unpredictable weather has caused farmers not to know when to plant their crops. Investment in disaster risk reduction and climate change adaptation is required if serious decreases in developing countries' GDP are to be avoided.



“I think we all agree on the problem, we all agree on the solutions... the problem is that almost nothing has been implemented.”

Bertrand Piccard of Winds of the Hopes

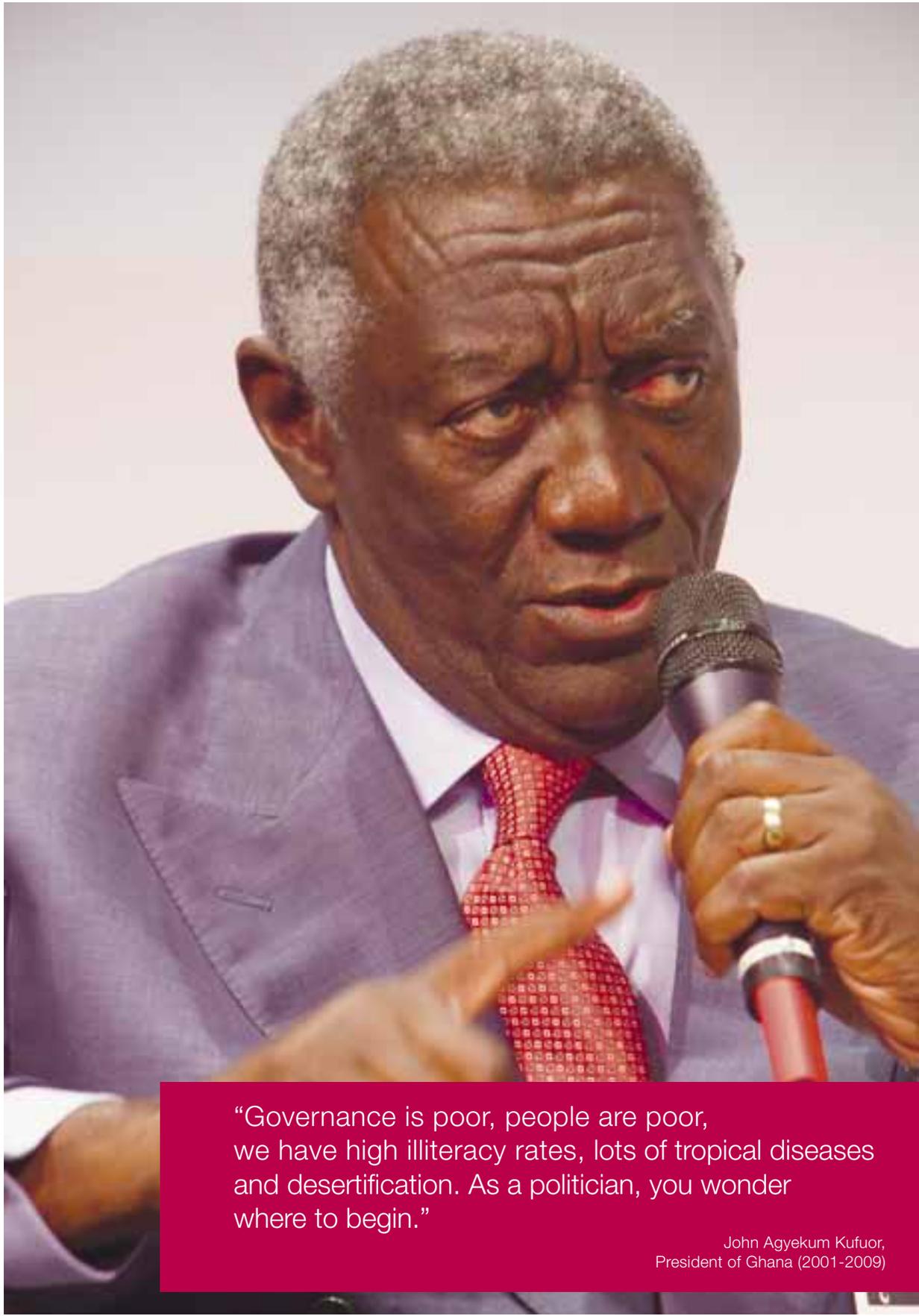
### Common threats and responses

Vulnerable developing nations face several common threats exacerbated by climate change. Weak governance and corruption lead to shoddy public works, including bridges, dikes, sea walls and dams, which fail in severe or extreme weather. Ecosystems decline as mangroves are removed for shrimp ponds and rain forests are cut down to make way for profitable crops or leisure estates. Failure to promote sustainable rural livelihoods leads to over-population in blighted urban slums.

Some leaders of threatened islands believe their people will have no choice but to migrate. What they seek is for their people to be able to migrate with confidence and dignity. There are many questions and challenges confronting people facing forced displacement, including what will happen to their sovereignty, their culture, and their exclusive fishing and other economic rights.

For migration to be with confidence and dignity, there should be partnerships between the threatened island nations and the international community. One example is an arrangement between Kiribati and New Zealand under which New Zealand allows 75 randomly chosen Kiribati citizens to migrate annually. Australia is providing training so that Kiribati citizens can qualify as migrants in many countries. The objective of these programmes is to permit migration in a gradual, planned way and avoid disruptive, traumatic, massive migration under crisis conditions.

For some threatened small island nations, like the Maldives, migration is seen as a last, unpalatable resort. The people of the Maldives have lived on their islands for 3,000 years and have developed dialects and culture that would be lost through mass migration. For them, the focus should be placed on adaptation and the need for adequate adaptation funding from the developed world.



“Governance is poor, people are poor, we have high illiteracy rates, lots of tropical diseases and desertification. As a politician, you wonder where to begin.”

John Agyekum Kufuor,  
President of Ghana (2001-2009)

There is a recognised need for cooperation among developing and at-risk nations at regional and continental levels, such as the African Union. There are also new agreements for cooperation between African countries and the European Union, Brazil, India and China. Through cooperation, many nations can share best practices and undertake mutually beneficial projects, such as construction of a tidal surge wall along the West African coast and reforestation projects to arrest the southward spread of the Sahara.

#### The developed world's responsibility

The developed countries are largely responsible for the greenhouse gas emissions causing climate change. They have the resources to deal with climate change adaptation. The developing world lacks the resources, the science and the technology to deal with the problems. The developed world should be pressured to accept responsibility and provide the resources for the developing world to adapt to climate change.

Some participants suggested that 10% of all humanitarian aid should go for disaster risk reduction and climate change adaptation. All agreed that significant funding from the developed world is necessary for disaster risk reduction and climate change adaptation.

#### The need to engage the private sector

Participants generally agreed that governments should find ways to engage the private sector and civil society organisations in finding solutions to climate change challenges. Some called for policies and legislation encouraging renewable energy and controlling solid wastes.

Others pointed to private-sector projects to design floating islands that can accommodate large numbers of people and last 1,000 years. Public financial support for these projects will be necessary.

While the private sector can play a critical role in combating climate change and its adverse effects, government regulation remains vital to check environmentally unsound practices such as over-logging of rain forests.

### Are the voices of vulnerable nations being heard?

The international community is willing to listen to the voices from small island nations. One question is whether it is willing to take action to help them. Either way however, small, vulnerable nations should work together to develop a common strategy leading up to the UNFCCC Conference. They should focus their messages on politicians and citizens in developed and emerging economy countries. These groups need to fully understand how climate change is impacting the lives of people in the developing world. Citizens in developed countries should be educated and then encouraged to pressure their own politicians and governments to take appropriate responsibility and provide the developing world with adequate resources. There was also a call for vulnerable nations to have a media strategy leading up to Copenhagen involving public relations campaigns in Washington, DC, New Delhi, Beijing and Brussels.



Ahmed Naseem, Minister of State for Foreign Affairs of the Maldives

### Lead participants

**John Agyekum Kufuor**, President, Ghana (2001-2009)

**Loren Legarda**, Senator, Philippines; UN Regional Champion for Disaster Risk Reduction and Climate Change Adaptation for Asia Pacific

**Anoto Tong**, President, Kiribati

Moderated by **Nik Gowing**, BBC

## Plenary Discussion

# Leadership for Copenhagen

This plenary session addressed reasons why leadership on climate change is lacking and identified how to mobilise the leadership necessary for a successful outcome in Copenhagen and beyond.

## No deal is better than a bad deal

Although many people criticise the Kyoto Protocol because the signatories did not live up to their commitments, it was an earnest attempt to develop a framework to move forward. Kyoto is something that can be built upon. Nevertheless, a mediocre agreement could risk taking climate change off the international political agenda, which would be a disaster for all nations of the world. All nations must be on board if a global transformation able to avert the worst impacts of climate change is the objective. And only an agreement that is perceived to be fair would survive successful ratification and implementation in every single country. Such an agreement represents a phenomenal negotiating challenge that simply must be overcome.



HRH Princess Haya Bint Al Hussein,  
UN Messenger of Peace and  
José Ramos-Horta,  
President of Timor-Leste



“Decoupling carbon emissions from growth has never been done before. There are enormous vested interests waiting to come in between the cracks. We must ensure we do not come in with a mediocre agreement.”

José Maria Figueres Olsen,  
CEO of Concordia21

“When we talk about climate justice we are talking about looking at climate catastrophe through the injustice lens. Either we get this right together or we all sink together. Every little [action] counts.”

Kumi Naidoo,  
Chair of the Global Campaign  
for Climate Action (GCCA) and Co-Chair,  
Global Call to Action Against Poverty (GCAP)



For negotiators to make headway in these conditions, political leadership is critical to whether a high quality or mediocre deal is reached at the upcoming climate change negotiations. It is time for courageous political leaders to speak out about the tough decisions ahead, even if the messages are unpopular. Apologies such as “we did the best we could” – should be considered unacceptable.

There is no breathing space for politicians to settle for the mediocre. A carbon tax of 15% in Costa Rica in the early 1990s made then-president José Maria Figueres Olsen unpopular, but was a necessary measure. The world’s leaders should recognise that one of the biggest economic breakdowns and market failures on the planet so far has been the lack of a price on carbon. Visionary leadership implies the creation and implementation of policies that spur economic growth to alleviate poverty while decoupling that growth from carbon and greenhouse gas emission intensive practices.

International and regional political dynamics will also have to be navigated with foresight. An agreement in Copenhagen should recognise variations in culpability and the different starting points of countries with respect to industrial development, but still hold everyone accountable. Any successful outcome will require that virtually all countries work together effectively. So climate change also presents a valuable opportunity to break down North-South divides.

### Pressuring leaders and communicating urgency

Political will alone is not enough. Political leaders need to work together with civil society and the private sector to shape a high quality agreement. The wide range of private and public sector stakeholders already working on climate change issues, including civil society, foundations, religious groups, foundations and politicians could work together more effectively. Such multistakeholder coalitions have the power to wield great influence.

Nisha Pillai of BBC



The media is critical and should be communicating important messages about the unsustainability of current practices to the public. Leaders should also come under more scrutiny: “Who are the leaders, what are they saying and what are they doing?” In the lead up to the negotiations and afterwards, the media should support the widest cross-section of civil society and inform consistently about the significance of the Copenhagen negotiations. The issues and challenges must be deconstructed and explained in clear, accessible language.

History has taught that the great crises, injustices or urgencies can only be stopped when men and women have the strength to stand up and denounce the situation as unacceptable. That time is now for climate change. There is a convergence of crises – a perfect storm – that is opening up an opportunity to change the current mode of life on this planet. It is an opportunity to reinvent livelihoods and workplaces, and to change the very way society is structured. Change lies ahead for everyone. Each individual on the planet has the potential to be an agent of change. Current lifestyles and economic practices are largely unsustainable, but collective consumer choices and pressure have great influence for enacting change.

### Lead participants

**José María Figueres Olsen**, CEO, Concordia21; President, Costa Rica (1994-1998)

**Kumi Naidoo**, Chair, Global Campaign for Climate Action (GCCA);  
Co-Chair, Global Call to Action Against Poverty (GCAP)

Moderated by **Nisha Pillai**, BBC World News

## Youth Forum

The inaugural Youth Forum of the Global Humanitarian Forum took place from 17 – 19 June in Geneva, Switzerland. The Youth Forum entitled Young Adults 4 New Results united 100 young adults from around the world in order to develop new and innovative ideas on how youth can take action to deal with climate change and its human impact.

Participants engaged in a wide range of activities and discussion sessions throughout the three-day event. Every session was followed by small-scale brainstorming sessions generating hundreds of ideas, which were collected and stored with the assistance of an innovative technological tool. The young adults were then asked to develop their raw ideas further into concrete initiatives that could be implemented following the conclusion of the Youth Forum. The final five initiatives selected by participants included an algae based biofuel initiative, a climate change awareness radio project, a climate change school education drive, a green energy plan initiative and a collaborative global youth platform.



Youth Climate Agents presenting the outcomes of the first Global Humanitarian Forum Youth Forum

“At the Youth Forum, I saw new initiatives, new ideas, which all were practical, realistic and profitable for both financial, social and ecological success. In only 3 days! You [the older generation] had more time than we had, you have more expertise than we do!”

**Sundus Aladoofi (22, Yemen)**



“Nowadays we have a lot of means to communicate; everybody in this room has access to facebook and twitter. But that is the way literate people communicate. What about poor and illiterate people living in remote zones? They do not have access to internet, but they all have a radio. In many parts of the world it is better to choose a very easy and simple way to communicate with the local population.

I’m from Benin, and I don’t understand English that well. Sometimes, when people clap, I clap also, although I did not understand why we are clapping. For this reason, it is very important to bring to the people in West Africa information about climate change in their local languages!

If we manage to bring to people living in remote areas information about climate change in their local language, then they will understand that climate change is not happening because gods or ancestors are angry with them, but they will understand what the real problem is and how they can cope with it.”

**Folachade Bello (23, Benin)**



“From guiding ideas follow our actions. It is incredibly important for us to recognize that some of our past guiding ideas, and therefore also our actions, have been flawed. But as we recognize the relationship between our guiding ideas and our actions, an opportunity for change emerges. As opposed to be driven by ego and greed, we want to be driven by clarity, compassion and choice. As opposed to disconnect ourselves from nature, we want to live in harmony with nature. Some of us would say that what we need to do now is a step backwards. We, the young generation, refuse to see it as a step backwards, but we would like to see it as a forward role.”

**Emanuel Gävert (26, Sweden)**

“Over the years, we have had a fixed mental attitude of predetermined situations. This form of inclination needs to shift and we need to focus on the grassroots of climate change, and not on the symptoms. We have been too comfortable in our cocoons, tacked away in a world where escalating emissions are rising day by day. If we want to solve the climate change crisis, the older generation, the younger generation, myself and all of us need to come together and fight climate change tooth and nail! Shame on us for being so comfortable, shame on us for being instigators of climate change. The time to act is now, the time to change is now! The kindergarten blame-game needs to stop! It has led the ecosystem to a major disaster.”

**Peter Gichuki (28, Kenya)**

“Usually people say that young adults are naïve. But who is naïve? The ones that believe that things can be achieved in different ways and that we can change our attitudes or those who continue to make excuses for why we can't change? I could tell you today how angry my generation is at the older generation's inaction. But we are not here for that. We want to invite you to join us. We want to invite you to move forward with us, to move forward with us instead of looking backwards!”

**Javier Quero Guerra (25, Chile)**



“We want to talk to you today about what we want. We want to talk to you today about the legacy we are leaving behind to future generations. And we want to talk to you about the clear alternatives we believe there are to just digging up the earth and converting it into pollution. Or, we can all sit comfortably in our seats and watch the clock tick by, just like pretty much everybody has been doing since the 1950's when this climate change issue was first spoken about.

For the older generations who are happy to hand over their legacy of pollution, destruction, inaction and inequity to us and to tomorrow's child, I would say –‘if you are not willing to lead, then get out of the way’ – because I believe we are.

We can't do it alone and we can't do it separately from each other, weather we are talking across generations, across nations, across religions or across species. We have to be imaginative to think about what is actually humanly possible, rather than to make these excuses time and time again as to why these patterns of dominance and destruction are so hard to break from. We want you to come on a journey with us, because we need you, we need your experience. And we think you need a little bit of us too. I think you need our energy, you need our enthusiasm and you need our imagination.”

**Margot Hill (27, Switzerland)**



“20% for 2020, 30% for 2050? No, this is not the ground reality. This is not the reality for a simple young person like me. Even companies use it as a marketing scheme: 2% for renewable energy, 8% for solar energy. We don't want a soup of percentages! Stop looking at the 8% and start looking at the 92% and how we can turn that into something positive! If you are still so keen on giving us numbers, then please, give us a 100%.”

**Shruthi Shivabasavaiah (24, India)**



“All development should now include disaster risk reduction. Adaptation to climate change is part of this; it is not an add-on. People are accepting this notion in principle, but they are not doing it. It is going to take quite a revolution to make it happen.”

John Holmes, UN Under-Secretary-General for Humanitarian Affairs



## Climate change and displacement of people

Focus Session

### Managing displacement and humanitarian needs in a changing climate: the experience of cyclones Sidr and Nargis

This session compared the preparations for and human toll of two recent natural hazards – cyclones Sidr (November 2007, Bangladesh) and Nargis (May 2008, Myanmar). Such extreme weather events are predicted to become commonplace. Participants discussed what measures can be taken to minimise the impact of tropical storms.

#### The same intensity, but different outcomes

The symptoms of climate change include an increase in incidents of extreme weather such as the Sidr and Nargis cyclones. Both cyclones ravaged the landscape, leaving death and destruction in the wake of huge tidal surges of 10 to 20 feet (3 to 6 metres). However, cyclone Sidr killed fewer than 10,000 people, while the death toll in Myanmar was upwards of 100,000. There is a distinction between “hazards,” or natural phenomena, and “disasters,” which factor in the human response to these occurrences. It is the human response that determines whether a natural hazard becomes a human disaster.

Just weeks before the Annual Forum 2009, cyclone Ailia hit Bangladesh. It was not a strong storm, but its heavy rains and storm surges were enough to swamp the mouths of the Ganges River in Bangladesh and India. Cyclone Ailia killed 160 people.



“There is a lot of good will, but we are still tinkering and not tackling the issues in a concrete way by minimising the impacts of climate change.”

Mary Chinery-Hesse,  
Chief Advisor to  
the former President of Ghana

As many participants pointed out, catastrophic storms and extreme weather events are on the rise. The difference between Sidr and Nargis is that as one of the world’s most disaster prone countries, Bangladesh, has a well-developed, community-based disaster preparedness programme. With a population of more than 157 million and about 80% of the population living in rural areas, Bangladesh is also one of the most densely populated countries in the world.

A key to disaster preparedness is an early warning system that reaches even the most remote villages. Before cyclone Sidr hit, more than 5,000 community volunteers worked through the night to alert and evacuate the vulnerable. This effort saved the lives of thousands.

In Myanmar, the government was unprepared for Nargis; a cyclone had never hit that part of the Bay of Bengal. Nargis hit the unprepared delta and its people so violently that ongoing recovery efforts are estimated to take three years and cost US\$ 691 million. Valuable time was lost as Myanmar’s military government shied away from outside assistance.

ASEAN played a successful role of mediator, after which international humanitarian relief organisations were allowed into the country. The combined effort helped save 2.4 million lives in the wake of the disaster. The challenge now is to improve the situation of the millions affected, many of whom have yet to return to their original home areas. Failing this, South East Asia could be “flooded” by a new wave of migration.

### The case of Bangladesh

In Bangladesh, the government is doing the best it can to find long-term, durable solutions to the country’s vulnerability to natural hazards. Risk assessment, early warning systems, disaster management, post-disaster recovery and reconstruction are “everyday priorities.”

The country’s disaster management programme engages communities through committees that are trained in preparing for disasters, including mapping out the hazards, analysing the risks and planning for cyclones.

Awareness campaigns are part of the school curriculum, delivered through mechanisms such as dramatic performances and peer education.

The participation of civil society is critical in reducing the country’s vulnerability. Since environmental hazards continue to worsen, the people of Bangladesh remain highly vulnerable. But the result of decades of coping with cyclones and other impacts have made local communities among the most resilient on earth. This knowledge must be taken into account in the development of local policies for adapting to climate change, and if possible, shared with communities elsewhere that are dealing with similar challenges.

### Focus on emergency preparedness and risk reduction

In the face of climate change and escalating natural hazards, efforts and resources must shift from relief and rehabilitation to upstream efforts of risk reduction and disaster preparedness. National and local capacities need to be strengthened. The international response to disasters should not change, but such a “fire brigade” should only be called in to deal with exceptional circumstances.

In Ghana, 2007 started with extreme drought in the north of the country, home to the poorest, most vulnerable people. Their already fragile livelihoods were threatened as their farms become scorched. The drought had a crippling effect on the country’s water and power supplies. In the middle of 2007, that same region experienced unprecedented flooding. The government declared an emergency.

At the same time, the government decided to use the emergency as an opportunity to educate the population about climate change, an issue previously not high on the political agenda. In the face of challenges such as food, housing and education, climate change had been an abstract concept. This changed instantly as people faced threats to their health and livelihoods. Many of the poor lost their savings – if they had any – and farmers lost their assets by selling livestock to survive.

Ghana’s social safety net proved to be strong as communities sheltered those who had lost their homes. However, migration from the north had a negative impact, in particular on young girls, who are more at risk and vulnerable in the slums of the nation’s cities.

