Climate change and security – a planetary danger or military threat?

Many faiths united in hope

THE INTERFAITH CLIMATE SUMMIT: Is there hope for the future?

The links between climate change and violent conflict

Conflicted Middle East challenged by water scarcity

Climate trap on the Arctic tightens

CLIMATE CHANGE: New complexities, new conflicts and new challenges
A PEACEFUL ENVIRONMENT OR A HOSTILE CLIMATE?

Extreme drought in Argentina, China and Israel. Cold and snow in the US, Spain and Great Britain. Hurricane winds in France. Floods in northern Australia and enormous forest fires in the south after a period of intense heat. All of this is happening during the first weeks of 2009. Scientists and researchers warn that future climate change will bring about dramatic effects on the weather. One might wonder if the future is already here, or else, what it will bring ...

The majority of experts agree that global warming is most probably a result of human greenhouse gas emissions. Once again the human species has shown that it is capable of annihilating itself and its planet.

Indeed, the human being is capable of destruction, but s/he is also capable of healing, restoring and – hoping. “Hope is the only good god remaining among mankind” is a saying that goes back to the Greek myth about Pandora, who released all of the evils of humanity from her box, leaving only Hope inside once she had closed it again.

In November last year, I was one among a thousand participants in the Interfaith Climate Summit in Uppsala, Sweden. Many words of warning were spoken and, no doubt, these are serious times. But the Manifesto that was signed by adherents to different faiths at the Summit has the title, Hope for the Future. It is an invitation to all inhabitants on earth: to bring hope back to life and to take the drastic measures that are needed to create a future for humanity. Rosemary Radford Ruether, one of the signatories of the Manifesto, presents thoughts about its importance.

A consequence of climate change is likely to be the scarcity of vital resources such as water, clean air and arable land. This raises questions as to how people and governments will cope: will there be conflicts or cooperation, migration or adaptation?

One of the speakers at the Interfaith Climate Summit, Peter Haldén, reflects in his article on risks and possibilities in the aftermath of climate change, and warns that the most imminent risks might still be unknown to us. Karina Kristiansen and Dan Smith in their article point out that peacebuilding can be a solution to both climate change and violent conflict. Other articles in this issue discuss future scenarios in totalitarian states, the Arctic and the Middle East.

Climate change affects us all. You are welcome to share your reflections with other New Routes readers!

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Theories and assumptions around the consequences of climate change tend to get stuck in a few scenarios, which are more or less taken for granted. However, the reasoning must go one step further in order to realise that these changes are not necessarily the ones that the majority of researchers and politicians preach and predict. One of the important factors is that the consequences are not automatic, but are to a high degree the outcome of political decisions.

Climate change and security – a planetary danger or military threat?

Peter Haldén

Great public, political and academic attention is now being devoted to the issue of global warming and climate change. A broad scientific and political consensus has been established that climate change poses a considerable threat to the planet, its ecosystems and many of its species. A large number of reports and public statements have also suggested that climate change is a security threat. The most significant of these was perhaps the awarding of the Nobel Peace Prize to the International Panel on Climate Change and Al Gore in 2007. The dire, in some cases apocalyptic, predictions and scenarios offered not only by climate scientists but also by popular writers like Mark Lynas, the author of the bestselling ‘Six Degrees: Our Future on a Hotter Planet’, which outlines a series of worst-case scenarios of climate change, seem to make the association between climate change, security and conflict almost commonsensical. If the planet would be wracked by disasters and hazards like sea-level rise, severe droughts, crop failure and the extinction of species, would it not be likely, then, that a proliferation of armed conflict would follow? Some of the speculations and scenarios highlight specific issues, such as large-scale migrations in the wake of climate change-induced alterations in temperature and precipitation, in turn sparking discord, tension and ultimately, in the worst-case scenarios, armed conflicts. For example, United Nations (UN) Secretary-General Ban Ki Moon has stated that the unfolding tragedy in Darfur was the first climate change conflict.

In this article I will argue that the potential links between climate change and security are indirect and highly contingent on political decisions. Some of the arguments that the effects of climate change are likely to lead to a multitude of conflicts in many parts of the world rest on oversimplified assumptions unsupported by research on international security, conceptual confusion and historical comparisons taken out of context. My point is not to downplay the dangers and risks of climate change, far from it. Climate change is a danger to the entire planet on an unprecedented scale and of an unprecedented character. Unless mitigated and adapted to by insightful and forceful policies it is likely to lead to ecological disasters and to human suffering on a vast scale. But the links to large-scale armed conflict postulated so far remain doubtful. Indeed, I believe that such links may exist, but that they are probably not the ones that have hitherto been featured in the debate.

Security – an ambiguous term

‘Security’ is a powerful term, evoking both comfort and threat. It is also a term with several scientific meanings. In political science it has traditionally been used in the sense of ‘national security’ or even ‘international security’. The object under threat has been the nation-state or the stability of the international system. The threat has been organised military violence on a large scale – or in less complicated terms – war. Conflicts in this sense of security can be understood as being of a greater intensity than can be handled by the police, and hence require the military instrument. The potential and actual antagonists almost always used to be (other) nation-states. During the 1990s, the concept was broadened so as to include other groups, such as militias, terrorist organisations, tribes or clans having the potential to threaten as well as being threatened, which was a major conceptual innovation. In 1994, another important broadening was made when the UN Development Programme introduced the concept of ‘human security’.

‘Human security’ is about the individual human being and his/her welfare, which can be threatened by disaster, hunger, want of resources and lack of development. Of course, individual human wellbeing is threatened by war and other violent conflicts, but the main point of the concept of human security is to highlight that human beings are threatened by other factors than military ones and that the military instrument is not always sufficient protection.

Both meanings of security are useful and relevant, but their usefulness decreases when they become confused, which I suspect has sometimes occurred in the debate on climate change and security. I believe it is important that we discuss climate change in terms of both ‘human security’ and the ‘traditional’ understanding of security – which retains its connection to violent conflict. By doing so we can analyse the risks of climate change with more precision, and hence devise policies that help
more people. To anticipate one of the conclusions of this article, unmitigated climate change is likely to be calamitous in terms of human security, but not necessarily so in terms of traditional security. The following will argue why.

**The relevance of existing structures**

In a truly scientific manner we must take some time and consider the ways in which climate change can affect societies. Climate change does not automatically and in itself cause social and political consequences. Rather, the effects of climate change on societies and states will be mediated through existing economic, social and political systems. An effect of climate change, like drought, will not affect an industrialised and prosperous country like Spain in the same way as it is likely to affect a predominantly agrarian and poverty-stricken country, like Sudan. From a security perspective, whether the distribution of economic and social resources are solved through peaceful and political means or whether they are solved through violent conflict is likely to be of the greatest importance in a future characterised by climate change.

This argument applies to relations between states as well. Despite the many conflicts and problems in today’s world, in a historical comparison our period is one of the most peaceful ones in world history. This may sound provocative. However, compared to the international politics of the eighteenth to twentieth centuries, which were characterised by almost constant conflict between the great powers, our era is highly stable with regard to major wars. Hence, it is important from the viewpoint of preventing conflicts in connection with climate change to work to maintain this stability, and to prevent a polarisation and re-militarisation of the relations between the great powers.

This scholarly argument about causality also has concrete political implications. In order to forestall and prevent violent conflict in connection with the effects of climate change, ongoing work to solve armed conflicts and to create and fortify structures and institutions through which conflicts are solved peacefully and politically are the most important remedies. Since we can predict that the future is likely to entail serious strains on, and challenges to, societies, it is urgent to act forcefully and proactively to solve conflicts in today’s volatile regions. It is equally important to work to support stability in the international system, because global dynamics of power and global security relations have a significant impact on security relations in regions all over the world.

**Climate change weakens societies**

The root of why climate change is likely to produce a host of social and political problems is that its effects are likely to weaken states and societies. This lack of capacity is not only due to losses of natural resources, such as crops, animals and freshwater. Climate change may also put severe strain on the capacities of states and societies to co-ordinate activities, to communicate and to organise. This weakening effect is hugely problematic in terms of human security, as it will jeopardise health, livelihoods and development. However, a decrease in what some social scientists call ‘interaction capacity’ is also likely to decrease the ability of states and other social organisations, such as clans, tribes and criminal networks to exercise large-scale violence.
In order to exercise military-type violence a lot of resources are required – economic, technological and organisational. As resources that are put to civilian use dwindle or their use becomes impaired, the same might apply to the military use of resources. Consequently, the human security effects of climate change are likely to become severe as people suffer and succumb. But the traditional security effects, i.e. the likelihood of violent conflict, might actually decrease. This argument does not tell us anything about the likelihood of small-scale violence such as within or between families. Violence of the criminal type may increase, with detrimental effects on human security.

Another factor that makes the effects of climate change strike very differently in the realms of human and traditional security is the lack of popular representation and accountability in many states in the developing world. This means that the population is likely to suffer from, and possibly succumb to, the effects of floods and droughts, to take two examples of climate change-induced disasters. The indifference of the governments of dictatorial or outright despotic states to the plight of their peoples casts doubt over the predictions that the suffering of their countries will prompt these governments to initiate violent conflict either against other states or their own peoples. One could argue that the incapacity or unwillingness to aid a population stricken by climate change is likely to lead to popular uprisings. This may well be the case unless, as discussed above, significant parts of the population have found their resources so depleted by climate change that they will not be able to muster armed resistance or rebellion.