Ghana learned a hard lesson – the country was not prepared for natural disasters and its people suffered as a result.



“As a country on the frontline of natural disasters, we have learned lessons that could be helpful to others. But this may not be enough in the long term. Millions of environmental refugees will result. This is a daunting challenge that cannot be met without support and engagement from the international community.”

Hasan Mahmud,  
State Minister, Ministry of Foreign Affairs, Bangladesh

“This is an issue of human and political security.”

Surin Pitsuwan,  
Secretary-General of ASEAN

### The environmentally displaced

The challenges of population displacement as a result of climate change are beginning to emerge. People are on the move in Bangladesh, but within national borders. Huge challenges will arise worldwide when people will be forced to cross national boundaries. The International Organization on Migration has estimated that by 2050 there will be 250 million people who could be described as climate change migrants.

As the impact of climate change begins to increase, many regions of the world, such as Southeast Asia, will face more cyclones, tropical storms, floods and droughts. As human insecurity increases, so will migration. So-called environmental or climate change migration or displacement will likely become commonplace.

Migration and planned relocation are an integral part of adaptation to climate change. One solution could be to set up a framework within the UN to assist countries with at-risk populations. A group of Climatically Vulnerable Nations would receive priority funding.

### Interlinked policies

Many methods of disaster preparedness are also climate change adaptation or mitigation measures: reforestation, better water resources

management, and the planting of drought resistance crops. A more important question to explore is the relationship between climate change, sustainable development and the human impacts.

The international community is facing the challenges of humanitarianism caused by the degradation of our environment. Mainstreaming climate change into all development efforts would be a huge step forward in improving the resilience of poor and vulnerable populations.

### Lead participants

Mary Chinery-Hesse, Chief Advisor to the former President of Ghana John Agyekum Kufuor

John Holmes, UN Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator

Hasan Mahmud, State Minister, Ministry of Foreign Affairs, Bangladesh

Surin Pitsuwan, Secretary General, ASEAN

Moderated by Nisha Pillai, BBC World News

### Partner

UN Office for the Coordination of Humanitarian Affairs (OCHA)



188 km

The densely populated regions of South and South East Asia are being buffeted by increasingly frequent and severe tropical cyclones. The level of devastation caused by these massive storm systems varies significantly: the 2008 category four cyclone Nargis claimed over 100,000 lives in Myanmar, while the 2007 category five cyclone Sidr caused around 5,000 deaths in Bangladesh. However, large populations are often displaced from coastal regions. Many have difficulty returning to these communities since ocean wash from storms and slow-onset soil salination mean soils are less productive and access to freshwater more difficult. People in surviving communities find themselves travelling ever greater distances to collect fresh water.



“This is not a problem of the future. This is a problem upon us now and will it grow in intensity over the next few years.”

Craig Johnstone of UNHCR



Focus Session

## Climate change: migration and displacement

This session explored the relationship between climate change and the migration or displacement of people.

### The relationship between climate change, migration and displacement

Climate change causes migration and displacement of people in many ways. Increased numbers and severity of weather-related disasters destroy homes, crops and habitats, forcing people to seek shelter or livelihoods elsewhere. Longer-term effects, such as drought, desertification, soil salinization and rising sea levels doom livelihoods and force entire communities to abandon traditional homelands for more viable and sustaining environments. Environmental degradation caused by climate change can lead to conflicts over resources that displace people.

The Global Humanitarian Forum defines Climate Displaced People (CDPs) as those people forced to move, either permanently or temporarily, because of climate change, through its impacts and shocks. The Forum recently estimated that there are currently about 26 million CDPs and that this number could triple in the next 20 years. The estimate could, however, be very conservative, with perhaps as many as 30 million CDPs in Bangladesh alone.

### Legal frameworks and rights issues

The UNFCCC and the Kyoto Protocol include no provisions concerning assistance or protection for people affected by climate change. Many CDPs, who leave traditional homelands but do not cross international borders, fall within the UN's non-legally binding definition of Internally Displaced Persons (IDPs). IDPs, in theory, should enjoy all the rights and protections afforded to all citizens of their native countries. However, because IDPs are frequently very poor and marginalized, implementation of these rights and protections is often problematic. Governments should be persuaded to protect the rights of IDPs.

There are still open issues regarding the rights of IDPs whose displacement is linked to climate issues, such as a right to return to their homes, a right to repossess property, and whether or not governments can force them to live in camps.

CDPs do not fall within the definition of refugees under UN conventions because they lack the necessary well-founded fear of persecution. International migrants are those who leave their country to settle in another country, voluntarily or involuntarily, temporarily or permanently. Voluntary migrants normally leave in search of a higher standard of living and quality of life elsewhere. They are typically referred to as economic migrants. At present, if these people enter another country without permission they are subject to imprisonment and deportation. At best, they are often subject to discrimination, and sometimes violence.

CDPs crossing international borders are not refugees. They have not lost the intended protection of their governments. Their governments are willing to protect them, but sometimes lack the ability to do so, at least temporarily, as in the case of sudden disasters. International law should provide protection for these people. Cross-border cooperation is needed so that CDPs can receive temporary admission and protection in another country until it is safe for them to return home.

The case of people living in disappearing territories, such as the islands of Kiribati, Tuvalu and the Maldives, is also problematic. Do these people become “stateless” when their countries become submerged due to rising sea levels?

### Institutional responses

It is too late to solve or prevent all of the consequences of climate change. While prevention is critical, adaptation strategies are also needed. But, the world will not have the financial capability to adapt to every climate change contingency and circumstance. There will continue to be disasters. Thus, disaster response and relief needs attention in its own right.

“ It is now accepted that, in responding to displacement and migration, there must be cooperation among governments. This is part of climate change adaptation strategy. This is the way to protect the civil, political, economic and social rights of climate change displaced persons. ”

Walter Kälin, Special Representative of the UN Secretary-General on the Human Rights of Internally Displaced People



“Migration is driven by environmental conditions, including climate change, desertification and others. Migration, if properly managed, can be an adaptation strategy.”

Ndiro Ndiaye,

Deputy Director General of the International Organization for Migration

While the UNHCR is a refugee organization, it is vitally concerned with climate change impacts. One reason is that its mandate includes preventing people from becoming stateless and protecting those that do. When these islands disappear, are there other categories, devices and instruments that will cover their citizens? If their physical territory becomes submerged, do the citizens retain their fishing rights? What are the migratory possibilities for these people? Is it possible to create a “virtual state” so that these people will have a country to which they can continue to identify, and provide passports so that the people can continue to travel internationally?

UNHCR is studying how to locate disaster relief stocks to permit faster responses, and whether it needs greater response capability due to the impact of climate change on the number of environmental disasters.

Even though its mandate does not include climate change related disasters, the UNHCR has been called upon to respond in the cases of the 2005 Tsunami and the 2008 Myanmar cyclone.

For groups dealing with migration, such as the International Organization for Migration, climate change raises many issues. Migration may be an important adaptation strategy. However, migration itself can have adverse environmental consequences. For example, when migrants live in camps, the surrounding area often suffers severe environmental degradation.

There is a marked difference in international attitudes toward people forced to migrate due to sudden disasters and those who migrate due to gradual environmental degradation. Attitudes towards migrants due to gradual environmental degradation are much less sympathetic. Advocacy groups now should focus their attention on influencing national governments regarding both. Funding mechanisms for both climate change adaptation and disaster response are required if additional migration and displacement are to be managed.

### Lead participants

Craig Johnstone, Deputy UN High Commissioner for Refugees (UNHCR)

Walter Kälin, Special Representative of the UN Secretary-General on the Human Rights of Internally Displaced Persons

Ndiro Ndiaye, Deputy Director General, IOM

Moderated by Nisha Pillai, BBC World News

### Partner

UNHCR

An aerial photograph showing a wide, muddy river on the left side of the frame. The river flows through a valley with green vegetation on the right bank. A scale bar in the top left corner indicates a distance of 10 km. The riverbed is visible in the foreground, showing a rocky and sandy composition.

10 km



Desertification in this region of Western China is consuming up to four meters of remaining arable land each year as sand dunes are advancing northwards. Desertification is aggravated by intensive land-use for agricultural purposes. The government has initiated a scheme of tree-planting in an attempt to halt the advance of the desert, but the ever dryer conditions of the region due to climate change – with some rivers at just 20% of their size compared with 30 years ago – such projects have been largely unsuccessful. Communities either bear the harsher living conditions or migrate.

## Parallel Workshop

# International law and Climate Displaced People

This workshop explored gaps in International Law regarding Climate Displaced People (CDPs), as well as various potential ways of addressing those gaps through legal and policy initiatives.

### No single denomination

There are currently about 26 million CDPs worldwide and that this number could triple in the next 20 years. While the attempt to give international legal definitions to environmental migrants is new, the phenomenon of environmentally driven migration is very old.

A commonly agreed-on definition of CDPs does not yet exist and the status of this vulnerable group under International Law is unclear.

The UNHCR is particularly concerned with cross border displacements due to disasters and with persons living on sinking-islands states; these situations involve issues of refugees and stateless persons that are recognized under existing international law and of concern to the UN Refugee Agency. These legal categories are imperfect when applied to CDPs. Although the term “refugee” can be a powerful advocacy tool, potential are problems linked to this terminology.

### A legal viewpoint

It was generally recognized that while CDPs may have some legal protection, there remains a serious question about how adequate that protection actually is.

“Climate displaced people should not be sent back to their native countries if they would be exposed to life threatening situations.”

Walter Kälin, Special Representative of the UN Secretary-General on the Human Rights of Internally Displaced Persons

An overview of the legal status of CDPs under several different scenarios was given. In some situations, the legal obligation of states to protect CDPs is relatively clear. However, in others – disappearing territories (sinking islands),

cross border migrations, and governmentally forced, environmentally driven relocations – the legal rights of CDPs are unclear and existing gaps must be filled. Although not binding, the Guiding Principles on Internal Displacement cover the issue of people displaced internally because of disasters. However, operational and administrative gaps remain in providing assistance and protection to these populations.

As for cross-border CDPs, despite their unclear status, they should not be sent back to their native countries if they are exposed to life threatening situations.

Attempting to apply the Refugee Convention concept of ‘refugee’ in the environmental context can be problematic, especially because of the centrality of the notion of persecution. Persecution is not necessarily compatible with climate change. Who would be the persecutor? The country of origin or the countries responsible for the pollution? Applying the notion that CDPs are victims of persecution could lead to reparation litigation and perhaps even criminal prosecution. Such possibilities may render the use of the refugee model politically infeasible. Therefore, it was argued that it would be better to use concepts of migration law rather than refugee law because the latter, with its emphasis on persecution, is politically more sensitive.



> Andrew Clapham  
of the Graduate Institute  
of International and  
Development Studies,  
Geneva

>> Jean Ziegler  
of the Human Rights  
Council Advisory  
Committee

Hence, refugee law can capture only one part of the picture and migration law is still not enough developed. Climate Change can be an opportunity to expand the latter field as the phenomenon calls for a broader and more comprehensive migration framework.

A human rights-based approach to protecting CDPs was a further possibility. Since the end of World War II, legal developments have been based primarily on violations of political and civil rights. Therefore, a call was made for new instruments on protecting people fleeing due to the violation of their social and economic rights, especially in the context of climate displaced people issues. An appropriate legal analogy might be found in the UN's recognition of a right to food and a corresponding right to migrate to escape hunger. In this context the 'state of necessity' principle was invoked according to which a person may not be held liable for an unlawful act if his/her conduct was necessary to avoid a threat or a danger and if that conduct was proportionate to the seriousness of that threat. Such a principle could be the basis for a new norm of 'provisional non-refoulement' for 'hunger refugees' which may also be applied to people fleeing events linked to climate change.

"We should not assume that the bonds between the state and its citizens will be severed. But there may come a point where the state's capacity to protect its citizens becomes so eroded that the international community must take over."

Jean-François Durieux, Focal Point for Climate Change of the UNHCR

#### A humanitarian viewpoint

From a humanitarian perspective it is irrelevant whether people are displaced by natural or man-made disaster. On a more practical note, there are many difficulties involved in estimating the number of people displaced by disasters, as no systematic local monitoring of movements of population exists yet.

The Norwegian Refugee Council's tries to estimate and monitor numbers of displaced people. New methodologies have been developed, but studies must be repeated over several years to understand the scope and duration of environmental displacement. In order to better assess the scale of the phenomenon, there is an important need for long-term field based monitoring.

It was agreed that it is often difficult to distinguish between forced and voluntarily migrations. The relevant issue should be whether the person can obtain national protection or whether he/she needs international protection. The international community should not assume that the bonds between the state and its citizens will be severed. But there may come a point where the state's capacity to protect its citizens becomes so eroded that the international community must take over.

The way forward is to ensure that the link between the state and its citizens is not severed and that is where temporary protection is important. A more generalized application of this principle would be useful in cases where climate change related disasters require measures of temporary refuge until displaced people can return home.

The Copenhagen negotiating process should represent an opportunity to move forward on these issues as it proposes to recognize displacement as an adaptation strategy.

### Lead participants

**Vincent Chetail**, Research Director, Adh; Research Director, International Migration and Refugee Law, Programme for the Study of Global Migration, Graduate Institute, Geneva

**Jean-François Durieux**, Focal Point for Climate Change, UNHCR

**Kate Half**, Head, Internal Displacement Monitoring Center, Norwegian Refugee Council

**Walter Kälin**, Special Representative of the UN Secretary-General on the Human Rights of Internally Displaced Persons

**Jean Ziegler**, Member, Human Rights Council Advisory Committee; UN Special Rapporteur on the right to food (2000-2008)

Chaired by **Andrew Clapham**, Director, Geneva Academy of International Humanitarian Law and Human Rights (Adh)

### Partners

Geneva Academy of International Humanitarian Law and Human Rights and the Graduate Institute Geneva (HEID)

“The humanitarian system must be fully aligned with climate change adaptation.”

Bekele Geleta of the International Federation of Red Cross and Red Crescent Societies



## Adapting to climate impacts

Focus Session

### Climate change: a new role for humanitarian actors?

In light of increasing climate change related disasters and impacts, the session explored to what extent humanitarian actors need to revamp their policies and procedures or expand existing ones. It also looked forward to the UN Framework Convention on Climate Change conference in Copenhagen in December 2009, and discussed what strategies humanitarian organizations should follow and what outcomes they would like to secure.

#### Overwhelming new challenges due to climate change

Recorded disasters have more than doubled in the last two decades. In 2008, 200 million people were directly affected by disasters. The poor are disproportionately impacted. Currently, 10 million children die before reaching the age of five, most due to malaria, diarrhea, pneumonia and malnutrition, all of which will become more widespread due to climate change. New responses are required.

#### The evolving humanitarian system

Natural disaster response organizations have often been considered a stepchild in the United Nations system, with its original mandate to resolve issues of conflict and security. Steps are now being taken to reinvigorate these organizations, particularly in the wake of massive disasters such as the 2005 tsunami and the 2008 Myanmar cyclone, Cyclone Nargis.

Because the military has greater response capabilities than humanitarian organizations, they are playing an increasing role in disaster response. There is a need for greater coordination between the military and humanitarian actors in responding to disasters.

A recurring theme of this session was the need for humanitarian organizations to revamp funding and operational procedures to move away from the silo approach of the last 30 years. This approach drew a sharp divide between funding for development and funding for humanitarian disaster relief. In the era of climate change, drawing these distinctions is no longer useful. Development, emergency and disaster relief are merging and the lines between them are becoming blurred. Overall, this leads to inefficiencies and hampers the speed and effectiveness of disaster response, preparedness and recovery.

### Focus on poverty reduction

The first priority for humanitarian actors should be to save lives. In recent years there has been progress in saving lives through early warning systems, disaster preparedness and new strategies for improving the speed of emergency responses. However, after disasters, surviving victims tend to remain poor and continue to lack resilience. When another disaster takes place, they are severely impacted again. Humanitarian organizations should address the factors that make people vulnerable to climate change impacts, particularly poverty. The humanitarian community should, in particular, scale up its work on poverty reduction, capacity building and pre-disaster and post-disaster support. Climate change will lead to more droughts, floods, storms and resource-based conflicts.

These factors have profound implications for the delivery of humanitarian assistance. Existing programmes should be revamped and expanded to take climate change into account. Disaster preparedness, relief and mitigation programmes will require massive expansion to cope.

### Humanitarian organizations should also address the roots of the climate crisis

Because of the impact of climate change on the poor, humanitarian organizations should actively address not only the effects, but also the causes of climate change. In doing so, they – particularly religiously and ethically based humanitarian organisations such as Caritas Internationalis and Islamic Relief Worldwide – can play a critical role. Humanitarian organizations should help influence politicians and citizens in developed countries to accept these unpalatable truths by focusing on the ethical, moral and religious dimensions of the climate change crisis. Changes in human behaviour can only be achieved through the acceptance of a duty to care for fellow human beings and future generations. Humanitarian organizations should therefore become heavily involved in advocacy and campaigning. Sustainability should be emphasized in their work, which would also help reinforcing credibility. Environmental conservation, socioeconomic development and emergency relief are interlinked and this connection should be reflected in the activities of humanitarian organisations.

“We need a new paradigm for funding humanitarian actors.”

Catherine Bertini,  
Professor of Public Administration  
of the Syracuse University



### Focus on children

In formulating new policies and strategies, humanitarian organizations should pay particular attention to the impacts of climate change on children, who are asymmetrically affected. Climate impacts effect mortality rates, food insecurity and malnutrition and disrupt education. Conflict-related impacts also run to sexual exploitation, trafficking, and recruitment of child soldiers.

Children can also be tools for change. UNICEF is working to ensure environmental education is included the curriculums in developing countries. Children can also help train their parents how to prepare for disasters.

### Increase capacity at national and local levels

The humanitarian community needs a new business model that focuses on national and local governments in developing countries. If local people have better knowledge, understanding and skills, they can undertake greater measures to protect themselves against disasters and climate change impacts. Each country should have the capacity to collect, analyse and use data on mortality and demographic trends, as well as evolving environmental conditions. In developing countries, national and local governments clearly need increased capacity to prepare for and deal with the growing number of disasters.

“Scientific and economic arguments, while important, are not enough. If we are to change the world, we must change human behaviour. Fundamental behavioural change must be based on a deep conviction that there is a moral duty to care for fellow human beings.”

Lesley-Anne Knight, CEO of Caritas Internationalis

“There is no clear distinction between humanitarian aid and development. The line is completely blurred today.”

Ann Veneman,  
Executive Director of UNICEF



“The Islamic environmental world view is holistic and based on the five aims of Sharia – protection of religion, life, mind, offspring and property. All are threatened by climate change.”

Saleh Saeed,  
CEO of Islamic Relief Worldwide

#### Looking toward Copenhagen

African nations are attempting to organise themselves to speak with one voice, through the African Union, at the Copenhagen conference. One issue is whether the humanitarian community also will speak with one voice.

African governments will be pushing for sufficient funding for climate change mitigation and adaptation. If it is clear that developed countries will not provide sufficient adaptation funding, Africa should consider simply not going to Copenhagen.

One key issue that will arise with respect to adaptation funding is who should manage it: multinational organizations, humanitarian organizations or the governments of the developing countries. Given past issues of transparency, waste and corruption, this will be a controversial issue. There has been progress towards transparency, democracy and fighting corruption, but in many countries there is still a long way to go.

Developing country governments need to lead in policy, oversight and ensuring that any assistance finance is properly used. Humanitarian organizations should work to enable governments and their people to shape their own lives.

#### Lead participants

Catherine Bertini, Professor of Public Administration, Maxwell School of Citizenship and Public Affairs, Syracuse University; Senior Fellow, Agricultural Development, Bill and Melinda Gates Foundation (2007-2009)  
Bekele Geleta, Secretary General, International Federation of Red Cross and Red Crescent Societies (IFRC)  
Lesley-Anne Knight, CEO, Caritas Internationalis  
Saleh Saeed, CEO, Islamic Relief Worldwide  
Ann Veneman, Executive Director, UNICEF

#### Partner

UNICEF

Ahmed Naseem,  
Minister of State  
for Foreign Affairs of the Maldives,  
David Suzuki, Scientist,  
Environmentalist and Broadcaster,  
Eckhard Deutscher of the OECD  
and Dean Hirsh of World Vision International



“The rich world is ignoring the warnings of scientists, while industrial policies are choking mankind. The future must [start] now. We all stand to benefit if we move to a post-carbon world.”

Ahmed Naseem, Minister of State for Foreign Affairs of the Maldives

“Our fundamental needs are based on the elements of earth, air, fire and water. We are destroying our habitat without realizing that we are tearing at the very fabric of life – the biosphere – that keeps us alive”

David Suzuki, scientist, environmentalist and broadcaster

“We have bad global governance. Governments have knowledge of the problems, but they are acting very slowly. What are the instruments of the rich countries, the Bretton Woods institutions, doing?”

Eckhard Deutscher, Chair of the OECD Development Assistance Committee

Focus Session

## Climate change: the antithesis of sustainable development?

The session explored whether climate change will increasingly have a negative impact on economic growth and lead to exponentially higher adaptation costs. It also explored whether the rapidly deteriorating global environment will exacerbate poverty and social inequities.