**Climate change can be exploited**

As students of history will know well, wars can be used by governments who want to divert attention away from internal problems, often of their own making. Such hostilities can be initiated against neighbouring states or against parts of the population who are portrayed as responsible for social, economic and/or political problems by means of propaganda disinformation. This was the case in the former Yugoslavia, where undemocratic and illiberal leaders portrayed ethnic groups as scapegoats that had to be destroyed. Tragedy and genocide followed as a result.

This is but one scenario in which the effects of climate change can be exploited by political actors who either seek to retain power or to gain power. Such scenarios could unfold in connection with the direct effects of climate change such as droughts or other natural disasters, as well as in connection with indirect ones, such as the devastation of the economy due to climate change.

Another way in which the effects of climate change facilitate war is that a country stricken by the consequences of climate change could be imperilled by politicians in neighbouring countries seeking to exploit its weakness. Such exploitation could take many forms: ‘intervention’, subversion through support to clients in the stricken state, or outright invasion, which may well be clothed in terms of ‘intervention’. An analogous example of this type of conflict would be the wars in Zaire/Congo in 1998-2004, when neighbouring countries intervened due to a number of motives, not least economic considerations.

**Refugees, climate and security**

Numerous reports and newspaper articles have contended that climate change will lead to a massive increase in the number of refugees around the world. This coverage has even given rise to the new term ‘climate refugees’. This suggestive and eerie concept has entered the mainstream political vocabulary, but it remains unclear whether climate change will lead to a large number of refugees, how far they will go in search of safe havens and whether the uprooting of people will lead to armed conflict. We know that only a small minority of all migrants and refugees venture far from their places of origin, and therefore large-scale migrations due to ecological disasters are unlikely. It takes a lot of resources to migrate, which makes scenarios where disaster-stricken people remain in the disaster areas and succumb much more likely than long-range migrations.

As for armed conflict in connection with migrations and refugees due to ecological events, it is important to stress that in all recorded instances either the state of origin or of destina-

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**‘Human security’ can be threatened by disease, hunger, want of resources and lack of development.**

Issues for future research and debate

The concentration of the debates on climate change and security on direct causal links between climate events or resource deprivation and conflict has, I believe, overshadowed a number of potential security issues – human and ‘traditional’ – that may be even more consequential than those that have been discussed so far. In view of the evidence on climate change presented by natural science, it is unquestionable that we have to embark on far-reaching global programmes to mitigate the emissions of greenhouse gasses that fuel global warming. An essential part thereof is to limit the global consumption of fossil fuels such as oil and natural gas.

However, it is important that such programmes do not cause problems in the field of international security, for example by undermining the economies of countries producing oil and gas. Many of the oil-producing countries are today fraught with social and political tensions and it is important to help such counties diversify and develop their economies. Otherwise the solution to the problems of climate change might create new problems in the field of national and international security.

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**Climate change does not automatically and in itself cause social and political consequences.**
The same line of reasoning applies to adaptation to climate change. Successful adaptation both to a low-carbon economy and to a future of climate change entails far-reaching transformations of economies, societies and states. Hence, it is important that adaptation measures do not become implicated in security relations. One way in which this could occur would be if adaptive capacities would come to be seen as assets in regional balance of power games. In such a scenario, unequal capacities to adapt could give rise to inter-state tensions.

The risks of ‘adaptive inequalities’ are also relevant for political relations within countries, where inequities could fuel existing tensions or even create new ones. Since climate respects no boundaries made by man, adaptation is most effective when carried out through cross-border cooperation. Making adaptation programmes international or inter-regional would also be an effective precaution against the scenarios that I have just sketched.

One of the things that made climate change skyrocket to the top of the political agenda was the publication of the Stern Report in 2007. Commissioned by the British Government, the report dealt with the implications of climate change on the world economy. It argued that unmitigated climate change would create a global economic downturn comparable to the combined effect of the two World Wars and the Great Depression of the 1930s. Although much is different in international relations compared to the 1930s, a global economic crisis of this kind might result in serious ramifications for international security. To name one factor, it might make funding for peacekeeping and humanitarian operations, which might be badly needed in a future characterised by climate change, much scarcer.

Finally, most of the debates and research on the interface between climate change and security have dealt with climate change as a steady increase in mean temperatures and alterations in precipitation patterns. An equally, if not more, important aspect of climate change, but one that is much more difficult to understand, model and debate, is its so-called non-linearity. Climate scientists insist that climate systems can change very rapidly and have done so in the past. Therefore, although we can predict a certain increase in temperatures over a fifty- or hundred-year period, we have no way of telling when the increase will occur. It might occur gradually and evenly, giving us time to adapt and adjust, or a large increase might occur in a short span of time, something for which no society is prepared. The security implications of such events are only beginning to be discussed.

Furthermore, climate change entails irreversible so-called ‘independent drivers’. These are events that would significantly speed up the process of global climate change and they are beyond even the most sophisticated or ambitious human control. An example is if the Siberian permafrost were to melt and unleash enormous quantities of methane into the atmosphere, which would double or triple global warming. The security and societal implications of such a scenario have yet to be debated at the highest political levels.

In a fast-evolving field of research all conclusions will by necessity be tentative. From this brief survey of the security implications of climate change we can in any case conclude that the international community will face difficult challenges and risks in the future. However, these are not necessarily those that we have hitherto debated and feared. Climate change is a danger to our planet and its ecosystem, but also to large parts of its human population. But this danger is nothing that can be countered by military means. The effects of climate change can exacerbate existing problems of international or national security. However, this connection is not automatic, but a product of political choices. Hence, political actors have the responsibility, if not the duty, to refrain from conflict and instead cooperate to fight climate change through peaceful and political means.

Climate scientists insist that climate systems can change very rapidly and have done so in the past.

Clean water is one of the basic prerequisites for people’s health everywhere. As global warming is likely to cause increased drought in large areas, lack of clean water will be one of the more serious future problems.
Many faiths united in hope

– Hope is a desire for something to happen, combined with an expectation that it will.

With these words, Archbishop Anders Wejryd of the Church of Sweden began the opening ceremony of the Interfaith Climate Summit, which took place in Uppsala, Sweden, 28-29 November 2008.

He went on to say:
– It is easy to lose hope when we hear about climate change and environmental break-down. It is easy to lose hope when we see the complexity of the climate issue.

The Archbishop pointed to the need for hope and the sense of hope that permeates most religious traditions:
– There is a communion of hope, providing us with a possibility of encountering each other across barriers, of offering our hope to resist despair and fatalism. We are not at this meeting to find special religious answers to the environmental crisis. This meeting draws on facts and theories that we all, regardless of belief, can take in, question, debate and possibly share.

HRH Crown Princess Victoria of Sweden and Swedish Minister for the Environment Andreas Carlgren also welcomed the visitors to the Summit, and expressed their appreciation for the Archbishop’s initiative. Crown Princess Victoria stated that the well being of future generations is important to all of us:
– We owe them a planet with clean air and water, food and health. This Summit will draw attention to our responsibility ahead.

Like the Archbishop, Andreas Carlgren stressed the need for hope:
– There are no difficulties to mobilise people’s fear, and there are many reasons for fear. To avoid fear we must act, and to act we must have motivation. We must be inspired by hope. The real challenge is to mobilise hope and therefore we call upon religious leaders, churches and faith communities world wide.

Speeches were then delivered by participants from different faith communities interspersed with flute and organ music.

From worship to science

The venue of the Summit shifted, with clear symbolism, between the Cathedral and the university building, thus indicating that faith and science must go hand in hand in order to restore hope for the future of humanity. Thus, after the ceremony in the Cathedral some 1,000 people wandered a couple of hundred metres uphill to the university hall and the opening seminar, entitled Climate roadmap – from Bali to Copenhagen. A panel consisting of Margot Wallström, First Vice President of the European Commission, Rabbi Awraham Soetendorp, Amsterdam, The Netherlands, Ms Charanjit Ajitsingh, International Interfaith Centre, UK, and Professor James E Hansen, NASA, USA, presented on the subject under the chairmanship of Allan Larsson, of Lund University and former Minister of Finance.

In her speech Margot Wallström encouraged hope, quoting the Czech author and politician Václav Havel, who said that hope is not the same as optimism. It is not the conviction that something will turn out well, but the certainty that something makes sense, no matter how it turns out.

– Combating climate change certainly makes sense! It is not only a challenge, a burden, a problem or a cost, but an opportunity to change the world and steer it towards sustainable development and prosperity for all, towards a better quality of life.

However, there is a risk in fearing to be overwhelmed by the complexity of the climate crisis, where one dismal factor often leads on to another, even worse. As a counterbalance, Wallström reminded the participants of the Greek myth about Pandora’s box. After all misfortunes had flown out over the world, the last thing that remained in the box before she closed it was hope.

Awraham Soetendorp reflected on his own background, being born a Jewish child in Amsterdam in 1943. As his parents were deported by Gestapo, he was taken care of by a Catholic woman, who, of course, took a great risk by helping him. In no time she had to make her decision to save the Jewish child.