### The failure of sustainable development

Climate change can be viewed as the developed world's historic failure to meet the challenges of sustainable development. It takes approximately 1.3 years to replace what humans consume and destroy from the environment in one year. Clearly, this trend is unsustainable.

Against this backdrop, it is worth asking the question: “Are economic growth in itself and large-scale industrialization necessarily good things?” The world's obsession with economic growth could be considered the root of all the negative impacts of climate change on the global environment and social equity. To many, industrialization is systematically robbing the world of its natural capital. In this context, another important issue is the very definition of sustainable development. It is impossible to consider sustainable development without discussing issues such as justice as well as ethical and financial responsibility. It is equally important to consider the redistribution of economic rights because no one wants to give up the lifestyles they already have or are aspiring to have.

### Vulnerable, small island states – a harbinger of what is to come?

The Maldives is a small island state threatened with extinction by climate change. Already, houses are falling into the sea, fish stocks are dwindling, coral reefs are bleached and dying, agricultural land is contaminated by seawater, and there is no fresh drinking water on many of the archipelago's fragile islands. For many in developing countries – particularly vulnerable, small island states – economic growth in one part of the world comes at the expense of environmental degradation in another, a deeply unethical trade-off.

Political leaders from many small island states, particularly the Maldives and Tuvalu, have been sounding the alarm for more than 20 years. However, climate change has only recently made it onto the political agenda of developed nations as countries around the world are experiencing more cyclones, floods, hurricanes, landslides, droughts, heat waves, cold snaps and ocean and coastal surges.

### Integrating climate change into development

Humans fundamentally rely on the natural world, and the survival of the species depends on a clean environment. Climate change is pulling apart ecosystems, some of which will take thousands of years to recover. As a result, no one nation can tackle climate change. It is a global issue that requires immediate global action. Solutions exist; implementing them is a matter of political will. In fact, the money to address climate change is already in the international financial system. What is lacking are the instruments to put funds to work. Now is the time to consider social and economic development through the lens of climate change. All development initiatives should address adaptation and mitigation measures.

No one can escape the effects of climate change. It is a threat multiplier and therefore a political security issue with serious geopolitical implications. Water resource depletion increases propensity towards transboundary disputes. In East Africa about 25 rivers cross the boundaries of 17 countries, with 10 African nations sharing the Nile River.

“The way we handle forestry issues – the lungs of the earth – is more destructive than all of the vehicles in the world.”

Dean Hirsch,  
President and CEO of World Vision International



Developed countries should not forget Africa in the climate change debate. Africa has the potential to revive its agricultural development in a sustainable manner that could set an example for the rest of the world. Assistance already being directed to Africa could be used for more efficient and effective natural resource management.

### Climate knowledge

For politicians and policymakers to be forced to turn lip service into concrete action, there must be increased climate change literacy among citizens of both developed and developing countries. Climate change could and should be on the curriculum of every school, starting at elementary level.

A coherent, holistic approach to climate change mitigation and adaptation is needed, which brings together today's fragmented – and therefore ineffectual – multilateral institutions. It is important not to divide the world into North and South, East and West. To act as one planet, a radical political paradigm shift is needed.

In addition, more resources must be shored up for increased research and development related to sustainable development – for example, in sustainable energy and water resource management. Such investment holds great potential for the environment as well as for the sustainable development of poor nations. It is also important to capture the dying wisdom of peoples who are accustomed to managing crops and conserving water during droughts or who live in desert climates.

### An opportunity to rethink governance

The confluence of the financial, food, poverty, energy and climate change crises presents an invaluable opportunity to rethink different types of governance, including the roles of international and multilateral institutions. In a post-carbon world, growth will be driven by a policy framework that is based on sustainable development. Green technologies driven by the private sector will at once spur economic growth and preserve the environment.

The Maldives provides one example for the adjusting governance architecture so as to help tackle climate change. The country has established a climate change advisory council responsible for realigning all local and national policies in an attempt to revive the country's traditional empathy with sustainability.

### Lead participants

Eckhard Deutscher, Chair, Development Assistance Committee, OECD  
 Dean Hirsch, President and CEO, World Vision International  
 Ahmed Naseem, Minister of State for Foreign Affairs, Maldives  
 M.S. Swaminathan, Chairman, M.S. Swaminathan Research Foundation

Moderated by David Suzuki, scientist, environmentalist and broadcaster

“Despite well-meaning promises [in 2002], the world is off track to meet the Millennium Development Goals. We are not even achieving modest gains. In 2002, 800 million people were going to bed hungry. Today, that number is closer to 1 billion.”

M.S. Swaminathan, Chairman of the M.S. Swaminathan Research Foundation

“Women must fully participate both in developing national adaptation plans and in the Copenhagen negotiations. So far they are being ignored and this cannot be right.”

Barbara Stocking,  
Chief Executive of Oxfam GB



Focus Session

## Climate change and the impacts on poor women

Because women in poor communities are chiefly responsible for family nutrition, supplying fuel and water and raising children, the impact of climate change is amplified through them. But women are also adapting to climate change – they have no choice. At the same time, they are generally excluded from the climate change debate.

### First affected, least represented

It is important to look at the effect of climate change on women and men in light of the different roles they play in their communities. For example, in sub-Saharan Africa, around 70% of the farmers are women. Climate change exacerbated desertification, therefore, primarily affects women.

Despite talk since 1995 about mainstreaming gender issues, very little has been accomplished. Women are being left out of the climate change debate. To effect real change, it is necessary to educate young girls and invest in women as a first step to engaging them in becoming decision makers and decision takers.

National Adaptation Plans of Action for developing countries should be gender sensitive, and negotiating teams preparing for the December 2009 UNFCCC conference in Copenhagen should be gender balanced. Cabinet-level discussions at country level should ensure that gender is put on the table.

All of the powerful ministries in developing country governments, in particular, should recognise that women are at the core of the economies, particularly due to their over-representation in the agricultural labour force.

### Victims or agents of change?

Of the 1.4 billion people living on less than \$1 a day, 70% are women and girls. This means that women represent 70% of the solution. Therefore, they have the potential to be huge agents of change rather than being represented only as victims.

Women are already adapting to climate change – and driving change. There are countless examples of innovation as women engage to protect their families and the environment, whether it is running a local disaster risk committee or encouraging women to take measures to protect their families.

### Involving women in climate policy

In terms of negotiations leading up to Copenhagen, some women are involved at the country level and are bringing the gender perspective to the table. Several international organisations – such as the World Health Organization and the World Food Programme – are using the run-up to Copenhagen as an opportunity for a renewed focus on gender issues. However, women are generally being left out of the adaptation discussions, even though they often have the best expertise on what works for the protection of vulnerable communities. That said, local adaptation measures are often undertaken by women as survival tactics, particularly in the area of food security. Many of these women do not understand climate change. They are simply doing what they know best – surviving. Women must be educated about climate change so that they can participate in National Adaptation Plans.

The Global Gender Climate Action Group is reviewing texts being prepared at national level leading up to the 2009 Copenhagen climate summit and is training delegates, but there remains much work yet to be done. Oxfam has climate trackers who are following national delegates and gender issues, and are blogging on the results.



“How do we move from rhetoric to action?”

HRH Princess Haya Bint Al Hussein, UN Messenger of Peace

More funding should be made available for women's education and advocacy to improve involvement. Often, women cannot access existing funds for women's programmes because they need collateral. These types of conditionalities should be removed.

African leaders state they are going to Copenhagen with an agenda to secure the creation of an adaptation fund for Africa. If this materialises, it would be productive if at least 50% of such a fund could be set aside for gender issues to support women to adapt to local climate change issues.

### Recommendations

Participants in this session proposed wide-ranging solutions to addressing the impacts of climate change on women.

- > Women should take the lead. They should lobby ministries and negotiators. In Africa, the African Women Leaders in Agriculture and Environment Network is a contact point to become involved. Worldwide, the Global Gender and Climate Alliance is working to train negotiators.
- > An adaptation fund for Africa should be managed by the African Union with a percentage of the fund set aside for women's initiatives. More importantly, conditionality should be removed and women should be able to access funds.
- > Population stabilisation initiatives would empower women to control their own fertility, ease pressure on dwindling natural resources, create fewer climate change victims, and reduce the number of carbon emitters in developed and developing countries.
- > Lobby for quotas. For example, India boasts the largest number of elected women in the world. In addition, 50% of village council representatives should be women. Quotas have proved to function.

“Women are agents of change, but they are also the victims of political decisions. If the effects of climate change on women are not addressed positively, a whole generation will be undermined.”

Sherry Ayittey, Minister of Environment, Science and Technology of Ghana



“If there is no gender champion to ensure there is parity for women [at the Copenhagen negotiations], it ain't going to happen. There must be cabinet level discussions, and all of the muscular ministries in government must recognise that women are at the core of their economies.”

Malini Mehra, Founder and CEO of the Centre for Social Markets (CSM), India

- > Train rural women in adaptation measures and how to get involved in climate change actions. In Bangladesh, a local woman is running a disaster protection course and encouraging women to take precautionary measures before flooding, for example by storing clay ovens and wood in high places, raising the foundations of houses and keeping seeds to be planted when crops are destroyed.
  
- > Women need to organise themselves better. For example, leading up to Copenhagen there are opportunities for women to have their voices heard, particularly within civil society. Some foundations are funding programmes to help women engage better in the climate change debate.

#### Lead participants

HRH Princess Haya Bint Al Hussein, UN Messenger of Peace; Chairperson, International Humanitarian City

Shirley Ayitey, Minister of Environment, Science and Technology, Ghana

Malini Mehra, Founder and CEO, Centre for Social Markets (CSM), India

Barbara Stocking, Chief Executive, Oxfam GB

M.S. Swaminathan, Chairman, M.S. Swaminathan Research Foundation

Moderated by Cyba Audi, Al Arabiya/MBC

#### Partner

Oxfam GB

“Every time we see footage of a disaster it is pictures of impoverished women. Where are the men? The women are farmers. They walk to get water and firewood; they feed and nurture the children. Where are the men?”

Cyba Audi of Al Arabiya/MBC

Natural mangrove forests along coastal areas around the world are severely threatened due to multiple factors, including urbanization, pollution, shrimp farming and other fishery developments. Since 1980 25% of mangroves worldwide have been destroyed. Mangrove forests are unique ecosystems that help maintain local fish stocks, act as natural carbon sinks, provide protection for coastal communities against tropical storms, and a buffer against soil erosion from rising seas. Any short-term benefits associated with the destruction of mangrove forests are usually not enjoyed by poor local communities, who lose vital food and protection as a result. Worst affected are poor women, who are chiefly responsible for the nutrition of their families and have long subsisted on the fruits of mangrove forests.



8 km

“We must implement adaptation funding according to the principals of the Paris Declaration and the Accra High Level meeting for aid effectiveness.”

Bernard Petit,  
Special Adviser for Development of the European Commission



Focus Session

## Financing urgent adaptation

This session focused on the relationship between adaptation and development, the need for rapid and additional resources to fund adaptation to climate change, the role of the private sector in adaptation financing and the need for better ethics and governance at national and global levels.

### Linking adaptation and development

There is a clear need for funding for climate change adaptation programmes in developing countries hard hit by climate change effects, such as droughts, floods, unpredictable weather, spread of diseases, and other impacts. Two examples illustrate the issues. An African farmer is confronting weather patterns he has never seen before – one year too much rain; the next year too little. He does not know what to plant or when. A Bolivian farmer and his family, whose fields are high and near a lake, are now threatened by malaria, a lethal disease never known before at these altitudes.

One piece of good news is that arguments for funding adaptation projects do not suffer from the statistical uncertainties that climate change mitigation suffers from. Climate change adaptation cannot, however, be viewed as separate and distinct from development. Climate change means development under tougher circumstances. Development in hostile climates costs more. Adaptation efforts should be built on a solid developmental base. Strong economic development and poverty reduction programmes contribute to enhancing climate change adaptation efforts.

“Ethics and a more sustainable approach to life is a challenge for everyone, not just the business community.”

André Schneider, Managing Director and COO of the World Economic Forum

There is a potential problem, however, in that climate change adaptation is still a very nebulous concept whose definition and boundaries are neither well understood nor commonly agreed. This ambiguity has led to wildly varying estimates of adaptation financial requirements and perhaps unrealistic expectations in the developing world regarding the funding they can reasonably expect from the developed world.

At the multinational level, currently there are several funds and financing mechanisms for climate change adaptation, but most of these are not fully funded or operational. Less than 5% of funds available for climate change issues are available for adaptation.

Adaptation should be seen as part of development and adequately mainstreamed into these efforts. However, if adaptation is viewed as part of development, there is a risk that donors, some already well behind in funding their development aid commitments, will argue that additional funding for adaptation is not required if available development funds are used properly.

Participants urged that such arguments be rejected. Even if there were no climate change challenges, the developed world has not met its commitments and there still is not enough Official Development Assistance (ODA) to meet the MDGs.

Developed countries should fully honour their commitments for ODA, plus provide additional funds and new funding mechanisms to address the increased costs of development due to the newly recognized need for climate change adaptation.

There is a need for approximately US\$ 2 billion right now. There should be continuing discussions about funding mechanisms longer term. One approach is the proposal by the EU to use revenues from the auctioning of carbon credits for adaptation funding. However, it was noted that the recent decline in the price of carbon credits should urge caution in creating funding mechanisms that may not be sustainable.

### Shaping a deal at Copenhagen around the adaptation financing issue

Can a deal between developed and developing nations be reached at the December 2009 UNFCCC Copenhagen Conference for the provision of funding by industrialized countries to the developing world to deal with climate change adaptation? A number of voices from developing countries assert that this is a make or break issue for the success or failure of the conference. The arguments state that adaptation funding is critical for the survival of millions of climate change affected people. It is also critical for development strategies and as a matter of climate justice, since many affected communities did not cause the climate problem, but suffer the most.

“Poor African farmers cannot be held hostage to either dysfunctional national governments or to dysfunctional or unethical global governance arrangements.”

Michael Keating,  
Director of the Africa Progress Panel



Against these arguments, some industrialized country voices – already stressed by economic crisis expenditures and deficits - counter that adaptation is an ambiguous concept, and that many developing countries have poor track records in using foreign assistance funds in transparent, efficient and non-corrupt ways.

These conflicting positions suggest the contours of a deal. Developing nations that can show the capacity to make the resources work will receive money - those that cannot will not.

This proposal, however, ignores the needs of people living in countries with corrupt, dysfunctional governments or in failed states. Some of the poorest countries who are worst affected by climate change and in most need of financing, may therefore stand the least chance of receiving funding, since they are also more likely to have weak governance and a higher risk financial track record.

#### Better governance, coordination and coherence

To deal with climate change adaptation issues, least developed countries have drafted National Adaptation Programmes for Action (NAPA). These are essentially a long list of potential adaptation projects managed by environmental ministries, outside the mainstream priorities of the national governments. NAPA projects remain under-financed because donors have not yet begun to take them seriously. Adaptation efforts should be mainstreamed with national development strategies and priorities with the input and ownership of powerful ministries, such as finance and agriculture. Adaptation funding should be governed by the aid effectiveness principals of the Paris Declaration.

#### The role for the private sector

In terms of climate change driven investments, business at this point is more interested in mitigation projects than adaptation projects. The current financial and economic crises are likely to lead to less philanthropic donations and work by corporations and individuals.

“Development in hostile climates costs more. These costs should not be at the expense of traditional ODA [Official Development Assistance], nor in the form of loans.”

Kseniya Lvovsky, Program Leader for Climate Change of the Environmental Department of the World Bank



Business is also reluctant to invest in African and other developing countries due to concerns about corruption and waste. Many adaptation projects are likely to require long-term efforts at low rates of return, with correspondingly low investment prospects.

Nonetheless, there are roles for the private sector, particularly social entrepreneurs, who develop business models to address the impacts and causes of climate change in addition to other social issues.

These ventures typically do not require large investments. In the long term, businesses should see investments in development or adaptation as investments in the creation of new, expanded or safeguarded markets for their products.

For business to be willing to invest, policy stability upon which to base long-term planning is a basic requirement. Funding mechanisms should be predictable and not promise more than they can reasonably be expected to deliver.

#### Grants versus more debt

Climate change should not be a vehicle to create another African debt crisis. Therefore, most funding for climate change adaptation should be in the form of grants, not loans. Furthermore, adaptation funding should be provided by the developed countries in addition to their commitments for ODA, most of which have not been fulfilled.

#### Lead participants

Michel Camdessus, Member, Africa Progress Panel; Managing Director, International Monetary Fund (1987-2000)

Kseniya Lvovsky, Program Leader for Climate Change, Environment Department, World Bank

Bernard Petit, Special Adviser for Development, European Commission; Deputy Director General for Development, European Commission (2006-2008)

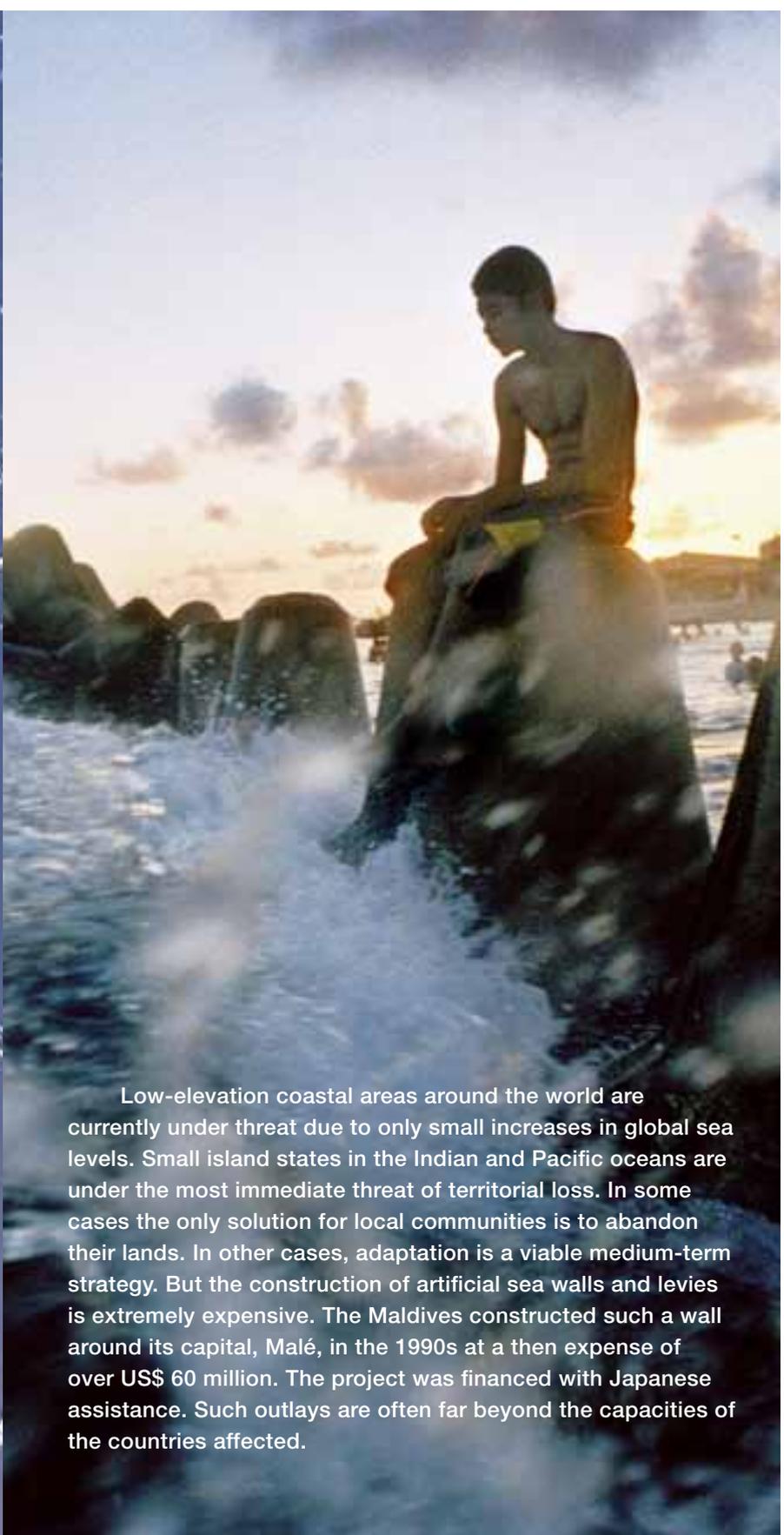
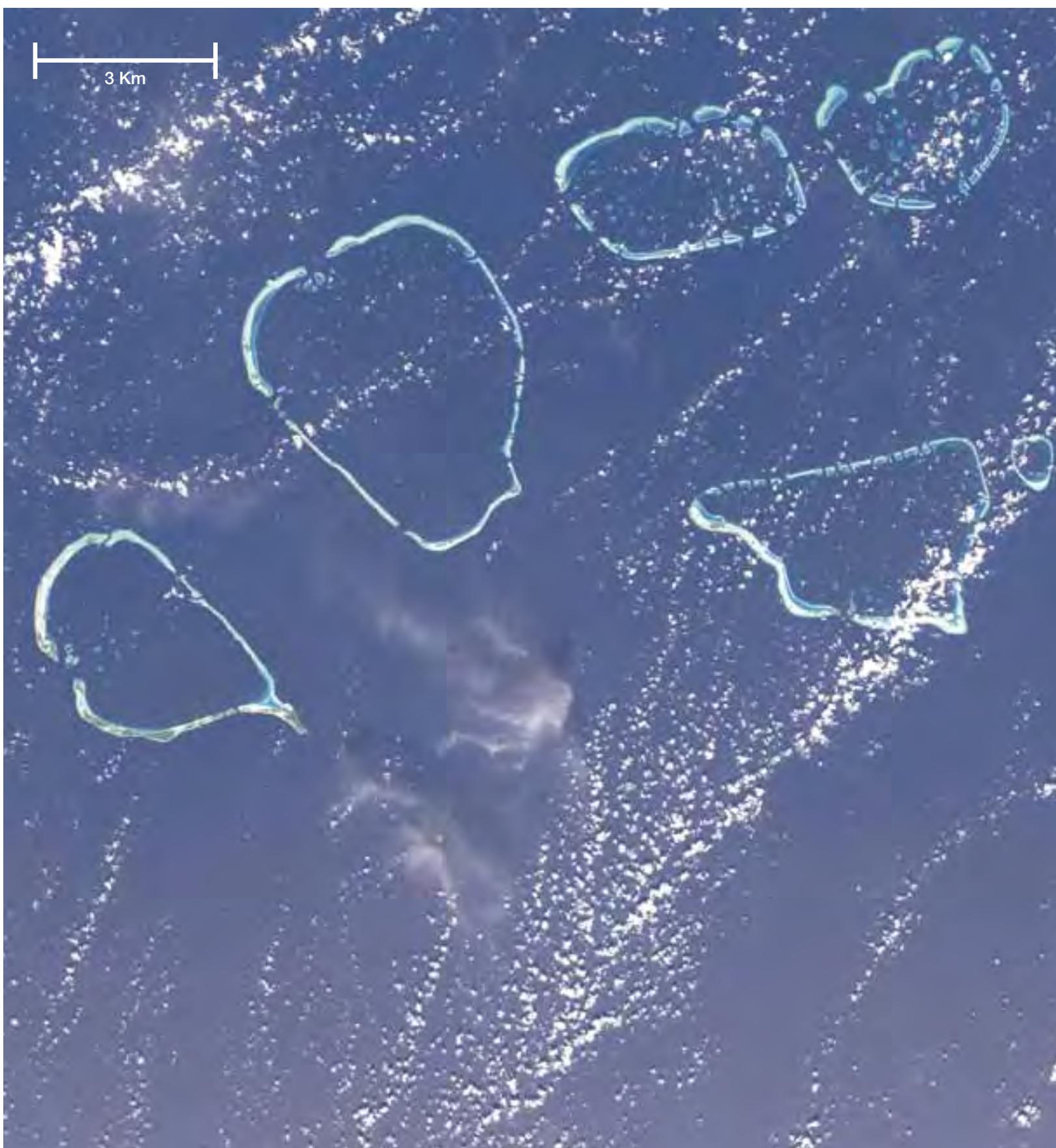
André Schneider, Managing Director and COO, World Economic Forum

#### Partner

World Bank

“Adaptation funding must be on top of existing 0.7% ODA [Official Development Assistance] pledges.”