– Like her, said Soetendorp, we have the energy of compassion that unites us to make a no time choice to save the world. We know what has to be done.

We can open the door wide to realise the millennium goals: basic education for all children, fresh air and clean water.

In a voice hoarse with emotion he concluded:
– If it is one thing that I have learned, living a life in interfaith and saved by interfaith, it is that I need you. We need each other, Jewish, Christian, Muslims, Sikhs ... We are unable to make this leap of action and faith with our hearts and feet without the collective spiritual and mindful knowledge of our different religions, traditions and humanism.

The ‘summit of the Summit’ took place on Friday evening when the Interfaith Climate Manifesto was signed by 30 signatories, all internationally well recognised policy-makers from different faiths, cultures and continents.

Summoned by a Buddhist gong, Sámi ‘yoik’, Muslim call to prayer and Christian church bells, the signatories, to-
Science might be able to give answers to my questions but never to my wonder.

A seminar on the topic *The Responsibility for Climate Adaptation in the South – a key issue in the climate negotiations?* was arranged by the Swedish Water House. The speakers were Johan Schaar, head of the Secretariat of the International Commission for Climate and Development, Anders Wijkman, EU Parliamentarian with many years experience of environmental and development issues, and Staffan Tillander, climate ambassador at the Ministry of Environment.

Johan Schaar stressed that the climate changes must be seen in an economic and political context. It is obvious that poor people are struck hardest by, for example, the uncertainty around the accessibility of water and, thus, around food production, health etc. This leads to demands for a more comprehensive approach to development, in which education, information, human rights, ownership and adaptation have to be included.

Anders Wijkman noted that new research results published after the release of the United Nation’s (UN’s) Intergovernmental Panel on Climate Change (IPCC) Report show that the situation is worse and that the changes are occurring faster than believed.

– The hope is, he said, that the gravity of the situation will be understood at the UN Climate Change Conference in Poznan, Poland.

Staffan Tillander also expressed hope that ‘Poznan’ would show a way forward. He stressed the importance for developed as well as developing countries to follow the Kyoto Convention.

One of the signatories, Rabbi Arthur Waskow, Director of the Shalom Center, Philadelphia, USA, held a seminar on *The Exodus Tradition and Climate Crisis*. He claimed that Exodus has a relationship to global scorching (“global warming is too meek a concept to describe the reality”) and compared the ten plagues that preceded the Exodus to natural disasters similar to those of today.

The plagues should have been a warning to Pharaoh to let the Jews go from their captivity in Egypt. However, Pharaoh’s heart was hardened and not until the tenth plague that would kill all first-born sons in Egypt, did he yield and drove the Israelites out of the country.

Waskow then drew a parallel to other religious communities that have challenged the powers that be: the Jewish tradition was framed by resistance to Pharaoh, the Christian tradition was framed by resistance to Caesar, and in similar ways resistance framed both Mohammed and Buddha. Waskow concluded:

– Now is our moment in the history of the human race. Great teachers outgrow the different phases of their own culture. At the heart of our faith traditions there is a transformative revolution model.

**Technical outlooks**

A more scientific aspect of the climate crisis was presented at a seminar with the title *Climate Research – what do we know, what do we guess?*. The research about climate change is in a dynamic process and is facing a number of complicated questions. One of the most urgent is, how acute and threatening is the situation? This was discussed by three Swedish scientists who have contributed to the IPCC: Henning Rodhe, Professor of Chemical Meteorology at Stockholm University, Karin Holmgren, Professor of Geography at Uppsala University, and Dr. Bengt Erik Rydén, Hydrologist, Uppsala University.

The fact is that there is an accelerating global heating of our planet. Professor Rodhe gave an overview of climate models that are used to analyse this phenomenon, what they forecast and what uncertainties there are. All existing models point to an increase of the temperature, and the estimation of IPCC is that there is a 90 per cent probability that the major part of the warming is caused by human greenhouse gas emissions. Both Professor Holmgren and Dr Rydén agreed with the probability and the uncertainty in these models.

The climate issue’s impact on the technique was demonstrated in the seminar *Technical Leaps in the Struggle*.
against the Climate Crisis. Lars Jonsson from Uppsala University Innovation and Jan Sundberg from the Institute of Engineering Sciences at Uppsala University presented the latest news within the spearhead research on renewable energy like solar cells and wind and sea-wave power, which all seem quite promising for future energy supplies.

At the seminar The Effects of Climate Change on Global Economy, Animal Health and Food Supply, Professors Henrik Eckersten, Ulf Magnusson and Senior Lecturer Erik Fahlbeck, all from the Swedish University of Agricultural Sciences (SLU), gave examples of the effects of climate change on agriculture, especially in Africa. However, they were more concerned about the socio-economic aspects for its inhabitants. In order for people to change their conduct, it takes a certain economic standard, which the poor do not have.

Most urban residents on earth live in cities about the size of Uppsala (about 130,000 inhabitants). A seminar entitled Sustainable Uppsala – BC/Beyond Carbon – a local and global perspective showed how a city can maintain its quality of life – and eliminate its carbon dioxide emissions – without both fossil fuels and nuclear power. Björn Vinnerås, a researcher at the Institute of Biometry and Technique at SLU, and Ulf Ranhagen, Professor at the Royal Institute of Technology, showed how this is possible by introducing powerful, alternative socio-technical systems solutions, supported by more moderate material consumption.

Mystery and wonder
At a seminar called The Climate Crisis as a Spiritual Challenge KG Hammar, former Archbishop of the Church of Sweden, and Mikael Kurkiala, Senior Lecturer in Anthropology at Uppsala University discussed the role of spiritual traditions in the struggle to save the environment. Kurkiala noted that since World War II humanity has faced continuous threats and crises, for example, weapons of mass destruction, environmental threats and population explosion.

In our time we see a new threat: the climate crisis and global warming, and we turn to scientists, technicians and other ‘fixers’, because we cannot see any other alternatives. This lack of alternatives, Kurkiala noted, is something new in the history of humanity. We seem to have reached way’s end, and we feel a great listlessness.

– The great superstition, he added, is that we have come a bit closer to the mystery of life, but we have not. Science might be able to give answers to my
Knowing and understanding this world of nature demands intuitive empathy as much as scientific rationality.

Ecofeminism is a critical perspective that interconnects feminism and ecological crisis. It shows the interconnection between the domination of women and the domination of nature.

On the ideological level women are said to be “closer to nature” than men, in the sense of being more aligned with the body, matter, the emotions and the non-human world. On the socioeconomic level women are located in the spheres of reproduction and domestic labour, and hence women need to take the lead in creating a more earth-based spirituality and practice of care for the earth. However, most ecofeminists reject this view of women as the “natural ecologists”, recognizing that this tends to make the work of healing nature “women’s work”, while men continue to have the right to abuse and destroy it.

Another very well visited seminar was Climate and Conflict: What consequences do the climate changes have on conflicts? It is presented as a separate article on page 3 by the seminar holder Peter Haldén, of the Swedish Defence Research Agency.

The closing ceremony in the Cathedral on Saturday afternoon offered reflections on the Summit and thoughts about the future, as well as brass and vocal music. The last speaker before Archbishop Anders Wejryd called down God’s blessing on all participants was Rabbi Arthur Waskow. He shared thoughts about the two names that God revealed to Moses from the burning bush, namely ‘I will be who I will be’ and (in Latin transcription) ‘YHWH’, a Hebrew word not quite with vowels, not quite with consonants:

– If you try to pronounce them, what comes forth is a sigh, a breathing, the breath of life. We are able to breathe in because the trees and grasses breathe out what we need to breathe in, and we breathe out what they need to breathe in. God said: I am the breath of life. These words, these names of hope, we must carry into the world to make change possible. I, we will be who we will be. We can, we will become. We affirm, celebrate, act and heal the breathing, the inter-breathing of all life.

† Read more about the signatories in Rosemary Radford Ruether’s article Is there hope for the future? on next page.
Twenty-eight people from eight faith traditions from all continents of the world were in focus at the Interfaith Climate Summit that took place in Uppsala, Sweden, in November 2008, as they signed the Manifesto at a ceremony in the Cathedral. One of the signatories, Rosemary Radford Ruether, presents the content of, and the thoughts behind, the Manifesto text. She also gives an outline of the background and communities of the signatories.

THE INTERFAITH CLIMATE SUMMIT:

Is there hope for the future? Rosemary Radford Ruether

“As religious leaders and teachers from the whole world, gathered in Uppsala 2008, we call for effective leadership and action in view of the global threat to the climate. From religious traditions, with different approaches to religious life, we come together at this time in human history to assure the world of what we have in common. ... We have reflected on the concerns of scientists and political leaders regarding the alarming climate crisis. We share their concerns.”

From the Uppsala Interfaith Climate Manifesto

The Manifesto issued by the Interfaith Climate Summit (see also article on pp 7-10) was written in advance of the gathering through an e-mail dialogue over a year’s time. An initial draft of the Manifesto was sent out and invited experts commented on it. Through this process a completed version was drafted by a committee in Uppsala and was ready for a formal signing and proclamation at the time of the Summit.