Michel Camdessus, Member of the Africa Progress Panel



Low-elevation coastal areas around the world are currently under threat due to only small increases in global sea levels. Small island states in the Indian and Pacific oceans are under the most immediate threat of territorial loss. In some cases the only solution for local communities is to abandon their lands. In other cases, adaptation is a viable medium-term strategy. But the construction of artificial sea walls and levies is extremely expensive. The Maldives constructed such a wall around its capital, Malé, in the 1990s at a then expense of over US\$ 60 million. The project was financed with Japanese assistance. Such outlays are often far beyond the capacities of the countries affected.

“The scientific debate and the political debate are like two ships passing in the night with no communication.”

Ian Dunlop,  
Deputy Convenor,  
Australian Association for the Study of Peak Oil;  
Member, The Club of Rome



Parallel Workshop

## Ensuring sustainable energy supply for the poor

This workshop examined the full dimensions of providing sustainable energy to the world's poorest groups.

### Energy needs of the poor

There are 1.6 billion people in the world today who have no access to electricity, and over 2 billion, it is estimated, are still dependent on biomass, particularly for cooking in the home. At least 1.6 billion people have never had a light bulb in their home. An especially troublesome problem is internal household air pollution generated by biomass fuels used for cooking. As many as 2.5 million people a year may be dying from breathing biomass cooking fumes.

The contention is not entirely accurate that energy sources for the poor need to be basic. The latest scientific innovations can be used, but they should be customized. Handled the right way, these innovations may actually enable the world's poorest groups to leapfrog developed countries. That said, in many cases high-technology solutions are unnecessary, with greater progress possible on the basis of low-tech, practical solutions.

### Dealing with multiple crises

There are many converging crises facing poor communities, including climate change, water and food crises, as well as the global economic crisis. The world's poorest are worst impacted by this convergence. Unlike higher socio-economic groups, the poor are unable to deal with many crises simultaneously, due to lack of capacity. Furthermore, commercial operations will not function adequately in these situations. This makes foreign aid the

only realistic solution to providing access to energy and/or to facilitate a low-carbon transformation among the world's poorest communities. If energy for the poor is not addressed, this will only compound the already existing and worsening sets of crises, creating security and other ramifications that will reverberate globally.

Despite the need for an integrated understanding of how the multiple crises in food, land-use, energy, climate, security and others are interacting, individualized solutions tailored to specific regions and localities are crucial for an effective response. Fully integrated approaches often fail at delivery because the bureaucracy needed to manage them fails to take advantage of individual situations.



“At least 1.6 billion people have never had a light bulb in their home.”

Rajendra Pachauri,  
Chairman of the IPCC and Director General  
of The Energy and  
Resources Institute

## Mobilizing solutions

With respect to financing, the issue is not so much one of quantity, since the issues that concern the poor can actually be resolved on relatively modest budgets. The problem is that energy for the poor has been largely ignored in climate and development logic – not featuring prominently, for instance, in the Millennium Development Goals.

The ideal framework for addressing energy poverty is a combination of bottom-up and decentralized solutions, where there is strong identification with and commitment from local communities. At the same time there is an overall top-down framework that provides the support that can enable the bottom-up strategy to function effectively.

There is a need for an emergency approach – or “war footing” – given the urgency of the issue for human wellbeing. The components are there; it is now a matter of assembling the will for action.

## The global energy picture

When addressing energy poverty, it is necessary to understand the non-sustainability of the global energy system. The total oil supply, for instance - the point at which oil production can no longer increase due to technical and price constraints - is fast approaching its peak. Even if roughly half of all available oil remains untapped, there simply does not exist enough oil on the planet so that, for example, China can progress to similar consumption levels as Europeans or North Americans. As early as 2030 the fall in oil supply could be as much as 25-50%. Furthermore, as available stocks continue to fall, prices will inevitably rise, which could lead to tensions over remaining resources.

Warnings on energy security and the impact of continued oil consumption are often ignored because upstream energy suppliers create powerful special interest groups. Discussion on the growth and evolution of these industries is carried out almost in isolation from scientific debates about

“We need bottom-up planning, but we need top-down financing.”

Sven Teske, Programme Director of the  
Renewable Energy Campaign of Greenpeace

environmental and climate impacts. Fundamental change would be required to overcome the abyss that separates environmentalists from major energy groups.

### Cooperation for addressing energy poverty and clean energy in China

The rate of growth of energy in China is extremely fast, with one new Chinese power plant connecting to the grid every week. The Joint US-China cooperation framework on clean energy, which works to bring energy efficient lighting to urban and rural areas, is now conceptualizing a so-called smart grid, in order to foster wind power, solar energy and other renewable energy sources while also improving access of energy supply to rural areas. The work also aims to consolidate China's previously fragmented approach to clean energy by creating a “one-stop shop” for innovation progress in this respect.

### Smart consumption, generation and distribution

Greenpeace's energy policy is based on the theme “smart consumption, generation and distribution.” Developed with technical assistance from the German Space Agency, the strategy is designed to stabilize energy demand and enable a full shift of energy reliance towards renewable sources. Its scenarios explore the different ways in which a renewable energy world could function in practice. One issue that inhibits the widespread adoption of renewable energy is the perceived inability of such energy to provide the base-load requirements needed by society, especially in developed countries. Such claims are unfounded: it is entirely possible to create a total load renewable energy framework, and within a realistic timeframe. In the

“We need integrated understanding, but the solutions that are needed may be quite different.”

Poul Engberg-Pedersen, Director General of  
the Norwegian Agency for Development Cooperation

interim, however, there are no simple solutions. Switching to electric vehicles, for example, is not a complete solution, since the electricity still has to be generated somehow. As one solution, Greenpeace has suggested setting different tariffs depending on the types of energy used in order to enhance the speed of low-carbon transformation.

### Lead participants

Ian Dunlop, Independent Governance and Sustainability Advisor; Deputy Convenor, Australian Association for the Study of Peak Oil; Member, The Club of Rome

Poul Engberg-Pedersen, Director General, Norwegian Agency for Development Cooperation

Yahya Bin Saeed Al-Lootah, Vice Chairman and CEO, S.S. Lootah Group, Dubai

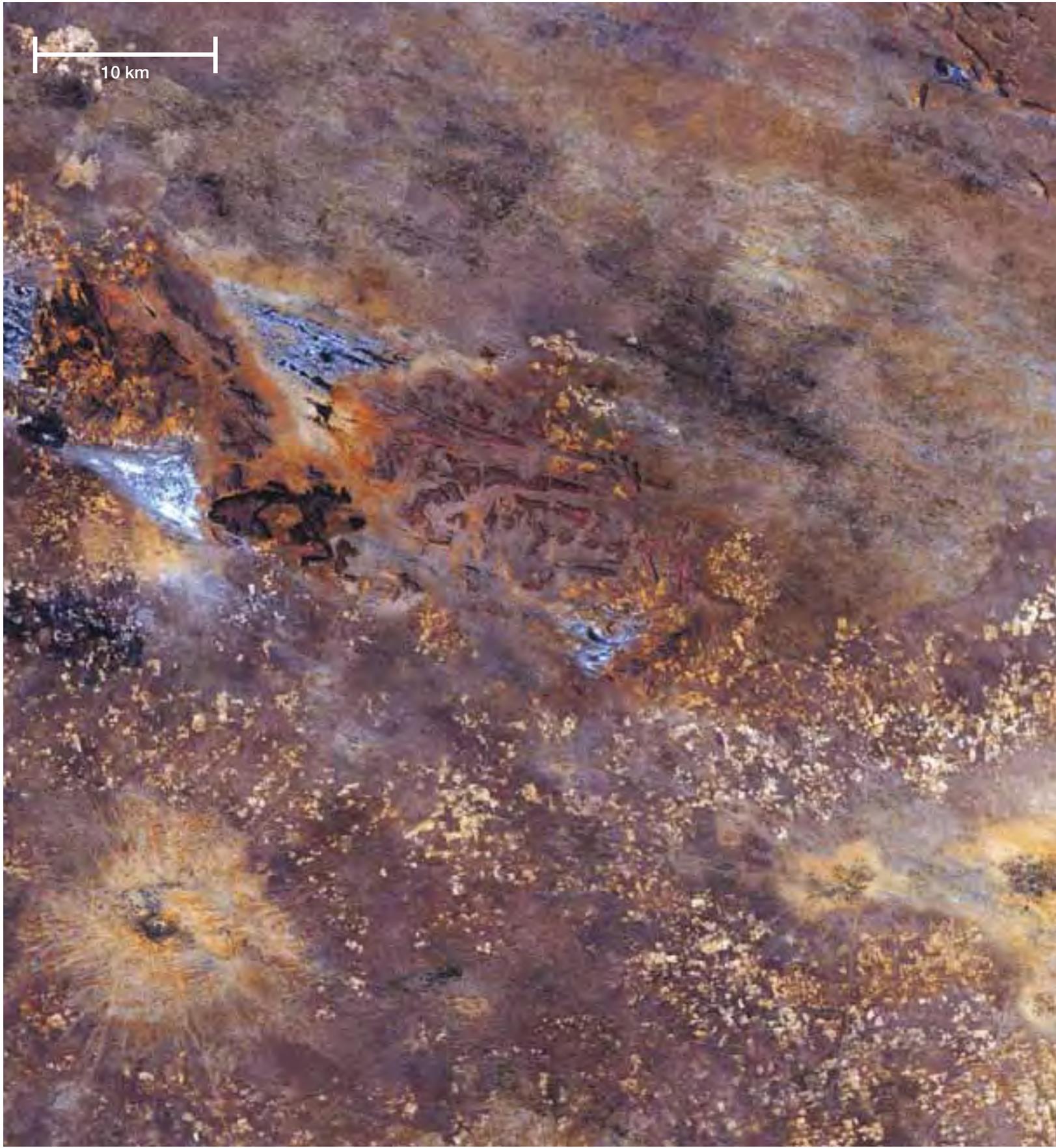
Steve Papermaster, Chairman and CEO, nGenera; Co-Chair, Energy Committee, US President's Council of Advisors on Science and Technology (PCAST); Co-Founder, Joint US-China Cooperation on Clean Energy (JUCCCE), US Steering Committee Chair

Sven Teske, Programme Director of the Renewable Energy Campaign, Greenpeace

Chaired by Rajendra Pachauri, Chairman, IPCC; Director General, TERI; Director, Yale Climate and Energy Institute

### Partner

The Energy and Resources Institute India (TERI)



Rural agglomerations in the Sudan create circular formations when viewed from above – the visual hallmarks of localized land degradation in a setting of regional desertification fuelled by climate change. Population growth increases demand for arable land, which is achieved through deforestation, while around 85% of Sub-Saharan Africa's energy needs are met through locally procured biomass – also achieved through deforestation. Deforestation is therefore contributing to climate change in multiple ways: the loss of forest carbon sinks; emissions from slash and burn clearing or the burning of wood for energy; and the loss of protection from advancing deserts. Similar pressures are afflicting many other regions of the world, such as in Borneo, Indonesia, where slash and burn deforestation is contributing massively to greenhouse gas emissions.

“It’s time to scale up this tool.”

Aranda da Silva,  
Deputy Executive Director of the World Food Programme



Parallel Workshop

## Weather index insurance: prospects for development and disaster management

This workshop looked at the technical and operational challenges that currently limit the growth and spread of index insurance and examined how this innovative tool can best serve development.

### The system of weather index insurance

For poor people, a variable and unpredictable climate can critically restrict livelihood options and limit development. For example, banks are unlikely to lend to farmers if they think a drought will cause widespread defaults, even if the farmers could pay back loans in most years. The farmers’ lack of access to credit limits their ability to buy improved seeds, fertilizers and other inputs.

Index insurance represents an attractive alternative for managing weather and climate risk because it uses a weather index, such as rainfall, to determine payouts. This resolves a number of problems that make traditional insurance unworkable in rural parts of developing countries. With index insurance contracts, an insurance company does not need to visit the policy holder to determine premiums or assess damages. Instead, if the rainfall recorded by gauges is below an earlier, agreed-upon threshold, the insurance pays out. Such a system significantly lowers transaction costs. Having insurance allows these policy holders to apply for bank loans and other types of credit previously unavailable to them.

However, if index insurance is to contribute to development at meaningful scales, a number of challenges must be overcome. For example, some efforts to implement index insurance failed due to lack of capacity, institutional, legal and/or regulatory issues, lack of data, and other constraints.

Index insurance is being tested in the context of development, disaster management and climate change adaptation. What is the value of index insurance given other investments that could be made? And has the experience with weather index insurance to date demonstrated value?

Swiss Re has experience dealing with index insurance and harbours cautious hopes for this tool, despite the many challenges presented.

Climate information and science could be used as a resource for scaling up index insurance. As development challenges mount in the face of a changing climate, innovative climate risk management tools, such as index insurance, will be needed.

### Prospects for development and disaster management

Index insurance is currently being used in development and disaster management settings. Insurance can help people adapt to climate change by increasing resilience through risk spreading, by reducing vulnerability through better risk-awareness, credit and assets and by enabling risk reduction measures through economic.

Risk financing and index insurance can promote development and protect people. There are successful examples of index insurance, for instance a multinational scheme in the Caribbean for earthquake and hurricane risk, and a national program in Ethiopia which is being used to complement a drought early warning system.

What is the financial sustainability of index insurance when targeted at the 'micro-scale', given the lack of capacity, infrastructure and existing markets?

The World Bank focuses its efforts more at the meso and macro scale, where markets are established, and where supply chains and more capacity exists.

### Is index insurance sustainable?

In International Research Institute for Climate and Society (IRI) experience with index insurance in Ethiopia, despite only seven years of station data, index insurance was being offered at the micro level due to scientific advances and innovations, such as remote sensing.

According to MicroEnsure experience, index insurance is not profitable at the moment, but worthwhile. For example, there are large differences in crop yield for those who purchase insurance (and access improved agricultural inputs) in Malawi versus those who had not.

From the perspective of a rural development agency, the International Fund for Agricultural Development (IFAD), index insurance can play a strong part when combined with a wider package of services and support. When index insurance is offered in a value chain (i.e. combined with access to markets and secured prices, agricultural services, access to information, seeds, and credit) index insurance complements IFAD's strategic objectives to facilitate access to a wide range of financial services.

A big challenge to meeting the needs of their target group is that overall there should be a winning value proposition for farmers, addressing issues such as affordability, reliable and trusted intermediaries, weather infrastructure, access to markets, and limited understanding of insurance and financial products.

### Global initiatives

How could index insurance fit into a potential new international climate agreement in Copenhagen? While there is recognition of the importance of risk transfer mechanisms, such as insurance in current language and negotiations, there is little in concrete terms regarding what measures should be taken.

Index insurance is clearly an example of the types of activities that could be promoted once a negotiated text is in place.

The UNDP for its part is currently considering supporting index-based insurance and other risk-transfer mechanisms in the developing world. One option would be a Climate Risk Transfer Facility, which would assist public authorities in implementing development- and risk-reduction-oriented climate risk transfer mechanisms at local and regional levels. Such a facility could have many functions, including delivering knowledge services (e.g. expertise on risk assessment), implementing pilots to test and demonstrate the feasibility of proposed approaches, and promoting national and global policy dialogues in order to expand access to financial risk transfer and pooling mechanisms.

### Recommendations

- > There is need to work now together at the ground level in order to collectively meet development challenges, whereby index insurance could be promoted as an adaption strategy, creating tangible benefits for farmers in a sustainable way.
- > Global goods are needed to make these markets work – mainly weather data and weather stations that are close to farmers. The Global Humanitarian Forum’s Weather Info for All initiative represents an opportunity to helping achieve scale-up of index insurance in Africa, given that one of the key constraints to scaling up index insurance is reliable weather information.
- > A larger network should be created to regularly discuss these issues informally and to move forward as a group in trying to help vulnerable communities better cope with climate risk.

Richard Leftley,  
President and CEO of Microensure



The workshop coincided with the launch of a new IRI publication assessing the current knowledge and state of the art in index insurance, entitled “Index Insurance and Climate Risk: Prospects for development and disaster management”. It was created in partnership with UNDP, IFAD, Oxfam America, Swiss Re, the US National Oceanic and Atmospheric Administration and the World Food Programme. The need for such a publication was first identified at the Global Humanitarian Forum’s inaugural 2008 annual event during a special roundtable on index insurance.

### Lead participants

Mirey Atallah, Portfolio Manager, International Waters, UNDP  
 David Bresch, Head, Sustainability & Emerging Risk Management, Swiss Re  
 Ulrich Hess, Chief, Risk Reduction and Disaster Mitigation Policy, WFP  
 Richard Leftley, President and CEO, Microensure  
 Andrea Stoppa, Commodity Risk Management Group, Agriculture and Rural Department, The World Bank  
 Koko Warner, Head, Environmental Migration, Social Vulnerability, and Adaptation Section, UN University Institute for Environment and Human Security (UNU-EHS)  
 Stephen E. Zebiak, Director-General, IRI

Chaired by Manuel Aranda da Silva, Special Advisor and Deputy Executive Director, WFP

### Partners

The International Research Institute for Climate and Society and Swiss Re

“Reduction commitments are critical, but architecture is also important because we have to involve all developing countries and all actors to provide incentives for action. Perhaps we need to think now not about having money up front, but rather on having climate action.”

José Romero,  
Head of the Section for Rio Conventions of the Swiss Federal Office for the Environment



José Romero of the Swiss Federal Office of Environment, Halldor Thorgeirsson of the UNFCCC, Paul Baer of EcoEquity and David Shukman of the BBC

## Copenhagen and beyond

Focus Session

### Copenhagen architecture

This session explored the elements of a successful international agreement at the UN Climate Conference in Copenhagen in December 2009, and some obstacles to achieving such a deal.

#### Essential elements

The architecture agreed to at Copenhagen will determine the incentives for different countries to reduce emissions and cooperate on other key action areas. A successful deal at Copenhagen should move the world from sporadic but also dramatic discussions to an orderly process for obtaining a sustainable level of greenhouse gas emissions. Four essential elements for a successful agreement were identified:

- 1 There should be clear commitments for greenhouse gas emissions reductions by industrialized countries.
- 2 There should be clarity on how developing countries will move forward on greenhouse gas emissions mitigation through Nationally Appropriate Mitigation Actions (NAMAS) in the context of sustainable development.
- 3 There should be clarity on the financial and technology flows needed to enable action by developing countries for both adaptation and mitigation.
- 4 There should be an overall institutional framework and governance structures that are sufficiently adaptive and organic to evolve with new scientific information and the reality of actual financial flows.