Added to the Manifesto proper are two background texts that underlie the standpoints and attitudes in the Manifesto. The section on Ethical Spiritual Horizons on Climate Change lays out the needed contributions of the world’s religious traditions to impelling deepening motivation for action. The world’s religions do not bring a different scientific analysis from that offered by the scientific community. Rather they concur with the urgency of the threat to the climate that scientists have shown is caused by human activity.

But the religions bring an added dimension to the issue often lacking in secular perspectives. This has to do with renewing the sense of wonder and awe at the preciousness of the universe, rooted in divine creativity and revealed as sacred. Religions bring traditions of spirituality that inform the meaning of the truly good human life, based on “being more, rather than having more”, which is needed to counteract the consumerist mentality. Changing current trends in global warming will require, not just technological fixes, but a different life style based on simplicity of life, love of neighbor and a sense of oneness with creation.

The Manifesto details the distinctive contributions of eight religious traditions: oral and indigenous traditions, Hinduism, Confucianism, Daoism, Buddhism, Judaism, Christianity and Islam to the issues of care for creation. Here the Manifesto draws on the work on religion and ecology done over the last two decades by the Forum for Religion and Ecology led by Mary Evelyn Tucker and John Grim, now based at the School of Forestry of Yale University. Tucker and Grim were advisors to the development of the Summit, although they were not able to be present at the actual gathering.

Stewards for creation

The Manifesto also acknowledges that different world religions have patterns that can be used in a negative way toward care for nature, such as ascetic flight to a higher spiritual world that despises material reality, or an anthropocentric claim to human domination over nature that instrumentalizes the physical world. Yet the world’s religions all have countervailing trends that see the divine as pervading the natural world, celebrate creation as the sacramental manifestation of the divine and call for humans to be stewards called to exercise responsible care for creation who are ultimately accountable to God as creator.

In earlier writing on ecology and religion in the 1960s and 1970s it was common to blame religion for the ecological crisis. This was expressed in the famous 1967 article by historian of science Lynn White, The Historical Roots of our Ecologic Crisis, where the Biblical doctrine of human domination over nature was blamed as the chief cause of earth’s destruction. Study of the relation of religion and ecology was partly spurred among religious scholars in response to this criticism.

More recent thinking is inclined to see the source of the ecological crisis as lying less in religion itself than in modern scientific views of the unlimited rights of humans to use nature for power and profit through technological practices, such as the massive burning of fossil fuels, causing air pollution and global warming. Religious communities and institutions have been less the source of these scientific views and technological practices, which have often been hostile to religion as “unscientific”, than they have been uncritically captive to them.

While all the world’s religions have the potential for countervailing views, they have generally failed to communicate these traditions to their members and to mobilize them to counteract the destruction. Only recently have a few religious leaders spoken out against the abuse of nature as sinful, and even these leaders seldom shape compelling spiritual and ethical mandates for ecological living that really reach the grassroots of their communities.

Yet the world’s religions, once they become mobilized on the side of ecological healing, can play an essential role. Recently environmentalists have begun to realize the importance of aligning religion on the side of ecological ethics.
While a scientific analysis of ecological crisis can detail the terrible effects of toxic waste and excess burning of fossil fuels on air and water as rational data, the power of religion is needed to motivate and mandate respect for nature by teaching a world view calling for care for nature as a reflection of the love of God and the sacredness of creation. Religion is needed to convert and motivate billions of people worldwide to change their practices in relation to nature. This is what the Interfaith Climate Manifesto seeks to do: to call the world’s religions to join hands with science in a common quest to save the planet.

**Consequences and challenges**

The second background text, titled *What do we know; what has to be done?*, makes clear that climate change is not just a problem of physical changes in temperature and rising seas. These changes are causing a global disruption of the relations of humans to each other, to other species and to the whole planet. Climate change means the melting of glaciers that threaten the survival of animals, such as polar bears that are losing their habitat, and rising seas that will flood the many low lying cities around the world built on coastal plains and sink entire islands. Climate change means more violent weather, drought, floods and stronger hurricanes that are destroying vast areas of human settlement, so evident in recent catastrophic events around the world.

Up to thirty percent of plant and animal species could face extinction if temperatures rise more than two centigrade. Agriculture in tropical areas will be devastated, leaving millions in danger of starvation. Acidification of the oceans due to atmospheric carbon dioxide is destroying coral reefs and undermining marine life worldwide.

Peoples from flooded islands and coastal areas will become refugees seeking places to resettle on higher land in ways that will tend to accentuate intergroup conflict and violence. Northern peoples, such as Scandinavians, Russians and Canadians, may initially seem to profit by longer growing seasons, while seeking to bar the immigration of people uprooted from flooded and drought-plagued tropical areas. It is the world’s wealthiest people, particularly North Americans and Northern Europeans, who contribute the vast majority of the fossil fuel emissions that are causing climate change, while it is the poorest and most vulnerable people of the world who are most threatened by it. This means that climate change is not simply a question of science and technology, but an issue of global justice. The voice of the world’s religious and ethical traditions is needed to lift up this dimension of global justice and to help foster a new ethic of solidarity between North and South, between the more fortunate and the most vulnerable.

The section of the Manifesto called *What do we know?* lays out the details...
of changes in planetary relations that are not just projected for the future, but are already happening. The Manifesto details the effects of rising temperatures on shortages of potable water, threats to food production, the massive numbers of refugees, more extreme variations of weather, increased diseases and species in peril.

The Manifesto then turns to a concise discussion of What can and must be done?. Central to this discussion is the cause of the problem. Perhaps “de-sil fuels, rather than just duplicating technologies and forms of energy must fall particularly on their shoulders. This is the issue that has caused American political and business leaders to balk at addressing climate change as an issue that they must take seriously.

A conflict then arises between “development” to overcome the inequities between developed and developing nations and cutting emissions to curb climate change. Should poorer peoples and nations be denied the opportunity to develop in the name of preventing more emissions that cause climate change? Can rich nations say to the poorer ones “you cannot develop” because we have already caused unacceptable damage to the earth which must now be kept to a minimum? How do rich nations cut back on emissions while still allowing poor nations to aspire to a more decent life where the basic needs to their people are met? One way of responding to this problem of equity is to assume a trade-off between richer and poorer nations, where the rich nations drastically cut their emissions, while poorer nations continue on the same path of fossil-fuel dependent global development for a while longer.

While the Manifesto refers to such trade-offs, it suggests that poor nations also need to develop alternatives to fossil fuels, rather than just duplicating a western style of development that is the cause of the problem. Perhaps “developing” nations should think more in terms of by-passing the fossil-fuel dependent form of development that can only profit an elite in their societies, while making most people poorer and contributing to more global warming. Rather they might move directly to alternatives ways of living based on renewable energy, focusing on local resources and community, rather than global trade and transportation chains. In other words, western and third world societies need to find different ways of moving toward more sustainable modes of life needed for a viable future for us all.

Signatories from many traditions
Archbishop Wejryd of the Church of Sweden had invited twenty-eight religious leaders active in environmental concerns from the world’s religions to formally sign the Manifesto. These included representatives from Judaism, Christianity and Islam, Hinduism, Buddhism, Sikhism, Daoism and Native American traditions. This was a very interesting assembly of persons who were chosen for their contributions to lifting up ecology as an issue for their religious tradition, not by official appointment by their religious hierarchies. For example, the representative of Daoism was Liu Xiaogan from China, researcher in Beijing and the Chinese University of Hong Kong, eminent scholar of Daoism and editor of the book on Daoism and Ecology in the Harvard series on Religion and Ecology.1

Among the Jewish representatives were Israeli author Hava Tirosh-Samuelson, editor of the Harvard series volume on Judaism and Ecology,2 Rabbi Awraham Soetendorp of Amsterdam, the Netherlands, a founder of the Earth Charter, and Rabbi Arthur Waskow, a leader in environmental Judaism for many decades.3 Buddhist monks active in environmental concerns came from Thailand (Parichart Suwanbhabha), Cambodia (Bikku Khy Sovanratan) and Taiwan (Bhiksuni Chuehman Shih). Muslim representatives included the Grand Mufti of Syria, Sheikh Ahmad Badr Al-Din Hassoun, a woman Sheikhha, Amina al-Jerrahi, leader of the Halveti Jerrahi Sufi order of Mexico, and Abdus Sabur of Thailand, Secretary General of AMAN, a network of Muslims in Asia.

Religions bring an added dimension to the issue often lacking in secular perspectives.

The Manifesto hopes to emphasize the urgency of the threat, but also to lift up a vision of hope for real action on climate change that will not only aid the survival of the planet, but also shape a better life style for humanity based on the cultivation of spiritual values, the values of justice, love for neighbor and care for creation. What is needed is not just technological fixes, but a conversion of the spirit that recognizes what really makes for the good human life through “being more rather than just having more”.

With the occurrence of climate change the world is facing not only a number of challenges, but also negative synergies between different problems. Worsened water scarcity and food shortage is a breeding ground for hostility and competition. Poor societies are prone to conflict. Peacebuilding, together with social resilience, help communities cope with climate adaptation as well as violent conflict.

The links between climate change and violent conflict – and peacebuilding as a solution to both

Karina Kristiansen & Dan Smith

The global debate on climate change has mainly centred on the scope of a potential carbon emissions mitigation deal, which is to be agreed at the international climate summit in Copenhagen by the end of this year. The main components of the debate have been discussions of the need for such a deal and how to implement it, and we have also seen intense disputes about the scientific facts and myths. Lately, however, another important aspect of climate change has received increasing attention: the necessity of adaptation to climate change.