It is not possible to only adapt to climate change, as has been suggested by some radical commentators. Emissions reductions are therefore crucial.

“We are not going to get anything in Copenhagen close to what is actually needed to begin to solve the climate change problem. We need to reduce expectations. There is no long-term shared vision now. In five years we may be able to do much better than we can do now.”

Paul Baer, Co-founder and Research Director, EcoEquity

However, there is also, of course, a great need to adapt to existing and future impacts, many of which are unavoidable. For adaptation, there are two essential elements. First, there should be dramatically enhanced financial flows to developing countries for adaptation actions. These flows should be on a firm foundation, not dependent on periodic appropriations by governments that can come and go. Second, there should be cooperative action between countries and different sectors and partners in order to enhance the effectiveness of strategies and wide-ranging efforts. One promising area is risk management through insurance instruments to reduce the vulnerability of poor nations.

### Lowering expectations

Given the political differences and constraints facing the 190 national parties to the negotiations, it is important to have realistic expectations about what can be reasonably accomplished at Copenhagen.

The new US Administration may have emerged from the dark ages of the Bush years, but there is nowhere near the political support for the kind of treaty actually necessary. There is a risk of the Obama Administration negotiating a treaty that the US Senate would be unable to ratify. The same risk applies equally to a number of different countries.

Talk by some people about Copenhagen needing to be the most ambitious international agreement ever negotiated is scary. Given what the science is saying about the needed level of emissions reductions, people should be ready for the reduction numbers coming out of the Copenhagen conference to be disappointing. Rather than the specific numbers, what is more important is that there be firm commitments by all governments to move forward together. Countries cannot be given the option to walk away from the deal, as was the case in Kyoto.

A successful deal does not need to work out all implementation modalities; however, it should have enough clarity that implementation can be worked out later. For example, the Clean Development Mechanism (CDM) was merely described in the Kyoto Protocol in a few paragraphs with the details to be worked out and made operational later.

### Overcoming distrust

North and South appear to be completely deadlocked on key issues. Developed countries of the world (Annex 1 countries under the Kyoto Protocol) have failed to deliver what they said they would with respect to climate change, financial crisis, trade and Official Development Assistance. Little over the last two decades has made developing countries trust developed countries. A way forward would be for developed countries to agree to reasonably steep reduction targets, even if they do not come close to what is scientifically necessary.

Another useful step would be for developed countries to agree to contribute a significant amount of money for adaptation and mitigation in developing countries. However, developed countries seem unwilling to do so until the developing countries can demonstrate the effectiveness of these investments.

### Practical problems with polluter pays

Environment advocates and many politicians from developing countries often invoke the principle that the polluters should pay for the damage and injury their pollution causes. However, embedding the polluter pays principle as an operational feature of international law would be an enormous step with potential financial liability of unbounded magnitude. That is why, for instance, industrialized countries will do everything in their power to make sure that whatever they agree to in terms of helping developing countries with adaptation does not become a legal obligation to provide redress for people harmed by prior pollution.

### The roles of business and civil society in the negotiations

Some participants questioned whether the private sector and civil society should have a greater and more formal role in the Copenhagen negotiations. Business, after all, is a major source of pollution.

As a practical matter, voices of business and civil society are heard through lobbying efforts. Business interests are also very active at national level and act as a brake on negotiators. Civil society has been energetic in the negotiations, providing draft texts, information and support. Indeed, civil society has put much effort into micromanaging the negotiations, but less energy into building the public political support needed for a more ambitious agreement.

### The UNFCCC and human rights

The Framework Convention does not address the human rights dimension of climate change. Yet, the scale of death and human suffering from climate change is already enormous, and the least responsible people are the most victimized. Participants discussed a proposal that a subsidiary body under the Convention be created to carry forward the human rights dimension of climate change. One concern was that if climate change raises legitimate human rights issues, they should be addressed by the existing UN Human Rights Council rather than a new body.

“Copenhagen will not solve the climate problem. What Copenhagen needs to do is put in motion international cooperation mechanisms and the required financial flows needed for that cooperation. It is not possible to adapt out of the climate change problem. The overriding response must be prevention. We need to reduce emissions.”

Halldor Thorgeirsson, Director of the UNFCCC Bali Road Map Support

Another issue raised was that human rights often involve protecting people from their governments. Climate change often involves protecting people from the actions of other states or cross-border businesses. To provide climate change victims redress would require a system of enforcement of rights, duties and obligations that currently does not exist.

### Lead participants

Paul Baer, Co-Founder and Research Director, EcoEquity

José Romero, Head, Section for Rio Conventions, Swiss Federal Office for the Environment

Halldor Thorgeirsson, Director, Bali Road Map Support, UNFCCC

Moderated by David Shukman, BBC World

“Each country will need country-specific, culturally appropriate ways of making people comfortable with limiting their number of children to one or two.”

Ashok Khosla,  
President of the IUCN



Focus Session

## Demographic dynamics

This session debated three provocative and controversial issues: first, whether population stabilization should play a role in combating climate change; second, if so, what kind of initiatives can contribute to fertility rate reductions, population stabilisation and thus reductions in greenhouse gas emissions; and third, whether population stabilisation can make a meaningful difference in the efforts to reduce emissions of greenhouse gases sufficiently to avoid a runaway global climate catastrophe.

### The relationship between population and climate change

The Earth's resources and capacity are finite. Unless current trends change radically, the Earth's population will grow from the current 6 billion to over 9 billion in 2050. More people mean more greenhouse gas emissions. Equity should inform any emission reduction policies since all people should be treated equally. The only equitable and politically viable basis to allocate emission rights is evenly per capita. The more people in the world each having an equal right to the atmosphere's finite capacity to safely hold carbon, the less each person's share of that capacity can be. For every unborn person, there is also less carbon absorption capacity for the rest of the population.

### Contraction and convergence – the equitable basis for addressing global climate change

The objective of the UNFCCC is to stabilise greenhouse gas concentrations in the atmosphere to a level that is not dangerous. The Convention is based on the principles of precaution and equity. For greenhouse gas concentrations to be stabilised at a safe level with equal treatment for all the worlds' people, there should be a dramatic general contraction of greenhouse gas emissions, including a swift movement towards convergence



“Contraction and convergence is the only moral and rational option. All people have an equal right to be here and enjoy nature’s resources. If there is no contraction and convergence at Copenhagen, we are wasting our time.”

Aubrey Meyer,  
Director of the Global Commons Institute

of per capita emission levels among all the countries of the world. Developed countries with above-average per capita emission levels would be required to further reduce their emissions, while developing countries with below average per capita emission levels would be permitted to increase emissions up to the convergence level.

Contraction and convergence is the only population-based model for greenhouse gas reduction. Some have attacked the contraction and convergence proposal as a “breeders’ charter” on the ground that it could create perverse incentives for developing country governments to encourage more births, thus increasing the countries total emission rights. Proponents of contraction and convergence have responded to the attack by proposing the use of a population base year for setting a country’s emission rights. If a country’s population grew after the base year, it would receive no additional emission rights. However, if population declined from the base year, its emission rights would not be reduced. This should adequately address the issue of perverse incentives.

### The need for population stabilisation

The planet cannot sustain infinite growth. Human population growth will most likely halt one day in one of two ways: the humane way through contraception-backed population stabilisation policies; or the natural way through more deaths by famine, disease, war and catastrophe.

The UN has estimated that 43% of all pregnancies in the world are unwanted. The poorest people in the world have no control over their fertility. If women were empowered to take control of their fertility their lives could be dramatically improved by having fewer children.

Since the 1980s, there has been a taboo, irrational in the view of some, around population issues in developing countries. This taboo was created by a coalition between the Catholic church and the religious right-based on opposition to abortion and contraception, and some developing countries and left leaning groups who view calls for population stabilisation in developing countries to be racist and elitist.

Population stabilisation programmes do not appear to be on the table for inclusion as part of a climate change agreement at the upcoming UN Climate Conference in Copenhagen in December 2009. Environmental problems can be solved without reference to population growth. Population policy should be elevated in importance with respect to climate policy. It makes, for instance, no sense to fund carbon reducing emission projects, but not include projects that result in reducing fertility. There is a need to free women from the burden of unwanted fertility and to free the planet from the burden of too many people.

Population stabilisation measures are necessary, but they are insufficient to adequately address climate change. Even if the world’s population were stabilised today, there would still be a need to dramatically reduce emissions to bring the atmospheric concentration of greenhouse gas down to a safe level.

### Reducing population growth and emissions by empowering young girls and women

There is a strong correlation between girls' school attendance and literacy, and fertility rates. In areas where there are many uneducated women and girls, birth rates are often very high. Where young girls and women are empowered and educated, and have reasonable incomes and old age social security, birth rates are low. There is also strong correlation between high fertility rates and low per capita GDP.

One hypothetical proposal linking population stabilisation, development and environment calls for developed countries to reduce energy consumption and transfer the equivalent of 1,000 kilograms of oil per person to developing countries. This aid would be used to provide young girls and women with energy, lighting, education and decent livelihoods. By empowering young girls and women, fertility rates would fall and the global population could be reduced by up to 2 billion and 3 billion people by 2050. This reduction in population would have profound impact on greenhouse gas emissions.

“Investment in girls' education and health is the best possible investment for managing climate change.”

Michael Keating,  
Director, Africa Progress Panel

“There is no problem not easier solved with fewer people; nor is there a problem harder, if not impossible, with more people. Population stabilisation is necessary, but not a sufficient condition for sustainability. But without it, nothing is possible except utter catastrophe.”

Roger Martin,  
Chair of Trustees, Optimum Population Trust

### Lead participants

Ashok Khosla, President, IUCN

Roger Martin, Chair of Trustees, Optimum Population Trust

Aubrey Meyer, Director, Global Commons Institute

Moderated by Michael Keating, Director, African Progress Panel

### Partner

Optimum Population Trust

“The poor do not have private wealth. Their only wealth is public wealth. If governments and donors do not invest in public assets, they are depriving the poor of their only assets and their livelihood security.”

Pavan Sukhdev,  
Director, Global Markets Division, Deutsche Bank India



Pavan Sukhdev of Deutsche Bank India, Julia Martin-Lefèvre of IUCN, David Shukman of the BBC, Mathis Wackernagel of the Global Footprint Network and Stephan Wells of the Nevada Desert Research Institute

Focus Session

## Climate change and global commons

This session explored ways human thinking and behaviour can be changed to protect the earth's resources and environment and promote their sustainable use.

### The need to change thinking and behaviour

A statement of Albert Einstein was recalled: “Without changing our patterns of thought we will not be able to solve the problems we have created by our current patterns of thought.” Many environmental problems, including those exacerbated by climate change, stem from individuals thinking they can use natural resources in any way that benefits them without regard to impacts on others or on sustainability. For example, loggers in Brazilian rainforests illegally cut down trees for short-term personal profit without regard for the impact of logging on climate change. If caught, the loggers face monetary fines that are not large enough to deter them from risking apprehension in the future.

Economists define commons as public goods and services that are available to everyone with one person's enjoyment not precluding the enjoyment by others. Natural resources must be considered part of the global commons. The Millennium Ecosystem Assessment demonstrated that there has been a severe loss of ecosystem good and services, including clean water, food production, clean air, and flood regulation, among others.

Current thinking too often lacks a reverence for time and space and an understanding of the planet as an interrelated system. People tend to view concerns as discrete parts, not part of a whole.

On Earth, two systems have co-evolved: the earth's natural system, evolving over 4.5 billion years provides life-sustaining resources, and the human network, which has evolved over the last 15,000 years. The human network now dominates to the detriment of the Earth's natural system. That network should now be transformed from low efficiency-high impact to high efficiency-low impact.

There is a connection between each of the eight UN Millennium Development Goals and poverty, public assets and natural resources. For example, deforestation in Haiti has caused floods and droughts adversely impacting poverty levels, childhood and maternal health, and nutrition. Environmental collapses are already apparent in Haiti, Darfur and Somalia.

### Managing resources

One way to move towards higher-efficiency lower-impact is to provide economic incentives coupled with effective communications. For example, water depletion, salinisation and threats to indigenous fish in terminal lakes in Nevada are being combated by a programme to convince ranchers to sell their water rights back to the government to reduce unsustainable water usage, which is causing the problems. Unbiased science, trust, excellent communications and money are needed.

Ecosystems should be managed, conserved and restored to allow them to continue providing critical ecosystem services. Ecosystem-based adaptation is often more accessible and affordable for the poor than solutions based on infrastructure and engineered projects. The recent international initiative for reducing emissions from deforestation and forest degradation in developing countries (REDD) also holds some promise. Under the REDD proposal, a carbon market system for avoiding deforestation in developing countries would be created. Local communities would receive payments for protecting their forests.



“We need to change the way we think. People lack reverence for time, space and understanding of the planet as a system. We view things as pieces, not part of the whole. We need to create a global reverence for natural systems.”

Stephen Wells,  
President of the Desert Research Institute  
of the Nevada System of Higher Education

People, companies and nations can learn to live, work and consume more sustainably through the use of ecological footprint accounting, which according to the Global Footprint Network measures how much nature each person draws upon, and how much each person uses, as well as who uses what. Many countries of the world use more resources than they have domestically or their consumption of resources far exceeds comparative levels elsewhere. These practices are rarely sustainable. If countries do not prepare for a resource constrained future, they will suffer the increasingly higher costs of this type of practice.

### Public wealth versus private wealth

There is currently an overemphasis on private wealth versus public wealth. In the long-term, however, and often also on shorter time horizons in local cases, private wealth is closely associated with public wealth.

“We are spending our natural capital too quickly.  
We must invest in nature.”

Julia Marton-Lefèvre,  
Director General of the International Union for Conservation of Nature

Excessive attention to private wealth adversely impacts the level of investment in public assets and skews development paradigms. It also entrenches inequities - the wealth of the poor is often only based on public wealth. When governments and donors fail to fund public assets, they deprive the poor of livelihood security. Governments should be reminded that their primary responsibility is the provision of public goods and public wealth. For this, leaders must possess vision and determination, but also citizens and civil society have a responsibility to maintain effective pressure and support politicians to make the right – if difficult – choices.

Just as climate change most severely impacts the poor, so does the loss of global commons. It is estimated that the cost of losing ecosystem-based goods and services would be 7% of GDP generally, but 57% of the GDP of the poor. One example of this impact is found in dwindling fisheries resources. The Food and Agriculture Organization of the UN estimates that  $\frac{3}{4}$  of all fisheries are fully fished or overfished. Developed world subsidies for fishing trawler fleets are a principal cause of excessive fishery depletion. The estimated annual economic loss tied to a global fisheries collapse is some US\$ 100 billion. Beyond that loss in world GDP, however, the jobs of 27 million poor people who depend on fisheries for sustenance and livelihoods will be destroyed. An even more dire impact will come from the fact that fisheries provide the main source of protein for 1 billion people in the developing world. How will their health be preserved if the natural resource of the fisheries is not available for meeting these basic dietary needs?

“As we move into a natural resource constrained future,  
ecological assets will become ever more important  
to maintaining economic success.”

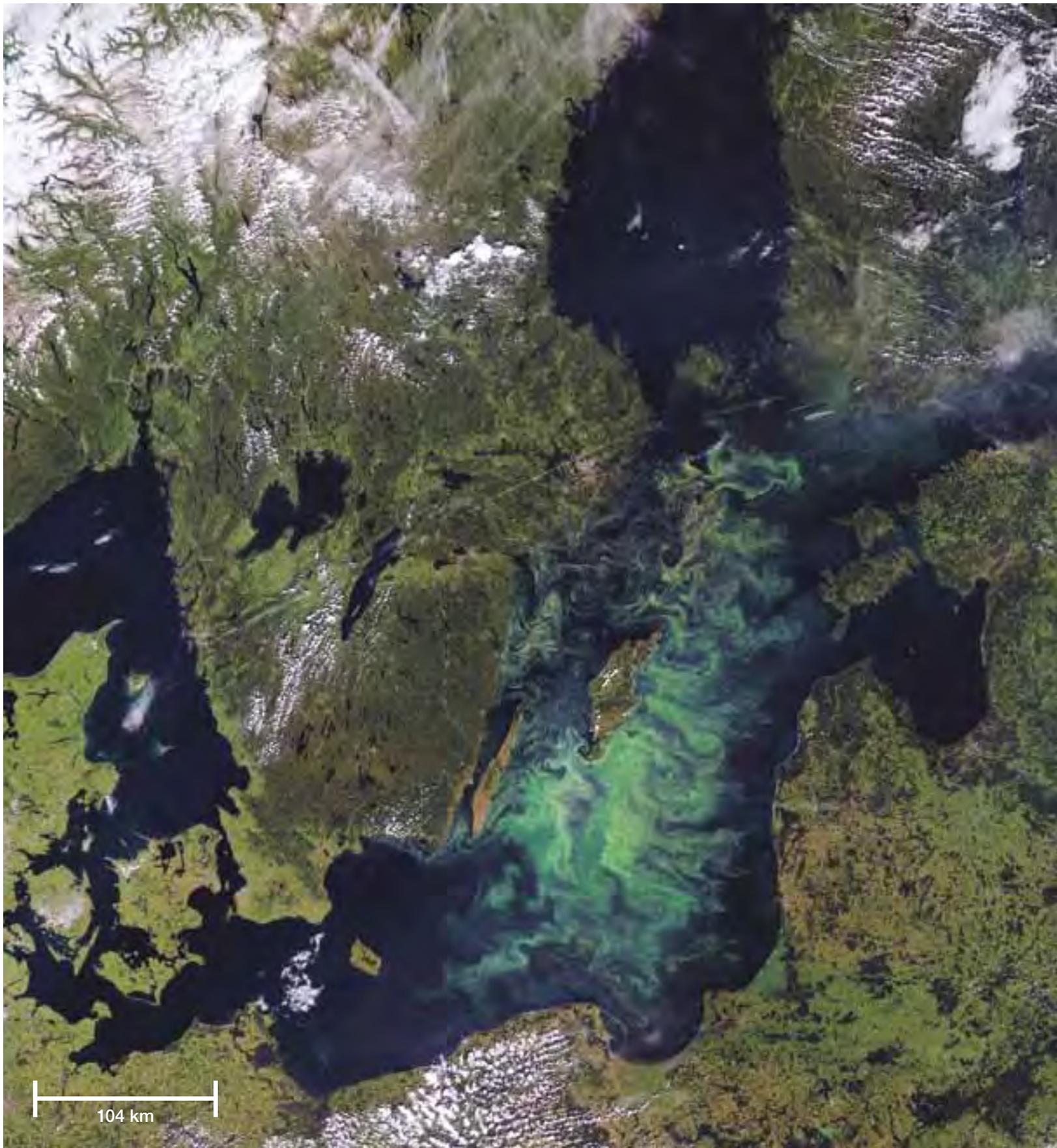
Mathis Wackernagel,  
Executive Director of the Global Footprint Network

### Lead participants

Julia Marton-Lefèvre, Director General, World Conservation Union (IUCN)  
Pavan Sukhdev, Director, Global Markets Division, Deutsche Bank India; Study Leader, The Economics of Ecosystems and Biodiversity (TEEB); Project Leader, Green Economy, UNEP  
Mathis Wackernagel, Executive Director, Global Footprint Network  
Stephen Wells, President, Desert Research Institute of the Nevada System of Higher Education

Moderated by David Shukman, BBC World

Partner  
IUCN



In July 2005 the abnormal coloration of the Baltic Sea is due to the massive blooming of algae or marine cyanobacteria. The unusually warm weather and strong sunlight during that period triggered the growth of the bacteria, which feeds off the waste produced by the approximately 85 million inhabitants living in close proximity to the closed waterway. The process of blooming and then deterioration, once the waste that the algae feed upon is consumed, causes a depletion of oxygen in the sea water. This has a negative impact on other marine species, including fish stocks. Coastal communities are under stress as a result.

“We have created a global economy. But we have not yet created a global community or a global polity. We need to sever carbon from growth, separate consumption from human satisfaction and restore the balance between individual rights and community responsibilities”

Sean Cleary,  
Managing Director of Strategic Concepts, South Africa



Focus Session

## Taking interdependence seriously in addressing climate change

This session explored physical, philosophical, political, historical and biological interconnectedness worldwide, along with the opportunities and impediments they present for international cooperation on climate change.

### Evidence of interdependence

We all live in the biosphere where everything is interconnected and interdependent. Pesticide use has negative impacts on birds, fish and human beings. Greenhouse gas emissions change the chemistry of the biosphere by trapping more heat on the surface of the planet. Carbon dioxide dissolves into the oceans, causing acidification. Warmer temperatures cause insect populations to grow unchecked, contributing to the destruction of forests. There are other trade-offs as well. Banning DDT (a synthetic pesticide) has led to more mosquitoes; dams for hydro-power kill fish. Increased demand for silicon for solar power in the north increases the price of silicon in the southern and equatorial countries, where solar power is more efficient.

Yet, there is a failure to recognise the interconnectedness of wide-ranging issues and phenomena. Elsewhere, there may be a conscious decision to ignore, for instance, that certain actions and consumption patterns contribute to environmental problems.

### What interdependence means

The level of systemic interconnectedness is enormous. The world is comprised of highly adaptive, complex systems that behave in nonlinear ways.



“National sovereignty stands in the way of dealing effectively with cross-border challenges, including climate change. We need to change the independence paradigm that is now an impediment to global climate change progress.”

Benjamin Barber,  
Distinguished Senior Fellow of Demos

No human being should think of himself or herself as unrelated to anyone else. In economic terms, interdependence is a system where consequences of a failure are passed on to all participants in the system. The current system passes systemic failures onto everyone, but the weakest are disproportionately affected. In a policy context, interdependence can be defined as a dynamic condition of being mutually and physically responsible to and sharing common principles with others.

There is, however, a tendency to act as if people were not interdependent. One reason human beings fail to act as part of a common system may stem from the human brain's strengths in identifying “the other”. This ability contributes to xenophobia, “blood is thicker than water” instincts and “us-them” responses. This sort of behaviour is highly dysfunctional in a systemically interconnected biosphere.

### Interdependence versus independence – conflicting paradigms

Addressing the global challenges presented by climate change requires thinking and action based on interdependence. The interdependence paradigm, however, collides head-on with the dominant paradigm in the western developed world for the last 400 years – the independence paradigm. The thinking, values and world view emanating from the independence paradigm makes developing support for programmes based on interdependence problematic.

The Kyoto Protocol stumbled, and the Copenhagen negotiations could possibly stumble, due to the independence paradigm.

Three kinds of independence thinking impede interdependence thinking. First, various intellectual sectors or domains – such as economics, psychology, politics and culture – are viewed as separate, distinct and independent from each other. Economists value economic growth and argue, correctly, that economic growth and consumption over the past 400 years have dramatically improved the quality of human life for people in the developed world. Developing countries want to emulate western economic growth and consumption. Recent developed country suggestions to developing countries that growth and consumption are bad due to their environmental impacts, ring hypocritical and immoral. Such arguments should be nuanced with the full cultural, social and political contexts concerned.

The second kind of independence thinking that conflicts with interdependence is found in the western political tradition that values national sovereignty, democracy and individual liberty. All of these values are important. Yet, they stand in the way of effectively dealing with multinational, cross-border challenges such as the global environmental crisis, the global financial crisis, and the global security crisis presented by terrorist groups and failed states.

“The trend [toward industrialization in the BRIC countries – Brazil, Russia, India and China] cannot be stopped. These countries cannot stop the development process, but they must learn to use energy efficiently. China does not want to copy the US. It is exploring its own way and seeking to build a harmonious society.”

Xisu Wang,  
Principal Consultant of Think Global Consulting



Car ownership, prevalent in developed countries, and the aspiration of billions in developing countries, is a form of radical individualism and independence.

In democracies, politicians are accountable to national, not global constituencies. If they wish to be re-elected, they generally appeal to highly localized, vested or special interests and avoid calls for reduced consumption, altruism or sacrifice. Democracies may be inconsistent with effective environmental action. Authoritarian governments may be more effective.

The third manifestation of the independence paradigm in the western thinking can be described as temporal independence. People currently living are unconcerned about the dead or those yet to be born. People in developed countries are unwilling to acknowledge or take responsibility for the environmental consequences of the extraction, consumption and economic development activities and mistakes of their predecessors; likewise, they are sometimes unconcerned about the effects of their actions on future generations.

If environmental advocates are to succeed at Copenhagen and beyond, they should understand and acknowledge the power and the values of the independence paradigm, and then work to change people's thinking.

### China's efforts

In addressing the twin challenges of economic development and climate change, China is attempting to demonstrate awareness of interdependence and to create a harmonious society. It is making highly publicized efforts in three areas. First, China's consumption of energy per unit of GDP is 40% higher than that of the average of developed countries and it is the world's largest emitter of greenhouse gas emissions. Thus, China is making strenuous efforts to reduce energy consumption per unit of GDP, with a target of a 4% improvement each year, a target it has met each year since 2000. Among other steps, China has closed down thousands of obsolete and inefficient manufacturing facilities and power stations.

“Everything we do has repercussions. Therefore, everything we do carries responsibilities. We all live in the biosphere. In the biosphere everything is connected to everything else.”

David Suzuki,  
scientist, environmentalist and broadcaster

Second, China is reducing greenhouse gas emissions by reducing dependence on coal through investment in hydro, nuclear, solar, wind and tidal power. It is also encouraging replacement of inefficient appliances, vehicles, machinery and light bulbs through government subsidies. Third, China is making major efforts to clean up badly polluted air and water.

### Lead participants

**Benjamin Barber**, Distinguished Senior Fellow, Demos; Walt Whitman Professor Emeritus, Rutgers University

**Sean Cleary**, Managing Director, Strategic Concepts, South Africa International Forum on Globalization

**Xisu Wang**, Principal Consultant, Think Global Consulting

Moderated by **David Suzuki**, scientist, environmentalist and broadcaster

### Partner

Demos



30 km

The Nile riverbanks and delta area, once among the most fertile regions of the world and early cradle of civilization, have experienced a steady reduction in fertility since the 1971 construction of the Aswan dam. The dam put an end to the seasonal soil-enriching flooding of this area and the depositing of sediment that allowed for natural expansion of the delta into the Mediterranean. Lacking its once natural protection against the sea, farmers are now suffering from soil erosion and salination caused by its ever-rising levels.



“Without solutions it is evident that global climate change will be catastrophic for the countries of the Sahel.”

Tiémoko Sangaré, Minister for Environment of Mali



Madeleen Helmer of the Red Cross and Red Crescent Climate Centre and Tiémoko Sangaré, Minister of Environment of Mali

Focus Session

## Special needs of least developed countries

The session explored the special situation of least developed countries (LDCs) with regards to climate change and the negotiations for a future global climate agreement.

### A basic strategy for adaptation: focus on reinforcing existing strategies

90% of climate change adaptation comprises familiar humanitarian and development efforts, such as those reflected in the Millennium Development Goals and disaster risk reduction strategies. Socio-economic conditions are the greatest determinant of vulnerability to climate change. Adaptation therefore is not a case of reinvention. More investment should be channelled into existing efforts to reduce poverty and risks from disasters rather than into projects that only target the 10% of adaptation-specific work that exists. However, adjustments to the general humanitarian and development systems of operation might be needed. Even if just one of the major climate impacts projected by scientists were to take place people could be severely affected in fundamental ways: a slight modification in the monsoonal pattern could for example directly impact on over one billion people. The additional challenges would be unprecedented and could easily overwhelm existing systems.

### Affected regions have already gained valuable resilience

Climate change has already altered weather patterns challenging traditional knowledge on agriculture, one of the key assets of the poor.

“This is an issue that the world hasn’t had to face before.”

Robin Gwynn,  
UK Climate Security Envoy for Vulnerable Countries

However, certain regions have already begun to develop higher levels of resilience in response to the experience of regular environmental disasters. In Bangladesh for instance, tropical cyclones of similar magnitude cause less damage and casualties than in neighbouring Myanmar. Flooding is a regular phenomenon, occurring every year along the three main rivers that cross the country. In 1998, when over a third of the country was under flood, the government fed approximately 10 million people for more than three months, avoiding widespread famine. While ever greater impacts will need greater capacity to be effectively combated, such countries have crucial knowledge to share with other regions.

#### Key challenges in the Sahel: desertification and water

Two thirds of LDCs are located in sub-Saharan Africa, many of which are situated in the Sahel region. The entire Sahel region faces a steady southward advancement of desert. The desertification of the region is disenfranchising and displacing communities who inhabited once fertile land. Due to dire poverty, any available solutions to this issue must rely on significant external finance.

The lack of funding for a major regional greenbelt project to slow the advancement of the desert by planting trees prevents the proper implementation of possibly the only viable adaptation measure that can be taken.

Water is obviously one of the central issues: in Mali water access is extremely restricted during the dry season. Water is necessary not only for basic living needs, but also vital for agriculture, which engages 80% of Mali’s workforce.

Still, costly water infrastructure and management relies in most cases on external resources, which have not been forthcoming in adequate amounts.

#### Weather and climate information

Most LDCs require assistance to improve inadequate weather and climate monitoring networks. Such information is crucial for the disaster preparation efforts of populations at risk. It is also vital for agricultural decision making, where a clear priority also should be given to ensure better access of information to smallholder subsistence farmers. Governments, however, are bound to make difficult choices within the resources available.

Urgent needs in health, sanitation, education, infrastructure and elsewhere are competing with the need for better weather and climate monitoring. Even though better weather information also improves decision-making in these areas. It also helps to build the case for adaptation, allowing for its higher priority in national action plans. However, since uncertainty is inherent to climate change, many steps towards adaptation must be taken on the basis of less than satisfactory information. Calls for deepening knowledge should not go unheeded, but neither should action be delayed until after new information has become available.

#### Preparing for large-scale adaptation

Given the additional burden of climate change on what are already the world’s poorest countries, almost any further adaptation measures must be matched by additional external financing in one form or another.

“One of the key questions is how much funding: it should be as much as possible. Whatever it is, it is not going to be enough.”

Robert Glasser,  
Secretary General of Care International



There also has to be a general coming-to-terms with the prospect that mitigation efforts may fail to bring concentrations of greenhouse gases in the atmosphere under control. It is quite possible that a tipping point will be reached whereby the life support systems of millions become fundamentally threatened. At such a point, adaptation is the only solution. Given the scale of the estimated financing required, alternative avenues aside from direct financing should be explored. Effective payments can be made in-kind, for instance, by facilitating trade through the lifting of tariffs that constrain exports from LDCs.

#### Energy supply, land degradation, and global carbon markets

Energy and land degradation are major issues for many LDCs. In Mali, 95% of all energy is provided through biomass, mainly derived from vegetation and forests, and is therefore a major driver of man-made environmental degradation, which in turn worsens regional desertification. The entire Sahel region requires a substitute energy source, preferably renewable. In Bangladesh, renewable energy has begun to be promoted through financial incentives, such as tax relief, including for solar energy and small-scale hydro power. But large-scale transformations necessitate targeted external financial resources.

Carbon markets may be a possible resource conduit for combating land degradation, with the potential for generating hundreds of millions of dollars worth of funding for poor communities. For that, land use and preservation projects must be accepted as a viable means for carbon sequestration project funding. Rules should also enforce proper safeguards to prevent any associated collateral disadvantages for local communities.

The Clean Development Mechanism (CDM), an international emissions transfer scheme, has mostly been applied in major emerging economies as opposed to LDCs. However, examples of successful CDM projects able to operate on the basis of current rules within LDCs do exist. So while international climate negotiations present an important opportunity for improving the CDM, in the interim such projects can and should be expanded within LDCs.

#### Capacity constraints in development and adaptation planning

International mechanisms for financing and assistance for different issues, such as adaptation, biodiversity, or poverty reduction, require LDCs to develop detailed planning programmes. With the work load of as many as 12 planning processes in parallel, when one process is completed, further programmes are likely to need either updating or comprehensive revision. Implementation of these plans on the local level often suffers as a result. It is imperative that climate change is harnessed as a catalyst for change and not another layer of planning and complexity that slows implementation of the necessary measures among worst affected communities.

#### Participation of the poor in climate negotiations

Poor people have virtually no voice at the climate change negotiating table and related decisions that governments take around the world. As a consequence, it is often only major local industries that receive the benefits of adaptation resources. The principle that vulnerable people within developing countries should be benefitting first from adaptation should be enshrined in climate negotiations. This would unlikely solve the marginalization issue, but would create an obligation for governments to comment and therefore a premise to take steps to ensure the vulnerable are prioritized. Insistence on participation of the poor would also imply a greater level of transparency in financial transactions that should improve accountability and facilitate the scaling up of financing in problematic governance situations.

#### Common interests across existing divides

Climate change is a truly global problem: every person in every country, including future generations, is affected and concerned by climate change, including in economic, social, security, and cultural terms. While LDCs in particular are on the frontlines of climate change, all countries are at risk already today. There is a common interest to go beyond traditional negotiating positions in order to arrive at a solution to global climate change, which is ultimately in the interests of all groups, particularly today, the LDCs.

In United Nations conferences, dealing with such hugely complex issues as climate change, it is normal practice for countries to band together into tried blocs to facilitate the articulation of a position, especially when capacities are restricted, as is the case with LDCs.

### Towards a climate vulnerable coalition

Around the world there are a large number of countries that are on the global frontlines of climate change but are not actively part of current climate change negotiations. There is great scope for increased cooperation between climate vulnerable countries to form a common front with which to negotiate with other parties, and also to share practical experiences and strategies for tackling climate change. Such a group could exert considerable political pressure on two other groups: first, the wealthy industrialized nations, who need to better understand the real cost of inaction as communicated by those countries worst affected today. There exists also a great interest to prevent the world's most fragile populations from reaching a point of total destabilisation. Second, major emerging economies could be encouraged to rethink set positions, moving outside of established comfort zones in the same way that industrialized countries must, towards a more conciliatory approach. If industrialized countries, emerging economies, and climate frontline countries can work together effectively, Copenhagen will have a much more effective outcome.

### Lead participants

Robert Glasser, Secretary General, Care International

Robin Gwynn, UK Climate Security Envoy for Vulnerable Countries

Madeleen Helmer, Head, Red Cross and Red Crescent Climate Centre

Tiémoko Sangaré, Minister for Environment, Mali

Moderated by Johan Botha, 50/50 SABC

“Climate change is an opportunity. We are at the beginning of the largest engine for economic growth since the industrial revolution. Over the next 40 years, mankind will drive up the carbon productivity of the world economy by a factor of 10.”

Jules Kortenhorst,  
CEO of the European Climate Foundation



HSH Prince Albert II of Monaco and  
Martin Frick, Deputy CEO/Director, Global Humanitarian Forum (right)

## Focus Session

# Supporting and financing low carbon growth and development

The session examined challenges, sources and mechanisms for funding low carbon growth and development in developing countries.

## The need for national low carbon growth plans

Poor countries need economic development to reduce poverty, but the world also needs to reduce emissions of greenhouse gases. To alleviate poverty while increasing carbon efficiency requires a plan. Each country should create a country-specific low carbon growth plan for economic development while at the same time reducing emissions. The plan should focus on both mitigation opportunities and specific needs for adaptation. It should identify specific projects and actions and the technologies and funding needed for those projects and actions. These plans would be a platform for discussion and education of all stakeholders. When adopted, they would represent commitments of governments and a basis for mobilising business and civil society.

## Mutual interests unrealized

In Africa, some 70% of the population is involved in agriculture, forestry or in some other way related to the land; 90% of the energy of the region is derived from wood-related products such as biomass. Serious changes will be required to achieve low carbon growth. Most greenhouse gas emissions come from the developed countries. African forests sequester carbon from developed country emissions. If Africa does not deforest, it will have no energy supply, nor be able to meet growing food supply needs. If developed countries require these forests to be preserved in order to combat climate change, they should pay.



“Everybody says to Africans ‘don’t cut the forests’. But without energy we will never develop. It is obvious that someone has to pay us for not cutting down the trees.”

Edward Ayensu,  
Chairman of the Council for Scientific Growth and Industrial Research of Ghana

The high carbon road to development taken by the developed world has led to the current climate crisis. It is in the interest of the developed world for the developing world not to go down the same path. There is a mutual interest in helping developing countries find a low carbon path.

So far, developed countries’ responses to this logic have not been encouraging. Recently, substantial oil reserves were discovered under a rain forest in Ecuador. In exchange for preserving the forest and avoiding contributing to fossil fuel use, the Ecuadorian government asked the international community to contribute to a fund equal to about one half of the revenues Ecuador would receive if it exploited the oil. While efforts to raise funds are ongoing, the responses of the international community have been few and disappointing. While many in the Ecuadorian government prefer to preserve the forest, there is substantial pressure in Ecuador, a low-income country, to exploit the oil reserves. A similar situation occurred recently when Guyana unsuccessfully asked for financial assistance in preserving an enormous forest.

### The money required

Estimates suggest that developing countries will need about US\$ 100 billion per year from 2010 to 2020 to address climate change and low carbon development. Participants agreed that these numbers, while large, are manageable when compared to the sums devoted by developed countries to deal with the financial crisis. Nonetheless, such numbers scare developed countries. Furthermore, the current financial crisis has created a greater reluctance among the large polluting nations to provide funding.

To deal with this reluctance developing countries could present their funding demands in two phases, starting with a smaller sum for the first five-year period. The onus would then be with developing countries to demonstrate that the money was used with transparency, accountability and effectiveness. If that is the case, this would facilitate the request and delivery of a second, expanded tranche.

### Making the case for funding developing countries

There are several arguments developing countries can use in making their case at the upcoming UNFCCC Conference in Copenhagen for the provision of financing from developed countries to deal with climate change. The first is a cost-benefit argument. If developed countries do not help the developing countries to also work as drivers for a solution to climate change, it will soon face a bill of many hundreds of billions of dollars to protect its own citizens from the increased adverse effects of climate change, including, for example, threats of flooding in London and the Netherlands. It is a prudent investment for developed countries to invest instead now.

Second, in response to developed country concerns for protecting their taxpayers from wasted aid, developing countries should point out that rich countries have a responsibility to pay to assist developing countries because of their pollution. This is not charity for the poor. This money is to help people in the developing world overcome the effects of the rich world’s pollution and to diminish future impacts on everyone.



“The global financial crisis brought about by greed can be likened to the global climate crisis that was brought about by greed, industrialisation and unsustainable development. Low carbon growth and sustainable development is the only option.”

Loren Legarda, Senator of the Philippines

Third, climate change should be presented more as an opportunity than a challenge. It could be the largest economic engine for growth since the industrial revolution. Over the next 40 years, to address climate change challenges, human beings will be required to increase the carbon productivity of the world economy by a factor of 10. It is not naively optimistic to believe, with sound policies, information and incentives, that this will be possible. The transformation will create massive numbers of new jobs, products, innovation, capital flows and result in low carbon economic growth. Billions of people in developing countries could become participants in markets for low carbon goods and services.

### Potential funding sources

Participants identified several different sources of funding not involving direct outlays from developed world public treasuries. These include:

- > Debt forgiveness
- > Clean Development Mechanism (CDM) investments under the UNFCCC
- > The Adaptation Fund under the UNFCCC funded by a 2% levy on CDM investments
- > New levies on airline travel and shipping
- > Lifting of direct and indirect trade barriers

### Trust, governance and honouring commitments

Developing countries have reason to distrust developed countries due to the latter's failure to honour commitments made at Gleneagles and Monterrey to fund development assistance to meet the Millennium Development Goals. The developed world distrusts the ability of many developing countries to use money effectively, without waste and corruption. Indeed, some participants argued that some notoriously badly governed developing countries should receive no money at all. If progress is to be made, these trust issues must be overcome.

“We cannot distinguish between adaptation and mitigation any longer. All countries will need to mitigate more or less and all will have to deal with climate change impacts. All countries need low carbon development in the future.”

Saleemul Huq,  
Senior Fellow, Climate Change of the International Institute  
for Environment and Development

Trust and governance issues also give rise to debates as to which entities should manage funding for climate change and low carbon development – the World Bank Group, NGOs, the African Union or others. One promising governance model is found in the UNFCCC Adaptation Fund. It is governed by a board comprised of representatives from both developed and developing countries with special seats for least developed countries and small island states. Developing countries hold a majority of seats. This board is in the process of formulating innovative procedures for oversight and transparency.

### Lead participants

Edward Ayensu, Chairman,

Council for Scientific and Industrial Research, Ghana

Saleemul Huq, Senior Fellow, Climate Change, International Institute for Environment and Development (IIED)

Jules Kortenhorst, CEO, European Climate Foundation

Loren Legarda, Senator, Philippines; UN Regional Champion for Disaster Risk Reduction and Climate Change Adaptation for Asia Pacific

Moderated by David Shukman, BBC World

### Partner

European Climate Foundation

“Social injustice is killing on a grand scale.”

Michael Marmot,  
Professor of Epidemiology  
and Public Health at the University College London



Parallel Workshop

## Health equity and climate change policy

This workshop explored the fundamental issues underlying health equity and climate change and how these twin agendas should be aligned.

### A vicious cycle

Health inequities are caused by the unequal distribution of political power, income, goods and services, and the consequent disparities that are levelled on the lives of individual people. Health equity and climate change have significant and intersecting impacts on human wellbeing and the quality of life. Health equity is a measure by which the fitness of a given society can be judged. Further, every aspect of society has the potential to affect health and health equity.

Already disadvantaged communities are likely to shoulder a disproportionate share of the burden of climate change because of their greater exposure and vulnerability to health threats. Climate change alters the distribution of disease-transmitting organisms, affects water supply and threatens food security in many developing countries.

### Developing coping mechanisms

It is now well understood that responding to the climate change challenge will require concerted efforts not only to control atmospheric greenhouse gas emissions, but also to adapt to and manage the effects of climate change. In this process, it is important to pay special attention to particularly vulnerable people rather than just vulnerable countries. Health inequities should be addressed at all levels, rather than just through a national government perspective.

There is a need to have both health and climate communities collaborate closer in research and practice, addressing risks at all timescales, and at all spatial scales.