This new focus was particularly evident at the climate conference in Poznan, Poland, in December 2008 and builds upon the findings of the Fourth Assessment Report of the Inter-Governmental Panel on Climate Change (IPCC) in 2007 reflecting a broad scientific consensus that climate change is already unfolding as a result of global warming. It is now widely recognised that global temperatures will continue to increase in the next two to three decades even if we drastically cut down our emissions. It is therefore crucial to adapt to these inevitable climatic changes to prevent climate-related human disasters in the near future. The developing countries are the most vulnerable to climate change and the most likely to suffer from the consequences. Adaptation is therefore particularly crucial in these countries – not least because there is an increased risk of armed conflict linked to climate change.

Consequences of consequences

Adaptation is not only essential for minimising the risks attached to the direct physical consequences of climate change. It is also crucial for preventing the negative socio-political consequences of consequences. The IPCC has predicted a global increase in temperatures of 1-3 degrees in the next 50 years. The physical effects of this will either be experienced as sudden shocks, such as tropical storms and floods, or slow onset changes, such as the steadily falling water levels in the Ganges basin, lengthening droughts on the margins of the Sahel, glacial melting in Peru and Nepal, and rising sea levels affecting small island states and big coastal cities in particular. All these physical consequences will most likely generate a long chain of interlinked social consequences in weak states that are not in a position to prepare for or recover from disastrous events.

These knock-on consequences will be felt as negative changes around water, agriculture, energy, health, migration and urbanisation. Water itself will be affected in several different ways. Water scarcity on one hand and extreme water surplus on the other hand are both likely – and dangerous – consequences of climate change, depending on the context and the geographic location. Fresh water scarcity can be a result of rises in temperatures and changes in the length of the monsoon, leading to long periods of droughts. Glacial melting and intensified monsoon also have a problematic impact. They increase the risk of flooding and humanitarian disasters, and even though melt water will cause inland water levels to rise in the short term it will most likely be followed by a downturn later. India and China are among the most vulnerable countries to this changing situation of water resources. In their transition from agricultural countries to industrial powerhouses the water shortage combined with a growing demand is causing tensions over water rights, within and beyond borders. Peru is a quite different example. The melting of the glaciers threatens the stability and eventual sufficiency of water supply and may cause irreversible water scarcity by 2015 to as much as 70 per cent of the population.

Agriculture will be put under immense strain as a consequence of global warming and diminishing water supply. Crop yields will most likely be falling in mid- to high-altitude regions, many of which are already prone to food insecurity such as Southern Africa, Central and South Asia. Low-lying coastal areas with large populations will also be affe-

There is an increased risk of armed conflict linked to climate change.
activities, either briefly or in prolonged periods. In addition to this climate change will increase the overall requirements for energy. The risk of a vicious energy circle is therefore evident as the increased energy requirements inevitably lead to an increase in carbon emissions and thus worsen global warming.

The melting of the glaciers threatens the stability and eventual sufficiency of water supply.

One likely consequence of such deterioration of governance, agriculture, energy and health is that people will be forced to move. Migration and urbanisation will therefore occur on a much greater scale around the world than is the case now. This can be said with some confidence, even though it is difficult to distinguish between the climate change induced increases and increases caused by other factors such as population growth. Projected population growth is the main reason that urbanisation is expected to increase significantly in the coming decades, and it might also influence other types of migration. In general terms though, migration will most likely be affected by the consequences of climate change on top of other factors. Stern estimates the scale of migration to reach 200 million by 2050 partly because of climate change. This will undoubtedly put further pressure on already struggling poor communities, and it will to a larger degree internationalise otherwise local challenges of climate change.

A double-headed problem

These consequences of climate change form some key risks for already weak societies: political instability, economic weakness, food insecurity, and demographic changes.

First of all, climate change will put increased pressure on basic state functions such as provision of health care and food security. This is particularly critical for the population of fragile states or states in transition, which are already struggling – or not willing – to provide for the basic needs of their citizens. Such weak governance will therefore increase political tensions and instability.

Secondly, poorer countries, which tend to be agrarian states, will be much more susceptible to falling crop yields, extreme weather events and migratory movements. This will hinder economic development and worsen poverty for large numbers of people who will see their livelihood security disappear, while the risk of violent conflict increases.

Thirdly, food security will be reduced due to a constant uncertainty of food supply. This uncertainty is based on changes in several links of the food supply chain. It can either be caused by the destruction of arable land and changed growing seasons, or more indirectly by damage to the infrastructure. The latter plays a crucial role for the transportation of food, and damaging it can therefore be just as fatal for food security as loss of arable land. Both result in further grievances among the population that could lead to conflict.

Finally, climate induced migration and urbanisation place a strain on host communities, which might already have scarce resources. When people are forced to move they naturally search for new places with more resources and greater livelihood opportunities, but in the context of climate change the surrounding areas might have suffered from the physical effects themselves. This places the receiving societies in a poor situation to share their resources and opportunities. The likelihood of changes in resource allocation as a consequence...
of migration generates hostility towards the newcomers, due to fear of losing social position and prestige. Moreover, some of the most densely populated areas are in low-lying coastal zones and are particularly vulnerable to rising sea levels, which places further pressure on the societies and their governments. The combination of population growth, internal migration, basic shortages and the steady threat of climate change can trigger severe social tensions.

With all these severe socio-political risks interacting, violent conflict is an almost inevitable consequence. Poor communities therefore face not one but two major threats – climate change and violent conflict. Moreover, these two threats will negatively reinforce each other: climate change will most likely compound the propensity for violent conflict, which in turn will leave communities poorer, less resilient and less able to cope with the consequences of climate change.

In the report ‘A Climate of Conflict’ International Alert pointed out how 46 countries – home to 2.7 billion people – have a high risk of violent conflict, due to the combination of vulnerability to climate change and severe economic, social and political problems. Moreover, in a further 56 countries there is a high risk of political instability. The risk of armed conflict may not be so immediate here, but it could be one of the consequences if the political instability is not dealt with appropriately.

Nepal is among the 46 countries in the high risk zone. The country is in the front line of climate change because of glacial melting and changes in the timing of the monsoon – both building on climate variability that is already extreme. Moreover, it has only recently come out of a ten-year civil war and is therefore in a particularly vulnerable state. The severe flooding in 2007 and 2008 has added to this vulnerability, and failed crops and forced migration have increased tensions in the country which could lead to renewed violence.

Darfur is another good example of the link between climate change and violent conflict and illustrates the slow-onset changes. The conflict has been referred to as ‘the first climate war’ by many, but such a simplification is not adequate for understanding the conflict, the complexity of its causes, and the current vulnerability of the area. However, the impact of climate change, in particular the 20-year Sahelian drought, has played a major role in intensifying grievances in Sudan because of less land being available for both farming and herding. Further climate change could therefore increase the intensity of the current conflict and lead to more conflicts in the area.

A unified solution

Even though adaptation has gained more attention and is now considered
an essential part of development by some European governments, the risk of armed conflict suggests that adaptation efforts must allow for a rather different approach than we have seen so far. Technical solutions such as disaster warning systems, better dams and stronger houses are not enough. Such efforts might be sufficient for preventing or reducing the direct consequences of climate change, but adaptation to the indirect consequences requires a much more comprehensive societal change. The key is creating social resilience – that is, the capacity to absorb stress or destructive forces, to manage or maintain basic functions and structures during disasters, and to recover quickly after such events. Building resilience thus means building a society that is well governed, understands the risks it faces, is able to manage those risks and minimise its vulnerability to them, and is prepared to respond to inevitable disasters.

Interestingly, this social process of building resilience is in essence the same for successful climate change adaptation as for successful peacebuilding. Both seek to build well governed, adaptable societies that can manage shocks – natural or human induced – in a smooth manner. Therefore, adaptation and peacebuilding are effectively the same kind of activity, involving the same kinds of methods of dialogue and social engagement, and requiring the same values of inclusivity and transparency from governments. Addressing one part of the problem automatically addresses the other part of the problem, because the involved communities need exactly the same capacities to overcome their challenges. So when practising peacebuilding, one is essentially assisting countries in adapting to climate change at the same time. Thus, to the double-headed problem of climate change and armed conflict, there is a unified solution.

Moreover, climate change adaptation and peacebuilding can even positively reinforce each other, if dealt with properly. Adaptation offers a reason for divided communities to cooperate. Living under the external threat of climate change, adaptation is not only a means to fight this threat, it also becomes a reason to unite against it. This combined effort can maximise the potential of adaptation, as united communities are in an even stronger position to tackle the effects of climate change.

To achieve these positive multiple outcomes, adaptation should to a larger degree be considered a social process, instead of a technical exercise, and its main target should be resilience – with conflict prevention as a side-target. Adaptation can and must be made conflict-sensitive and peacebuilding and development must be made climate-proof.

Existing examples of the social process towards resilience can be found in the Philippines, where a local governor has recently launched an extensive climate change adaptation programme as a reaction to rising sea levels and storm surges. This programme does not only consist of technical prevention and risk reduction, it also educates the population on several levels on the threats and necessary changes in everyday life and assists in establishing alternative methods of fishery and farming. The main focus of this mainstreaming of adaptation in the society as a whole has been to climate-proof and disaster-proof development.