Many new opportunities exist, also within the UN framework, to develop partnerships between the public and private sectors to address these issues. For instance, micro-insurance for farmers and opportunities in developing public-private partnerships have the potential to enhance coping mechanisms, reducing the vulnerability of subsistence farmers to climate shocks. There is also the potential to link micro-insurance to catastrophic health risks, including those related to climate-sensitive diseases.

#### Addressing climate change can worsen health equity

Measures to stabilize the climate will not necessarily improve health equity. Many promising policies to reduce carbon emissions, such as price mechanisms, could easily increase income inequality and worsen health inequities.

For example, the use of carbon taxes in the European Union have been shown to be regressive and therefore inequitable, as the relative financial burden is greater for low-income groups. Subsequent decrease in spending by low-income groups on essentials such as adequate food, heating and healthcare can negatively affect health and health equity.

Furthermore, an agricultural shift from food to biofuel production was a contributing factor in the dramatic increase in the cost of basic foods in 2008 – a shift partly driven by environmental concerns. The recent conversion of diesel buses to liquefied petroleum gas (LPG) in Delhi led to higher prices, causing poorer passengers to use more polluting and more dangerous forms of transport instead, which also hampered access to health and other essential services.

#### Improving health equity can worsen climate change

Equally, policies that aim to improve health inequity can easily worsen climate change. Economic development and improvements in basic infrastructure are a necessity for reducing health inequities in many countries. Even using the best available technology, this will require significant carbon emissions.

Stabilizing the climate will require the use of no more than two tonnes of carbon dioxide per person per year. In North America, however, the average use per person is around 20 tonnes; the average in China is nearly four tonnes. And denying poor countries the ability to develop their economies using carbon-based fuel risks appearing hypocritical. For these and other reasons, many developing countries resist emissions reductions that seem at odds with the quest for improvements to living conditions, which themselves are essential also to improving health equity.

#### Health equity and climate stabilization can be achieved together

Despite these tensions, improving health equity and addressing climate change can be pursued together. Potential short-term health equity improvements from economic development in poorer countries are unsustainable if climate change is not arrested. Stabilizing the climate without hampering poverty alleviation in developing countries is thus essential to meaningful progress on health equity.

Improving access to clean household energy can also both reduce greenhouse gas emissions and provide valuable health equity benefits. Incomplete combustion of coal and biomass in households in low-income countries contributes significantly to the incidence of respiratory diseases while also producing black carbon, a potent contributor to climate change. Providing cleaner energy will both save many lives and reduce emissions. Improvements in building insulation in all countries hold potential for similar gains.

Improving the security and sustainability of food supplies can both improve nutrition and make a major contribution to climate stabilization. Livestock accounts for nearly 80% of emissions from agriculture, since the methane associated with livestock farming is significantly more potent as a greenhouse gas than carbon dioxide.

Reduced consumption of meat from livestock in high-income countries would reduce emissions and have potential

benefits for cardiovascular and other chronic disease, which are disproportionately affecting the poor. Other opportunities in the food sector exist in reducing the increasing reliance on highly processed, energy-dense foods, which are both energy intensive and often of poor nutritional value.

Good climate change policy should provide health and health equity benefits immediately and in the future. Any future international climate change agreement, in particular, should be fully informed by its impact on health and aligned to the worldwide advancement of health equity.

### Moving forward on climate stabilization and health equity as twin agendas

The case of health equity demonstrates the importance of policy coherence for mitigation and adaptation to climate change. Good climate change policy should provide health and health equity benefits immediately and in the future. Trade, energy production, transportation, agriculture, and tourism will be affected by climate change policies, and each sector should also be measuring the successful implementation of those policies through a health equity lens to ensure that no further disadvantages accrue to those people already most at risk.

To bring the two agendas of health equity and climate change together is a complex task. It requires elevating and embedding fairness, as emphasized in both the UNFCCC and the constitution of the World Health Organization, in actual concrete cross-sectoral measures.

Climate change and health equity should be key priority goals in national and global development.

One measure of the success of Copenhagen climate change negotiations will be the level of support that it provides to policies that reduce greenhouse gas emissions while improving health equity.

This will require an agreement that stabilizes greenhouse gases but that also specifies the protection and improvement of health, and health equity, as a central goal of adaptation and mitigation policy.

### Lead participants

**Amir Dossal**, Director, UN Office of Partnerships

**Andrew Haines**, Director, London School of Hygiene and Tropical Medicine, University of London

**Richard Leftley**, President and CEO, Microensure

**Tony McMichael**, Director, Research programme on climate change and health, National Centre for Epidemiology and Population Health, The Australian National University

**Maria Neira**, Director, Public Health and Environment Department, World Health Organization

**Stephen E. Zebiak**, Director-General, The International Research Institute for Climate and Society

Chaired by **Michael Marmot**, Professor of Epidemiology and Public Health, University College London (UCL); Director, UCL International Institute for Society and Health

### Partners

Health and Climate Foundation, Agence Médecine Préventive, Capacity Building International, Global Forum for Health Research, International Research Institute for Climate and Society (IRI), inWEnt, and the World Health Organization

“In the fight against climate change,  
for the first time in history there may be a global movement  
where everyone is on the same side.”

Don Tapscott, Author of Wikinomics and Chairman of nGenera Insight



Wijayananda Jayaweera of UNESCO,  
Nitinand Desai of the Prime Minister's Council  
on Climate Change, India and  
Don Tapscott of nGenera

## New frontiers: evolving responses

Focus Session

### New media

This session explored various ways in which the digital revolution is changing our world and how it can contribute to the fight against climate change. Parallel to the technological revolution are demographic and social revolutions.

#### Three revolutions

Three simultaneous revolutions are changing the world. The technological revolution, including the ever expanding Internet and mobile telephony, are creating content and platforms for information sharing, social networking and self-organizing on a global scale never before possible. Much environmental information, advocacy and organizing takes place on Facebook, for example. There are many environmental websites, and the web permits worldwide collaborative solutions to environmental problems. Critical to solving environmental problems, new media facilitates collection, analysis and dissemination of massive amounts of data from many sources and reporters. New media can also facilitate relief efforts in disaster situations, for example through the use of mobile phones and text messaging when traditional infrastructure has been destroyed.

At the same time, there is a demographic revolution. In North America, Asia and Africa, the youth generation is the largest ever and it is growing up digital literate. Youth all over the world know how to use the technology. They use the Internet to interact, collaborate, obtain and disseminate information and organize collective responses to social, political and environmental issues.

The technological and demographic revolutions have led to a social revolution featuring collaboration, self-organization and user content generation.

The greatest single contribution of the new media may be its facilitation of collaboration among people around the world.

The new media available on the Internet are very different from the old media. They are transforming power relationships. The old media – newspaper, book and magazine publishers, broadcasting networks, movie studios – were centralized; they communicated in one direction to passive audiences in a one-size-fits-all format. They were controlled by powerful owners and advertisers. The new media is not one communicating to many; it is one-to-one and many-to-many. Communication is two-way and recipients are also content providers.

These revolutions have profound implications for environmental issues. They provide the opportunity to harness the power of billions of people to “do something about the weather.”

#### A campaign for climate literacy

Many Internet social networks are built upon the existing beliefs and convictions of their members. However, many people, particularly in the developing world, are not yet aware of climate change issues, and many do not have access to or the ability to use information and communication technologies (ICT).

“We need to go beyond social networks based on existing convictions to reach people who are not yet aware of climate change. We need a global climate literacy movement using both old and new media in partnership.”

Wijayananda Jayaweera,  
Director of the UNESCO Communication Development Division

“The new media was built for political organising. It gives people at least a fighting chance to counter the money that the fossil fuel industry can throw at governments and politicians.”

Bill McKibben,  
Co-Founder and Director of 350.org



Florence Nibart Devouard of the Wikimedia Foundation,  
Daniel Stauffacher of the ICT4Peace Foundation, Wijayananda  
Jayaweera of UNESCO and Bill McKibben of 350.org

What is needed is a global campaign for climate literacy employing both old and new media tools. For such a campaign to succeed, several challenges must be confronted. Language presents barriers for many people.

Much content on the Internet is in English. While Google now has machine translation capacity in a number of languages, many languages are not available. Much work needs to be done to promote multilingualism on the web. Another challenge is to train developing country journalists to report intelligently and insightfully on complex scientific and environmental issues.

“The challenge for the new media is improving credibility and also improving access.”

Nitin Desai,  
Member, Prime Minister’s Council on Climate Change,  
India and Special Advisor to the UN for the World Summit on an Information Society

Broadcasters, particularly those receiving public funding, should accept the public service responsibility to present programming on climate change. Educational and environmental ministries should be involved. Wiki systems could aid tremendously in climate literacy education.

To reach the poor through new media, the technology should be affordable and the content understandable. Many more poor people have mobile telephones than have access to computers. What will bring the Internet to the rural poor is mobile telephony. Radio also remains an affordable, critical medium for providing information to the rural poor. However, most radio allows only one-way communication.

The literacy barrier remains a big obstacle, but new voice-to text-systems hold promise. One such system in India allows an Indian farmer to pose an agricultural question verbally by mobile phone. The question is translated into text and sent to an appropriate expert. The expert’s text response is translated back into a voice message that is sent to the farmer’s mobile phone.

### The Internet for political organising and advocacy

The time available to address climate change is very short. Rapid political action, hopefully at the UN Framework Convention on Climate Change Conference in Copenhagen in December 2009, is needed. How can the world be organized? One organization, 350.org, is attempting to do so. Using wordless videos on YouTube and a website in 13 languages,

“The Internet is good for the mass collection of data from many reporters – the kind of data needed for studies on climate change.”

Florence Nibart-Devouard,  
Member of the Wikimedia Advisory Board

it hopes to organize a global day of action on 24 October 2009 involving about 1,500 events in 50 countries. 350.org’s advocacy is targeted at educating people, pressuring governments to reach a sound agreement, capping greenhouse gas emissions, and providing adequate funding for developing world adaptation.

The new media give people, through massive self-organization, a chance to counter the money and influence of businesses with vested interests in fossil fuels.

### Collaboration, content and quality

Since its inception in 2001, Wikipedia has grown to many millions of visitors per month and content in over 250 languages. Wikipedia is an example of new media self-organisation and collaboration to create content. This type of collaboration can promote peace. Collection of data and information from around the world promotes better understanding.

There is a lot of inaccurate information on the Internet. The web has a serious problem with credibility. Ensuring the accuracy and quality of information on the Internet remains a significant challenge. Wikipedia attempts to ensure accuracy through a transparent system where everyone can see the construction of articles, examine the sources, reflect, comment and criticise. Wikipedia claims this system is self-correcting.

“ICT is not being used sufficiently yet in crisis situations.”

Daniel Stauffacher, Chairman of the ICT4Peace Foundation

Enthusiasm over the potential for new media should be tempered by the realisation that these technologies are simply tools for human beings to use as they see fit. They can be used for good; they can be used to waste time; and they can be used for exploitation, crime and violence.

### Lead participants

[Don Tapscott](#), Author, Wikinomics; Chairman, nGenera Insight

[Nitin Desai](#), Member, Prime Minister's Council on Climate Change, India; Special Adviser to the UN for the World Summit on an Information Society

[Wijayananda Jayaweera](#), Director, Communication Development Division, UNESCO

[Bill McKibben](#), Co-Founder and Director, 350.org

[Florence Nibart-Devouard](#), Member, Advisory Board, Wikimedia Foundation; Chair, Wikimedia (2006-2008)

[Daniel Stauffacher](#), Chairman, ICT4Peace Foundation; Ambassador of Switzerland to the UN (1999-2005)

### Partner

nGenera

“We should certainly use military assets  
when disaster strikes and human lives are at stake.  
But there are problems attached.”

Robert Egnell, Director of the Stockholm Centre for Strategic Studies



Christian Segur-Cabanac of the Austrian Armed Forces,  
Rita Hauser of the International Peace Institute,  
Johan Botha of 50/50 SABC,  
Robert Egnell of the Stockholm Center for Strategic Studies  
and Goh Kee Nguan of the Singapore Youth Olympic Games

Focus Session

## Improving the use of military in emergency response operations

Climate change is triggering an increasing number of emergencies and corresponding new demands for rapid-reaction humanitarian responses. This session addressed the role of the military during humanitarian emergencies and whether and how that role should be expanded.

### The military: strong intrinsic emergency response capacities

The military demonstrated tremendous humanitarian benefit during the 2004 Indian Ocean tsunami. Forces from across the affected region joined together with humanitarian organisations from around the world to deliver an effective response to the humanitarian crisis in the wake of the massive natural disaster. The session debated not only how to improve the use of military in emergency response operations, but whether, when and how the military should be involved.

Military forces by design are well equipped to assist in emergency response situations. The appropriate assets are in place, including search and rescue capacities, equipment and logistics, among other things. The military also has the capacity to react immediately, while it often takes humanitarian relief organisations more time to mobilise people and resources.

“We all have our mandate, but for the poorest who are suffering in the world, we need to cooperate.”

General Christian Segur-Cabanac,  
Director General Operations of the Austrian Ministry of Defense

During the tsunami, for example, neighbouring Singapore immediately mobilised three ships, 10 helicopters and 1,500 troops. Lessons learned include that the military is needed in the first-response phase to a natural disaster, but cannot sustain the relief operation over time. Its primary role is to stabilise the country, giving civil agencies the time they need to mobilise.

Another lesson learned is that efficient and effective cooperation and coordination depends on mutual trust and existing bilateral relationships between the military, civil society and the government. In the wake of the tsunami, military and civilian agencies from the region are working closely together, meeting more often, conducting courses and sharing information. This is building better understanding, trust and confidence in each other's capabilities.

The Austrian armed forces have been involved from the Congo to Chad in using military assets in emergency response situations since 1960. The mission of the armed forces is to protect civilians and refugees and to facilitate humanitarian relief efforts. In Chad, the Austrian military is supporting efforts for the voluntary return of refugees, helping to improve conditions for long-term civilian rehabilitation processes, securing UN personnel, facilities and equipment and guaranteeing their freedom of movement. At the same time, in conflict situations, the Austrian military is involved in both peacekeeping and peace enforcement.

“What we have learned is that military forces and civilian organisations can complement each other. The military has assets that are ready to be mobilised almost immediately to any disaster area. But the military cannot sustain the relief operation for a long time.”

Goh Kee Nguan,  
CEO of the Singapore Youth Olympic Games Organizing Committee

### A blurring of the lines

Several panellists and participants were reluctant to take the role of the military as a given. For example, in conflict zones such as Afghanistan, military engagement in humanitarian relief can exacerbate already-tense situations. The withdrawal of Doctors Without Borders (MSF) from war-torn Afghanistan in 2004 after 24 years was held up as an example. The US-led Provincial Reconstruction Teams are led by military personnel, which many claim compromised the neutrality and as a result the safety of MSF staff. Five staff members were killed in June 2004, a month before the organisation's withdrawal.

Some argue that in today's reality, the lines between the role of the military and the role of humanitarian actors are becoming increasingly blurred. The military is going to be increasingly involved for several reasons. All of the humanitarian disasters emerging from climate change are a fundamental threat to security. National security is the purview of the military. When hundreds of thousands of climate refugees start crossing national boundaries, there is a risk of tension and conflict, particularly in very poor countries. International tensions could build as a result.

Myanmar's reclusive military government's initial reluctance to accept humanitarian aid from the outside world when Cyclone Nargis devastated the country in 2008 was cited as an example of the dilemma posed by external intervention. The UN General Assembly recently adopted the principle of Responsibility to Protect. This raises many unanswered questions about the role of the military in humanitarian emergencies: Which force will intervene? Will the operation involve soldiers from the region? What will be the rules of engagement? These are questions that need to be answered before undertaking classic peacekeeping and peace enforcement operations. In a humanitarian operation, those lines will be even more unclear.

In light of Singapore's experience in the aftermath of the Tsunami, there are three key conditions under which a foreign military should intervene.

First, there should be a framework for cooperation to allow the military into the affected country under certain conditions. Second, there should be a good bilateral relationship between the two national militaries. Third, the scale of the disaster should be so large that the affected nation is unable to react alone.

### Conflict changes everything

As climate change sparks new armed conflicts, or “resource wars” over food, water and arable land, humanitarian emergencies will increase. This will create the need for more peacekeeping or peace enforcement by the military. Several panellists and participants pointed out that the situation in Afghanistan is atypical and needs both long-term military and humanitarian relief interventions.

Conflict changes everything at the bases around which operations are performed. In particular, war-zone complexities can escalate with phenomenal speed. There are no fast and simple solutions in such situations. Daily dilemmas in the field when it comes to delivering medicines, water and food supplies are not always resolved by charters, agreements and “understandings”.

### The way forward

The new challenge ahead will be the collective struggle against the negative impacts on human health and security stemming from recurring environmental disasters. The military remains the organisation with the equipment and logistic competences needed in the first phase of a disaster relief operation.

At the same time, some panellists and participants pointed to the “stay in your lane” approach, whereby military and humanitarian relief personnel coordinate their response, but maintain distinct roles and responsibilities. In the view of many, this is the best approach considering that the military mandate is at heart very different from the humanitarian relief organisations’ principle of neutrality.

“What I am arguing for is the creation of rules of the road. The question is how to constitute forces, on which grounds and where from?”

Rita Hauser,  
Chair of the International Peace Institute and President of the Hauser Foundation

Another issue is that where the military is involved, there should be appropriate training, information sharing and improved institutional procedures for civilian-military cooperation. This has funding implications – military versus civilian funding for emergency response operations.

The current situation begs for “rules of the road” – a charter or guidelines covering international political-legal arrangements that establish rules for humanitarian interventions. Given some sensitivities about the Responsibility to Protect, the international community is on the eve of an as yet undefined era in the deployment of military force in the case of severe humanitarian disasters. The implications of humanitarian cooperation with non-state armed factions such as Hezbollah also beg for the creation of a charter or guidelines.

### Lead participants

Robert Egnell, Director, Stockholm Center for Strategic Studies

Rita Hauser, Chair, International Peace Institute; President, The Hauser Foundation

Goh Kee Nguan, CEO, Singapore Youth Olympic Games Organising Committee; Brigadier General (National Service), Singapore Armed Forces

Christian Segur-Cabanac, General, Director General Operations, Ministry of Defense, Austria

Moderated by Johan Botha, 50/50 SABC

### Partner

Austrian Armed Forces

“It takes funds to run a programme where staff are secure.”

Charlotte Petri Gornitzka,  
Secretary General of the International Save the Children Alliance



George Rupp of the International Rescue Committee,  
Charlotte Petri Gornitzka of the International Save the Children Alliance,  
Irene Kahn of Amnesty International, Melker Mabeck of the ICRC, Jim White of the  
Mercy Corps, and Cyba Audi of Al Arabiya/MBC

Focus Session

## Protection of humanitarian workers and journalists

This session explored the need to provide humanitarian workers and journalists better protection against attacks, killings and kidnapping throughout the world, and how such protection should be provided.

### What kinds of protections are needed?

New international law conventions or agreements are unnecessary. Existing instruments would be sufficient if they were implemented. The need is to apply existing rules, rather than develop new rules that will likely be ignored. However, the international community should condemn attacks more strongly and pressure governments not to allow attackers to enjoy impunity for the crimes.

In many crisis areas, local populations also face physical insecurity. It is difficult to argue that humanitarian workers deserve more protection than a mother in a rural village. Efforts should be devoted to increasing the security of residents and humanitarian workers alike. International humanitarian workers tend to be better protected than local workers and journalists. Greater protections for local actors and civil society is required.

Adequate financing is critical for providing security for humanitarian workers. The International Save the Children Alliance recently pulled out of Chad and Darfur after the murder of its programme director. The death was not the only reason for the pullout; the organization was also having difficulty raising funds for the programme. Due to lack of funding, it concluded that it lacked capacity to run a secure programme.

“The need is to apply existing rules, rather than develop new rules we can ignore.”

Melker Mabeck,  
Deputy Head of the Security Unit of the International Committee of the Red Cross

Humanitarian operations must be viewed in the political context of the country involved. Many problems of insecurity arise in situations where there are limitations to basic freedoms or a lack of rule of law. More should be done to protect human rights before a country collapses into conflict and chaos.

In the post-Cold War world, countries and causes have fragmented. Combatants are not clearly identifiable, nor are they disciplined, nor do they respect the rules of international law. The growing role of the military in humanitarian assistance and the politicization of assistance according to donors' agendas creates new issues and risks for humanitarian workers.

### Promoting better security

Donor nations should not try to force humanitarian organizations to buy into political agendas. Donors should act in ways that create a safe space for humanitarian workers to operate. That would mean, for instance, that humanitarian funding mechanisms should be separated from counter-insurgency and anti-terrorism agendas.

“Security for humanitarian workers comes from acceptance by the communities that are receiving services they have elected to receive.”

George Rupp,  
CEO and President of the International Rescue Committee



“We need to look at the security situation, not only for international humanitarian workers, but also for local actors and civil society. International workers tend to be better protected than the locals.”

Irene Khan,  
Secretary General of Amnesty International

The real key to security for humanitarian workers is to gain acceptance from the communities they serve. It provides protection not available any other way. Acceptance is derived from allowing the communities to choose what service they wish to receive and using local residents as staff.

After losing four workers in 2003, the International Committee of the Red Cross (ICRC) undertook a detailed review of its security risks and policies. Today its security policy is based on three key principles. First, the ICRC maintains operational proximity to victims. Second, it uses decentralized security management based on the belief that people active in the field are best placed to know the security situation. Third, it has engaged with the Muslim community in a more structured way to build acceptance for the organization and its ideals. The ICRC has had no attacks with deadly outcomes since 2003.