Mexico and Argentina also offer examples of creative social adaptation. In response to increased flooding and drought risks, planting dates have been changed and new varieties of crop have been introduced, including drought-resistant plants such as agave and aloe. Moreover, crop stocks have been built up as economic reserve and community-based crop insurances have been established.

But resilience cannot be imposed on the communities as a top-down programme by authorities. It must be built in cooperation with local stakeholders, as a broad feeling and experience of inclusiveness are crucial factors. The hard science of climate change must be combined with local knowledge.

With social resilience as the goal, peace could be a potential positive effect of climate change. And vice versa: peaceful societies are in a much better position to resist the threats of climate change. It is in the objective of enhancing social resilience that we can see the prospect of a unified solution to the challenges of climate change and armed conflict.

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5. From the social resilience literature, i.a. John Twigg. ‘Characteristics of a Disaster-Resilient Community’, 2007
Rising temperatures and aggravated water scarcity are likely to be the consequences of climate change in the Middle East. These could either be sources of increased tension or stimuli for long term cooperation. Concerted efforts must be made by all actors and interested parties in order to find a sustainable solution to this issue of survival for the inhabitants of the region.

Conflicted Middle East challenged by water scarcity

So much of the energies of the countries of the Middle East are devoted to conflict that it is small wonder that environmental issues do not always receive the attention they deserve. It is hard to be concerned about long term issues such as air pollution or carbon emissions when instability and violence are never far away. And yet it is possible to argue that long term threats to the environment, and in particular to the supply and quality of water, constitute as great a threat to the long term well-being of the people of the region as does the sustained political conflict.

Israel, Jordan and Palestine are all countries classified as “water scarce”, that is, the amount of water currently available to them is less than that deemed minimally necessary by common consensus to support the demands for water for domestic, agricultural and industrial needs. All experts recognise that the three countries have insufficient water to meet current, let alone future, demand.

Currently this is most apparent in the Gaza Strip where the coastal aquifer, the main source of domestic supply for the million plus population, is heavily contaminated and over pumped. The Jordanian situation today is also extremely difficult. Many parts of Amman and other towns have access to piped water only three days a week, and domestic demand is growing rapidly. For their part the Palestinians – particularly those in rural areas – suffer continuous water shortage. Israel’s position is somewhat better, but the failure of the rains in the last two years has led to a crisis situation which will, unless there is sudden heavy rainfall this year (2009), lead to a drastic cut in the supply of water to agriculture.

The situation with regard to water availability is likely to get worse over the course of the twenty-first century as a result of two factors, namely population growth and climate change. Population growth appears to be inevitable. Current estimates put the total population of Israel, Jordan and Palestine to at least double by 2050. Not less significant is the potential role of climate change in reducing the amount of water available in the region.

Current studies all indicate that the impact of climate change in the Middle East will be negative. Temperatures will rise and rainfall (precipitation) decrease as a result. The number of extreme events, floods and droughts, can be expected to increase and a rise in the level of the sea appears inevitable.

While there are differing opinions as to the precise extent to which temperatures will rise and precipitation decrease, all informed opinion agrees that the effect of climate change in the Middle East will be to make water, already a scarce resource, even less available. This will put increasing strain on the limited resources of the region. Some authorities think that average temperatures in the region will rise between 2 and 2.5 degrees by 2050 while precipitation will decline by as much as 20 per cent.

The shortage of water which these figures predicate could either lead to increasing tension between the countries involved or alternatively to a realisation that only if they cooperate in facing this new challenge can they hope to overcome it.

Reactions of the Governments

The Governments of Israel and Jordan are both actively aware of their responsibilities with regard to climate change. Both signed the Kyoto protocol on CO2 emissions and are now actively involved in the preparation of a new agreement to replace that signed in Kyoto. Both countries are, however, small players in terms of their contribution to global warming and their efforts to reduce CO2 emissions cannot more than marginally affect the global picture. The Palestinian Authority, though equally aware of the threat posed by long term factors such as global warming, is in no position to do more than monitor the current situation.

Perhaps more significant regionally than the fight against CO2 emissions are the efforts being made by the countries of the region to look for ways of alleviating the threat posed by long term climate change to the well-being of their people. Jordan in 2005 initiated a project which aims at preparing the country to effectively responding to the demands of international agreements on biodiversity, climate change and desertification, while Israel has in place high powered expert committees working on similar concerns.

However a forward thinking response entails looking again at how water is managed, seeking for “new” sources of water and researching possible impact of climate change. Ultimately it will also involve looking again at the mechanisms by which water is managed in the region.

Of course some elements in the struggle to manage water effectively are well recognised. For example, the
need to repair and renovate urban distribution systems, which are reckoned in some cases to lose as much as 25 per cent of the fresh water they are supposed to distribute as a result of leaks in old pipes, is particularly apparent in Jordan and Palestine.

Treatment of waste water is also an area where the parameters of the problem and its long term solution are relatively clear. In Israel the wish to reduce the use of fresh water in agriculture and to replace it by treated waste water has led to the current situation where over 70 per cent of waste water is treated and available for agriculture. In Jordan and Palestine there is still much scope for waste water treatment and its use in agriculture. In Palestine less than ten per cent of waste water is treated and reused. This is to the detriment of farmers and of the underground aquifer which receives the untreated sewage. In all three countries there is an evident need to educate the public on water use and to make the maximum use of evolving technologies for domestic appliances.

Looking for “new” water

The challenge posed by climate change will make these efforts to improve water management all the more important, but they are not enough in themselves to counter water scarcity. "New" sources of water need to be found. The main hope of providing more water in time to cope with population growth and climate change in the region lies in the use of desalinated water. Improved technology has reduced the cost of desalination to a point where it provides water at almost the same cost as that obtained by pumping from deep wells. Already Israel desalinates at two plants on the Mediterranean coast, and additional plants are being built. By 2012 Israel expects to produce enough to account for about fifteen per cent of its needs.

The Jordanian Government also looks to desalination to help it keep water scarcity at bay. However the fact that it has no coastline other than the short stretch at Aqaba on the Red Sea, far from its main centres of population, makes desalination for Jordan more problematic. It is for this reason that the Jordanian Government supports a proposal to construct a conduit from the Red Sea at Aqaba to the Dead Sea, a distance of over 400 kilometres. Besides saving the Dead Sea from disappearance – the level of the sea is currently receding at a rate of over one meter a year – the proposed project (now the subject of a World Bank Feasibility Study to be completed in 2010) would provide water for a large desalination plant to be constructed south of the Dead Sea. The treated water could then be pumped to Amman and other towns in Jordan. While the results of the World Bank study cannot be anticipated, it is evident that even if the verdict is favourable, there will be problems in finding funding for the conduit (minimally five billion USD) in the present economic climate.

The Palestinian Authority could also greatly benefit from desalination. Plans were made almost a decade ago for construction of a large plant in Gaza, but these have been repeatedly put on hold over the last decade for political reasons. A major plant would make an immense difference to a population already in the grip of shortage, many of whom are drinking water which by World Health Organisation standards is detrimental to their health.

The West Bank has no access to the sea, but there has been talk for some years of building a plant on Israel’s Mediterranean coast which would supply desalinated water to the northern West Bank. There has been little progress on this proposal, in part at least because Palestinians are uneasy about giving Israel still more power over the water situation in Palestine.

Another possible option relates to the possibility of importing water from Tur-
key which has surplus water in the south of the country. This alternative nearly became a reality in 2004 when Israel and Turkey signed a provisional agreement which would have meant Israel buying Turkish water which would have been transported in specially constructed vessels. However, the costs of such a venture proved prohibitive and the agreement was allowed to lapse. Proposals for an underwater pipeline, for supply of water by sea in large “plastic bags”, and for construction of a pipeline from Turkey across Syria have all been discussed, but so far a mixture of doubts about costs and political considerations have meant that no progress has been made.

In all three countries there is an evident need to educate the public on water use.

Facing challenges together

Besides trying to improve water management and looking for “new” water, the countries in the region have begun to take stock of what changes are likely to occur as a result of climate change. One major project designed to provide scientific results to decision makers is known as the GLOWA Jordan River project. Researchers from Jordan, Palestine, Israel and those from Germany, whose government finances the projects, are working together to look at ways in which climate change can be expected to affect the future of the basin.

The GLOWA project and other similar endeavours are designed to create working relationships between experts in the three countries of the region. They are based on the premise that if those with professional knowledge in the three countries co-operate, their results will be of more value than if they work in separate national groups. It is already clear that development plans for agriculture and tourism among others, made by each country separately, will have to be modified in response to new information becoming available about climate change.

Since much of the water available to the inhabitants of Israel, Jordan and Palestine is shared, both surface water (rivers and streams) and underground water (the various aquifers), simply by being cross-boundary in character, limited cooperation has taken place over the years. A plan formulated by an American expert in the 1960s known as the Johnson plan has over the years been the basis for cooperation over the waters of the Jordan River. The establishment of the Joint Israeli/Palestinian Water Committee as a direct result of the Oslo Accords in 1995 provided a forum for joint management of water on a day-to-day basis. The Committee still meets today. An agreement between Israel and Jordan, under the terms of which Israel supplies and Jordan, under the terms of which Israel supplies Jordan annually with a limited amount of water from the Sea of Galilee (Kinneret), has been honoured by Israel even in times of drought.