The International Rescue Committee (IRC) seeks to foster security by embracing the norm of impartiality in the delivery of assistance. It maintains operational independence from donors, including governments. It does not, however, pretend to be completely neutral in all situations. Since the Karzai government came to power in Afghanistan, IRC has implemented some programmes through the ministries of health and rural development. That relationship compromises neutrality.



Humanitarian organizations need to devote more attention to security training for staff, including local partners. They also need to speak with a unified voice when humanitarian worker safety is threatened. Humanitarian organizations must bear primary responsibility for the safety of their staff. It is not possible to avoid all risks. In determining what an acceptable level of risk is, humanitarian organisations must weigh the risk of injury or death to staff against the potential beneficial impact of the proposed activity.

#### A division of labour between humanitarian and human rights workers

Human rights workers encourage humanitarian workers to communicate human rights violations they witness and to cooperate with human rights organizations. But humanitarian workers need to be cautious to avoid situations where their perceived neutrality is compromised leading to potential expulsion from disaster areas or to attacks on staff. This situation has become more complicated in the era of new media where governments can monitor email communications between aid workers, human rights advocates and journalists. The principle of complementarity should be respected. Each organization should pursue the mission for which it is best suited. Human rights groups and humanitarian groups should respect each other's missions.

“The new media both helps and hinders. It is very useful for getting information out and influencing people quickly. But having staff access journalists via blogs or Twitter can endanger staff on the ground.”

Jim White,  
Vice President of Mercy Corps

#### Protection for journalists

Journalists play a vital role in informing and exposing the causes and effects of humanitarian crises. They are frequently targeted for attack by governments, politicians, criminal organizations and others with incentives to hide the truth.

Over the last two years, 700 journalists were killed; in 87% of these cases, no investigation has been conducted.

NGOs and the international community generally should pressure governments to report on what steps are being taken to investigate and prosecute these crimes. Funding should be made available for journalists' unions to defend journalists in their own countries. Education campaigns are also needed to teach people the critical role journalists play in protecting rights, fighting corruption and fostering good decision-making.

#### Lead participants

Charlotte Petri Gornitzka, Secretary General,  
International Save the Children Alliance

Irene Khan, Secretary General, Amnesty International

Melker Mabeck, Deputy Head, Security Unit, ICRC

George Rupp, CEO and President, International Rescue Committee

Jim White, Vice President, Mercy Corps

Moderated by Cyba Audi, Al Arabiya/MBC

#### Partner

The International Rescue Committee (The IRC)

“The principles of climate justice will do more  
to create a sense of solidarity in tackling this issue.”

Mary Robinson of Realizing Rights



Parallel Workshop

## Climate change and human rights

This workshop examined the value and contribution of human rights and available legal recourses for addressing the negative impacts of climate change.

### Linking climate change and human rights

The recent unanimously adopted resolution on climate change at the UN Human Rights Council, following the study by the Office of the UN High Commissioner for Human Rights, marks the emergence of this issue from the periphery into the mainstream of the human rights debate.

The linking of climate change and human rights bears fruit in a number of respects. Human rights are the basis of commitments of equity and justice in the context of climate policy, enabling a focus on individuals and communities and disaggregating a discussion otherwise focused purely on state-to-state obligations. Further, the monitoring of human rights can provide safeguards against harmful mitigation and adaptation actions as well as assessment tools in such areas as technology needs and national adaptation programmes for action.

### Challenges

Negotiators and other stakeholders working on climate change are nervous about including human rights as they feel they can't oversee the consequences. Climate change poses major challenges to the human rights system itself, and certain aspects of human rights jurisprudence may need to be adapted as a result. In this respects, some principles from environmental law may also be usefully imported into the human rights arena.

Under international law, states have obligations to safeguard human rights from the effects of climate change through mitigation and adaptation measures. National responses to climate change should not violate the human rights of, for example, indigenous peoples and forest dwellers. At the same time, states are obligated under human rights law to cooperate internationally to address threats to human rights. These complex linkages pose a daunting challenge to existing international institutions and state parties, which often lack the capacity or expertise to address such highly complex issues.

#### Legal recourse: obstacles, opportunities and limitations

There are a number of potential avenues for legal recourse through human rights approaches when action is needed to combat the negative impacts of climate change on people and communities. Four distinct areas of potential recourse include: litigation against private actors (such as oil companies); individual petition (in the regional human rights arena, such as the Inter-American Commission on Human Rights); interstate litigation (in fora such as the International Court of Justice); and via human rights treaty and charter bodies (such as the Committee on Economic, Social and Cultural rights).

Obstacles to potential recourse avenues include: the difficulty of demonstrating causation in the climate change arena, linking a specific harm to specific actions by a defendant; the difficulty of establishing fault – which requires showing that the defendant has done something contrary to law or regulations – in the context of climate change. It is also not always clear what, if any, laws have been breached, and there is often difficulty in establishing the appropriate jurisdiction. As a result, litigation against private actors, in particular, is unlikely to be seen on a significant scale in the near future. While climate change is an inherently cross-border issue, cross-border actions against states by individuals and communities remain problematic.

None of these difficulties is insurmountable, however. The most promising legal recourses include those where it can be shown that governments

have failed to regulate, or failed in their duty of care, or that private companies have deliberately misled the public (as was the case with the tobacco industry in the past).

An important precedent was set in December 2005 when the Inuit Circumpolar Conference filed a legal petition against the US at the Inter-American Commission on Human Rights to investigate the harm caused to the Inuit by global warming. If the Commission rules in favour of the Inuit, the case could be referred by the US to the Inter-American Court of Human Rights for a legal judgment.

General advantages of litigation include the fact that any human rights litigation may force people to take an issue more seriously and that placing such issues in the public domain can highlight a failure of justice. These advantages can be relevant even if, or sometimes because, a specific case is not successful. Thus, litigation that uses the law creatively can be an effective component of the human rights toolkit.

The limits of legal recourse should also be well understood. Legal recourse is only one approach among many to address the challenge of climate change and the fragmentation of international law. In particular, accountability mechanisms outside court and litigation systems should be developed and used. The human rights system may be particularly well suited to undertake this process by building on existing treaty bodies and special procedures. Any future international climate regime should also establish a focal point, such as a new expert body (or sub-body) on human rights and climate change.

#### Making the most of international human rights instruments

Human rights treaty bodies and other mechanisms under the UN Human Rights Council do have significant potential for addressing climate change harms. Avenues for exploiting that potential include: increasing the involvement of special mandate holders; raising relevant questions in, and addressing the issue in the concluding observations of, the Committee on

Economic, Social and Cultural Rights; using the optional protocol to both the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights to address individual complaints; raising questions on climate change actions by states during the Universal Periodic Review; and, establishing a Special Rapporteur on Human Rights and Climate Change.

#### Areas for immediate action

There is a need to educate decision-makers in all legal fora on the linkages between human rights and climate change. Litigators and other victim representatives should develop and pursue a coordinated strategy to further share information and create tools for overcoming obstacles to human rights litigation in the climate change arena. Coordination and lesson-sharing between human rights advocates and environmental groups should be improved. Meanwhile, the Office of the UN High Commissioner for Human Rights and human rights treaty bodies should formalize, institutionalize and carry out discussions and meetings with other environmental accountability mechanisms and publicise this work.

#### Lead participants

[Olivier De Schutter](#), UN Special Rapporteur on the right to food  
[Richard Hermer](#), International Human Rights Lawyer  
[Kyung-wha Kang](#), Deputy UN High Commissioner for Human Rights  
[Miloon Kothari](#), UN Special Rapporteur on adequate housing (2000-2008); Coordinator, South Asia Regional Programme, Habitat International Coalition's Housing and Land Rights Network  
[Yves Lador](#), Permanent Representative to the UN in Geneva, Earthjustice  
[M.J. Mace](#), Programme Director, Foundation for International Environmental Law and Development (FIELD)  
[Maria Julia Oliva](#), International lawyer specializing on trade and environment

Chaired by [Mary Robinson](#), Honorary President, Oxfam International; Chancellor, University of Dublin; UN High Commissioner for Human Rights (1997-2002); President, Ireland (1990-1997)

#### Partners

Friedrich Ebert Stiftung, the International Council on Human Rights Policy, and The Center for International Environment Law (CIEL)

“I’m starting to get pretty militant right now about the situation.”

Pete Postlethwaite



Academy Award-nominated Pete Postlethwaite and Director Franny Armstrong presenting the movie *The Age of Stupid*

## Film “The Age of Stupid”

The 2009 Forum presented a drama-documentary-animation hybrid which stars Academy-Award nominated Pete Postlethwaite as an old man living in the devastated world of 2055, watching archive footage from 2008 and asking: why didn’t we stop climate change when we had the chance?

Presentation by Director [Franny Armstrong](#) and actor [Pete Postlethwaite](#)

**THE AGE OF  
STUPID**

“All humanity has an interest in working together to overcome humanitarian challenges wherever they may occur.”

Martin Frick



## Conclusion

Martin Frick, Deputy CEO/Director, Global Humanitarian Forum

It is a tall order to attempt to condense towards conclusion the discussions and work of some 400 people over two days on one of the more complex international issues facing the world today. Some interesting reflections are nevertheless possible.

First, what is it exactly that drove hundreds of people to gather in Geneva for these two days?

### Multi-stakeholder networking: a must

In one respect, the offer to provide a dedicated, neutral and independent space for debate on humanitarian issues among leaders and influential thinkers from all fields and sectors meets a clear need. The vast complexity and interconnectedness of issues in our globalized world demands cooperation of different sectors. Many different and specific challenges require a high degree of specialization, which can become a trap. Huge benefits can be gained from insights into the views and reasoning of such a wide range of people as that which gathered for our 2009 Forum. And many partners have been forthcoming to take advantage of this new global platform.

Indeed, the programme of the 2009 Forum was itself developed in cooperation with a wide variety of different partners. These ranged from major humanitarian and development organizations like UNHCR, UNICEF and the World Bank, to civil society actors like Demos and the Optimum Population Trust, research organizations like the International Research Institute for Climate and Society at Columbia University, businesses like Mercuria Global Energy Solutions or Swiss Re, and in some cases, bi-lateral partners, including the Maldives Ministry of Foreign Affairs.

So the choice of issues covered at the event, as well as their treatment, is indicative of some of the key concerns that are circulating with respect to climate change and its human impact today. It provides a unique snapshot of the policy thinking of leaders from various fields on one of today's key global issues.

### Working towards concrete outcomes

Sometimes the outcomes of these exchanges lead to serious new cross-sector cooperation with real results. A great example of this is the Weather Info for All initiative (WIFA), which was launched by the Global Humanitarian Forum at the closure of our 2008 annual event. In the short interval between then and now a full-scale first phase of the project was able to be presented at the 2009 Forum. The unique combination of business partners Ericsson and Zain together with the World Meteorological Organization (WMO) and national meteorological services at the heart of this project enabled us to more than double the weather monitoring network around the Lake Victoria region of Africa, which as a continent is chronically lacking in weather information. As some 5,000 people die on Lake Victoria every year due to storms and accidents, starting in this area means the initiative already has an impact by helping to improve disaster warnings. The Forum continues to work with its many partners in the context of WIFA with the ultimate aim of establishing a comprehensive weather information system for the entire African continent.

### Clarifying policies across fields

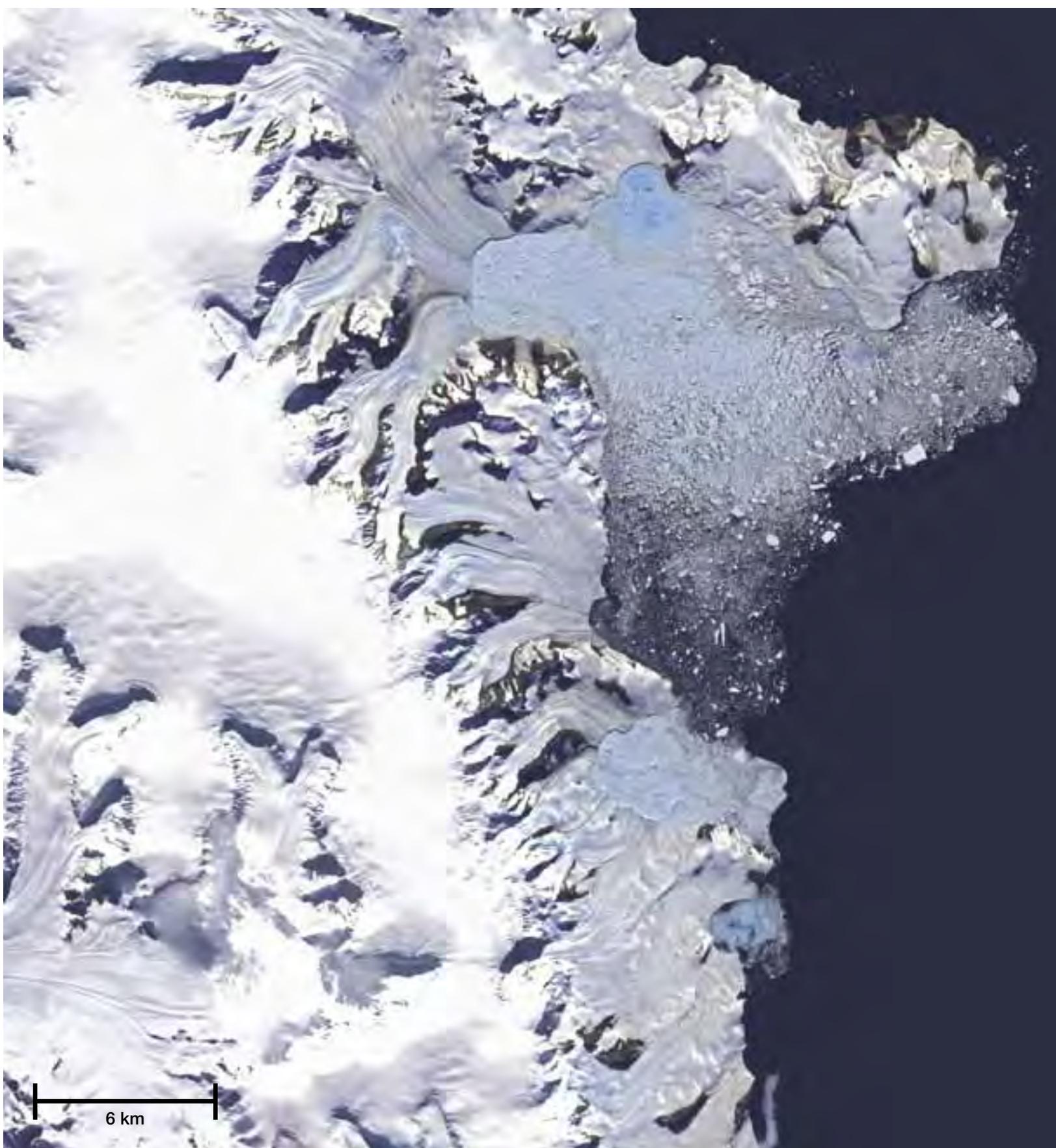
In other cases, it may be equally important to have clarity on where lines should be drawn. Such a case brought up this year concerned the benefits of maintaining a clear distinction between humanitarian workers and their human rights counterparts. Humanitarians are often encouraged to be vigilant in reporting human rights abuses - the designated role of human rights workers. While the value of excellent human rights monitoring is an undisputable priority, the practice can seriously compromise impartiality and neutrality with potentially lethal consequences in particular for locally recruited field staff. Drawing a clear line of responsibilities between the two is an important policy for enhancing the safety of humanitarian workers.

### Towards a global resolution of the climate crisis

Amid all the uncertainties on climate change, we do find simple truths. Carbon dioxide concentration of 350 parts per million (ppm) is ultimately the only level of greenhouse gas pollution that can be considered safe, without massive adaptation investments. Today we are at around 385 ppm and steadily rising at a rate of more than 2 ppm per year. And already today, as our Human Impact Report "The anatomy of a Silent Crisis" launched just weeks prior to this event pointed out, over 300,000 people are already estimated to be dying each year due to climate change. Not exceeding 2 degrees centigrade (or around 3.6 degrees Fahrenheit) ceiling versus today's 0.75 degrees centigrade warming with some certainty, as recently endorsed by the G8 means not exceeding 400 ppm. And that itself means peaking global emissions by around 2015 and entering into steep decline immediately thereafter until we are surviving on less than 20% of 1990 emissions levels by 2050. That is the only way to avoid unmanageable global catastrophe.

For that reason, the Forum joined together in late 2008 with major communications giant Havas to develop a viral campaign, known as tck tck tck, for global civil society to band together for a combined push towards the 2009 Copenhagen summit and beyond. In this context, the Forum emphasizes climate justice. Our work will include the free global re-release of the Midnight Oil hit single "Beds 'r Burning", sung by a range of committed artists and public figures.

We are of the firm opinion that all humanity has an interest in working together to overcome humanitarian challenges wherever they may occur. Climate change is a rare challenge in that people everywhere are all so much at risk that the grounds for a common solution to it could not be stronger. Climate justice simply means securing that solution for us all. An effort that this forum and the work of the many partners in the global community it strings together can take heart in having advanced, I believe, one step further by having collaborated in this event.



Melting glaciers in Grahamland, Antarctica, have gathered pace and are now disappearing at around four times the rate in only the last few years. Following the erosion of the original glacial bank against the ocean (right-hand photo), the interior ice is now more exposed to the warming seas. The peninsula was entirely glacial in 1995 up to where broken ice now simply floats in the Southern Ocean. In the arctic region, many local people are now forced to travel with boats when moving any distance due to the endemic fracturing of ice.



6 km

## Abbreviations

CDM	Clean Development Mechanism
CDPs	Climate Displaced People
CO <sub>2</sub>	Carbon Dioxide
FAO	Food and Agriculture Organisation
GDP	Gross Domestic Product
GHG	Greenhouse gases
IFAD	International Fund for Agricultural Development
IPCC	Intergovernmental Panel on Climate Change
IRI	International Research Institute for Climate and Society
ISDR	UN International Strategy for Disaster Reduction
LDCs	Least Developed Countries
MDGs	Millennium Development Goals
NASA	US National Aeronautics and Space Administration
OCHA	UN Office for the Coordination of Humanitarian Affairs
ODA	Official Development Assistance
OECD	Organisation for Economic Cooperation and Development
PPM	Parts per million of CO <sub>2</sub> concentration in the atmosphere
UN	United Nations
UNDP	UN Development Programme
UNEP	UN Environmental Programme
UNFCCC	UN Framework Convention on Climate Change
UNHCR	Office of the UN High Commissioner for Refugees
UNICEF	UN Children's Fund
WFP	World Food Programme
WHO	World Health Organisation
WIFA	Weather Information for All initiative
WWF	World Wildlife Fund

## Acknowledgements

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## About the Forum

Established in 2007, the Global Humanitarian Forum is an independent, impartial and non-profit foundation under Swiss law. It aims to build a stronger global community for overcoming today and tomorrow's humanitarian challenges. The Forum channels the voices and efforts of the broader humanitarian community into constructive debate, advocacy, and the development and mobilization of collaborative solutions. The Forum's centrepiece event, the Annual Forum, is held each summer in the world's humanitarian capital – Geneva – also home to the Forum's Secretariat.

The Forum engages in a number of different projects in addition to the Annual Forum, including:

**Global Alliance for Climate Justice and the tck tck tck Time for Climate Justice Campaign** – a global advocacy partnership for realizing climate justice and securing a just outcome to the 2009 United Nations Climate Conference in Copenhagen, together with the major communications firm Havas/Euro RSCG, wide-ranging civil society partners, including Oxfam, Greenpeace, WWF, Avaaz, 350.org, the World Council of Churches, the Global Campaign for Climate Action, WAGGS, and many others, and committed public figures from around the globe.

**Weather Info for All** – a major project mobilizing public and private partners to ensure availability of reliable weather/climate information and services to communities vulnerable to climate change, together with Ericsson, the World Meteorological Organization, Zain, the Earth Institute at Columbia University New York, Fairmount Weather Systems, and participating national meteorological services.

### **Human Impact Report: *Climate Change – The Anatomy of a Silent Crisis***

– a comprehensive report documenting the global impact of climate change on human society today (launched on 29 May 2009).

**Youth Forum** – an international community of over one hundred young adults aged 18-28 working to address the human impact of climate change from a youth perspective.

**Energy for the Poor** – a project for launching a global study into the energy needs of the 1.6 billion people worldwide who lack access to any modern forms of energy whatsoever, together with The Energy Resources Institute, India (TERI).

**Drylands: Climate Change and Development** – a regional initiative to boost adaptation measures in one of the most climate-stressed regions of the planet, together with the Earth Institute at Columbia University New York and the Office of HRH Princess Haya Bint Al Hussein.



For more information regarding the Global Humanitarian Forum and its ongoing activities please visit [www.ghf-ge.org](http://www.ghf-ge.org)



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Founded in 2007, the Global Humanitarian Forum is an independent international organization based in Geneva, Switzerland, working to harness the full potential of the global society for overcoming humanitarian challenges. The 2009 Forum was the second annual centrepiece event of the Global Humanitarian Forum.

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