But these positive features cannot disguise the fact that cooperation has been spasmodic at best. The Joint Israeli/Palestinian Water Committee, for example, has done good work but has not removed the Palestinian sense of being junior partners, unable to influence major decisions. If the three countries are to respond adequately to the challenge posed by climate change, they will need to develop more sophisticated mechanisms for doing so.

Among needed institutional changes is the establishment of a Jordan Basin Authority on which all riparians are represented. This could be adapted from the model introduced under the terms of the European Water Directive. It would also be very positive if the Joint Israeli/Palestinian Water Committee could be reconstituted with a new mandate, an effective secretariat and the participation of a mutually acceptable third party.

The area of data sharing is one in which much progress could be made without incurring additional expenditure. Data should be made freely available so that conclusions can be drawn from it on the basis of shared concern for all the people of the region. Joint development planning would also be essential if water scarcity is to be adequately dealt with.

The NGOs working across borders, such as Friends of the Earth Middle East and the Israel Palestine Centre for Research and Information, which seek to promote joint activity among Israelis, Jordanians and Palestinians at both grass roots level and among professionals, should be encouraged, while international donors should play a larger part in sponsoring joint research and cooperation among the countries of the region. New institutional frameworks such as these will not be readily accepted or easy to introduce. But they are a sine qua non if generally accepted decisions are to be taken about the use of a very limited resource, water.

Of course there is no way in which decisions about water or about response to climate change regionally can be taken in isolation from the generally conflictual situation in the region. It may be that in the event the three countries will find themselves in violent competition for a limited resource, but it is equally possible that the manifest threat posed by declining water resources will trigger more serious consideration within the region as to how best the Governments and peoples of the region can work together to save themselves. The penalty of failure to cooperate may be to turn the environmentally vulnerable lands of Arabs and Jews into over-crowded semi-deserts.

References


GLOWA Jordan River – for further details enter the GLOWA Jordan River home page – http://glowa-jordan-river.de


The Arctic is one of the regions that show some of the most dramatic signs of global warming. In a short term perspective the rapidly melting ice opens up for new shipping lanes and a wealth of natural resources, but the long-term consequences may be devastating, with alarming effects on the environment as well as the region becoming an arena for hot and cold conflicts.

CONFLICT OR COOPERATION?

Climate trap on the Arctic tightens

Catrin Rosquist

The Arctic area circling the earth’s North Pole is presently subject to extensive and tumultuous shifts, most of which are consequences of ongoing climate change. They are represented by elevating temperatures that are causing the ice to melt – ice that for thousands of years covered the Arctic Ocean and surrounded land covered with ice and snow. Fifty years ago, the polar ice caps were twice as big as today. These drastic changes are taking place in an area more fragile and vulnerable than the rest of the world as it warms up faster. During the next century there might be a temperature increase of 4-8 centigrade.

The receding ice reveals both possibilities and risks. Not long ago, the Arctic was an area that was largely left alone given its inhospitable and impenetrable territorial nature. However, with new ocean floor becoming visible and increasing accessibility, new possibilities for transport are opening up. Using the once ice-covered water as shipping lanes the distance between, for example, Europe and Asia would be considerably shorter, saving plenty of time and fuel costs.

Outweighing this, however, is the fact that the more accessible the Arctic becomes, the more exposed are the ‘treasures’ so far hidden underneath the ice caps, namely highly valued and attractive resources in the form of minerals, coal, gas and oil. The US Geological Survey estimates that about 13 per cent of the total amount of undetected oil, 30 per cent of the world’s undetected natural gas and circa 20 per cent of the undiscovered natural gas liquids are to be found under the Arctic ice.1 As oil and gas reserves are steadily depleting, these reserves will play a vital role in the coming 20 years. It is estimated that Arctic Canada alone holds 12-15 percent of the world’s undiscovered diamonds.2

Given the economic value of the resources and fresh shipping lanes of the Arctic, it is easy to predict a scenario in which countries in the vicinity of the Arctic are keen not only to access the undefined territories and resources, but also to preserve military strategic and climate-related interests by using sonar nets and arming their icebreakers. At the time of the Cold War, the Arctic was where the “beeline to mutually assured destruction passed through”,3 which resulted in the Arctic becoming one of the most militarised regions in the world due to the region’s strategic mobilisation. While the challenges have diminished, the area remains of strategic importance from a military point of view, as new shipping lanes imply greater possibilities for an augmentation of military supply distribution. For example, this can benefit NATO, the United States (US) and allied Asian nations, as the area can be used for constructing military bases and for troop deployments.

Scramble for the Arctic

A complicating factor is that there are no established maritime boundaries in the region north of an area considered an international zone and overseen by the International Seabed Authority. In effect, this situation creates an environment conducive to strong competition. While the technology at hand today is not enough to accurately explore the resources in the Arctic, actors are mobilising on different fronts to map and submit their claims to the area. The situation in the Arctic is beginning to develop into a spiral that could trigger hot and cold conflicts if no preventive and regulative measures are taken.

Although both China and Britain have expressed Arctic interests through mapping expeditions, and the former even participated in Russia’s oil and gas shelf projects, the key players in the scramble for the Arctic primarily include its littoral states: Russia, Canada, the US, Norway and Denmark. Some noticeable actions are worth mentioning. On 2 August 2007, Russia demonstratively dispatched a submarine to plant a flag 4,000 metres underneath the North Pole, then sent warships to monitor the Arctic waters and flew strategic bomber flights over the Arctic Ocean, which has not happened since the Cold War. Whilst the legal significance of the planting of the flag remains debatable, these events certainly tightened the snare on the Arctic and put it on the international agenda.

Russia and Canada are the two Arctic coastal countries with the largest territorial claims. In effect, this means that if they are granted ownership of their claimed areas, they will literally own enormous assets seeing that the majority of the oil and gas resources in the North are located in these specific areas. Previously, the US had the ambition of acting on the side of the other Arctic nations in view of the fact that it has not yet legally committed itself to international maritime law. The country faces
the challenge of finding solutions to its energy crisis and is also eager to ham- per Russia’s ambitions to access export routes and energy deposits in areas outside of Russia.

Furthermore, the US monitors Russian military mobilisation on the Kola Peninsula in the Barents Sea. However, the US military presence in the region itself is relatively limited, with only one icebreaker sufficiently equipped for the Arctic environment, compared to Russia’s 18. Nonetheless, the Arctic remains a strategic US military location, as the area could be used as a defensive zone against flight attacks, and, not least, a territory for its military forces.

Canada’s Arctic territory includes the length of its Northern archipelago, the Northwest Passage and its surrounding water. Canada is currently conducting studies for submission to a United Nations commission to determine the extent of its continental shelf in the east and west Arctic beyond the 200 nautical mile limit. In the navigable season the presence of ships and patrolling airplanes secures its sovereignty. Forthcoming Canadian plans include the construction of a new icebreaker, “Diefenbaker”, to be operational within ten years, and 6-8 Arctic/offshore patrol ships. Canada is also planning to build two military installations to reinforce its sovereignty in the North – an Arctic training centre at Resolute Bay, and a deep-water berthing and refuelling facility on Nansivik, on Baffin Island. Norway’s claims involve its right to Svalbard and the surrounding areas.5 Denmark is relevant in this case because of its sovereignty over Greenland.6 One of the territorial disputes Denmark is involved in concerns Hans Island.

Moreover, considerable money is set aside by multinational players, such as British-owned BP and Russian-owned Gazprom, in order for them to be able to purchase drilling rights and to develop gas pipelines for market distribution. Finally, Arctic actors also include civil society groups, who are increasing their activities – gaining in strength and number – as the issues of Arctic indigenous populations’ rights as well as environmental protection are becoming alarmingly pertinent, and at the same time are more frequently highlighted in media channels.

The legal framework
What does international maritime law stipulate? The United nations Con-

vention on the Law of the Sea 1994 (UNCLOS III) allows for a 12 nautical mile zone for territorial waters and an extended territory of 200 nautical miles beyond the shore of a specific Arctic littoral country. Consequently, that country has the right to use the resources located within that particular area – an economic zone is included. These two stipulations have never been a problem before, but as the ice recedes, the outer ring of the Arctic reveals new unexplored – and undefined – areas. In January 2008, a decision was taken at a State Party Meeting of UNCLOS III to appoint a Commission on the Limits of the Continental Shelf to review and certify the Arctic claims.

There are two distinct approaches to handling the territorial division in the Arctic. One can either draw longitudinal lines from the North Pole, or split up the Arctic according to a principle of proportionality adjusted to coastline length. The former approach is chiefly supported by Russia and the latter is backed by Denmark and Canada.

In May 2008, a ministerial meeting took place with the five coastal states in Illulissat, Greenland, to discuss the future of the Arctic. The discussions resulted in the Illulissat Decla-

ration, in which Canada, Norway, the US, Denmark and Russia committed themselves to show consideration for the legal framework set up in UNCLOS III. Regrettably, the development of a legal regime was not seen as a priority. Rather, it was deemed more vital to guarantee that the coastal states abide with international law, at the national level as well as internationally, through internal cooperation and collaboration with other concerned actors towards enhanced environmental protection in the Arctic. Unfortunately, none of the other Arctic nations, such as Sweden, Iceland or Finland, indigenous groups, relevant environmental organisations or other nations were invited to Illulissat.

The most prominent organisation involved in circumpolar cooperation is the Arctic Council, founded in September 1996. It is a “high-level intergovernmental forum to provide a means for promoting cooperation, coordination and interaction among the Arctic States” (Arctic Council 2007a). In order for the Council’s eight members – Canada, Russia, Norway, Denmark, Iceland, the US, Sweden and Finland – to achieve these objectives, specific working groups have been formed. They execute the programmes and projects mandated by
the Arctic Council ministers, and conduct research on pollution in the Arctic (monitoring, assessing and controlling), climate change, biodiversity conservation and sustainable use, emergency preparedness, prevention and response, and the environment of the Arctic’s inhabitants. Indigenous communities are considered important for the research carried out by the Arctic Council.

Scientists warn that this would imply consequences of apocalyptic dimensions.

Internally, the members of the Arctic Council share the same agenda concerning environmental protection and sustainable development. However, when it comes to burning issues such as the current resource competition, seabed mapping results and claims, energy needs, the consensus among the members is not quite obvious. Importantly, the US decision not to ratify UNCLOS III is a serious impediment to sustainable collaboration. Another Arctic cooperation initiative is the Barents Council. It was established by Finland, Norway, Sweden and Russia in 1993 with the aim to enhance cooperation with special emphasis on socio-economic development.6

Environmental risks

There is an impending risk that humanity imposes upon itself in a vicious circle, where the burning of fossil fuels contributes to global warming, which in turn causes the Arctic ice to melt, thereby exhibiting additional supplies of fossil fuels with the potential of further aggravating an already alarming situation. Other significant environmental challenges such as traffic, construction and pollution will have a direct impact on the fragile ecosystem of the Arctic. The drilling in itself poses risks, as the likelihood of oil spills increases, which has been emphasised by many environmental groups.

The by far worst scenario, however, would occur with the melting of the permafrost to a point that would release hitherto condensed carbon monoxide and hydrocarbons like methane gas. Scientists warn that this would imply consequences of apocalyptic dimensions.

According to the US National Oceanic and Atmospheric Administration’s “Arctic Report Card 2008”, there are six causes of concern in the Arctic. They include a) diminishing Arctic sea ice, b) elevated atmospheric and Arctic Ocean temperatures, c) increased loss of Arctic permafrost, d) the environmental impact on Arctic marine life, and e) danger to the Greenland ice shelf. Another consequence of the melting ice is that the darker ocean, appearing after the ice has melted, absorbs more radiation from the sun, which could impact the weather not only in the Arctic region but also in the rest of the world.

The complex problems in the Arctic underline the dramatic changes in our climate and the fact that we still have a long way to go before the forthcoming energy crisis will be resolved. But instead of letting greed and pride prevail, the solution needs to include a multi-pronged approach as well as several actors at different levels, as the concerns are overlapping and of a global nature. Already existing cooperation initiatives like the Arctic Council and the Barents Council need to be strengthened and followed by others, possibly also at a bilateral level. Of course, the most attractive but perhaps most unattainable solution would be the development and compliance with a treaty on the Arctic. Such a treaty would, however, necessitate collective responsibility and a consensus on how to deal with the Arctic resources. Even if some positive efforts are made, the existence of such a consensus is quite doubtful the way things are today. Whatever happens in the future, it is of crucial importance to take significant preventative steps in order to hamper what has the potential of turning into violent conflict in the Arctic.  

1 BBC NEWS, “Arctic has 90bn Barrels of Oil”, published 24 July 2008
6 For more information on organisations involved in circumpolar cooperation, please consult Wil-

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CLIMATE CHANGE:

New complexities, new conflicts and new challenges  
Anil Raj

Recent investments in the study of climate change and its impact on a range of issues – from development to disaster preparedness and response – has been regarded as a substantial first step forward by the global community to address and mitigate the consequences brought on by climate change. While climate change is a form of conflict on its own, it has produced new complexities in ongoing armed conflicts, and in some cases, has spawned new conflict altogether. Shortages of global water resources, the shifting of arable lands, and increasingly deadly natural disasters, among other examples, are all contributing to the formation of new layers to ongoing conflicts. Humanity’s need to secure overall environmental security is indispensable to the survival of people everywhere.

It is important to keep in mind that cyclones, earthquakes, droughts or other relevant occurrences are not inherently ‘natural disasters.’ Rather, these natural occurrences become ‘natural disasters’ when a given society’s coping mechanisms fail to protect its citizens, resulting in intolerable death and destruction. Moreover, natural disasters place even greater strains on states that are embroiled in armed conflict, since these conflicts already place a strain on social infrastructure, resources, and the effectiveness of public institutions. Consequently, braving these newfound realities in regions compounded by conflict will necessitate an examination of governance, conflict, and the human security nexus.

This article will seek to highlight the impact of natural disasters on societies plagued with civil conflict and poor governance. By way of organization, a brief overview of the trends in the context of natural disasters will be presented. Secondly, two case studies will highlight how conflict can affect a country’s ability to respond to natural disasters and how natural disasters/climate change can affect conflict. Finally, possible solutions and challenges will be presented.

If climate change has taught us anything in recent years, it is that natural disasters are likely to increase in magnitude and frequency.1 In 2007, Oxfam International reported that the number of natural disasters averaged between 400 and 500 a year, whereas in the early 1980s natural disasters were estimated at 125 annually.2 During the same time period, the number of floods and cyclones was noted to have quadrupled, and over the past two decades, the number of people thought to have been affected by disasters is estimated to have increased by 80 million.3 There is also an alarming rate in the fluctuations of extreme temperatures, resulting in an increase in drought, famine, and floods. Moreover, it is mind-boggling to think that if the global community stays on its current trajectory of further affecting climate change, these occurrences will sharpen in scope and magnitude.

The myth that natural disasters are indiscriminate should be dissolved immediately. According to the International Federation of Red Cross and Crescent Societies,4 poverty increases the ‘death-to-disaster’ ratio. Accordingly, between 1991 and 2000 there were 23 deaths/disaster in the world’s most developed countries, a stark contrast to the 1,052 deaths/disaster in the poorest. It is no secret that the poor and ill-equipped fall burden to the devastation of emergencies.5 Societies that are already plagued with poor governance and conflict are simultaneously lacking infrastructure, institutions, capital, and at times the political will, to respond.

Burma: Climate change, disaster response & poor governance

Two major policies implemented by Burma’s military regime have led not only to increasing numbers of vulnerable people along the country’s border, but have also largely contributed to Burma’s failure in effectively reaching vulnerable populations, especially in emergency situations.

First, the military’s counter-insurgency strategy towards ethnic minorities during the last 40 years has led to widespread human rights violations, resulting in an estimated 600,000 to 1 million internally displaced persons (IDPs) residing in camps along Burma’s border and minority regions.6 The military continuously utilizes the “Four Cuts” policy in order to sever the four crucial links between the Government and ethnic groups – food, funds, recruits and information. This has caused
extensive migration, food insecurity, disruption of livelihoods, and little or no access to health care. Specifically, in conflict zones, the military junta is committing violations such as “forcibly relocating civilian populations and engaging them in forced labor ... killing, sexually assaulting and torturing civilians; destroying medical supplies intended for civilian populations; and arresting, detaining, and killing medical workers.”

The Back Pack Health Worker Team, a cross-border organization providing care to IDPs on the Thai-Burma border, report that Burma’s national under 5 infant mortality rate is 106/1,000 live births. This already staggering figure is nowhere near the 221/1,000 live births in Burma’s eastern conflict zones, indicating the grave disparity in Burma’s conflict-afflicted regions.

Secondly, in July 2005, new travel restrictions and review procedures for foreign aid organizations were issued. This led to two major humanitarian aid organizations pulling out of Burma. In August 2005, the Global Fund to Fight AIDS, Malaria and Tuberculosis, and Médecins Sans Frontières (MSF-France) terminated grants to Burma on the basis that the newly imposed measures would prevent the organizations from working impartially and effectively. Subsequently, in 2006 Government authorities forcibly suspended the access of the International Committee of the Red Cross to prisons and labor camps, and all the while Government forces upped their counter-insurgency campaign in the Karen state.

However, despite the international pressure to relax the travel restrictions, the Government instead formalized them on February 2006 as the “Guidelines for UN Agencies, International Organizations and NGO/INGOs on Cooperation Programme in Myanmar [Burma]”. The Guidelines detail the steps that foreign aid organizations must follow: develop a Memorandum of Understanding (MoU), open and register field offices, inspect new staff members, acquire approval for internal travel, manage equipment purchases, and coordinate with state and division authorities. This has led to bureaucratic inefficiencies, increased delays, restricted independence and limited access to ethnic minorities.

These policies have directly led to limited or no exchange of information to inform, influence or motivate citizens about public health issues. In Burma, where 70 percent of the population resides in rural areas and the number of IDPs is increasing in border regions, raising awareness, risk communication, and education of safety measures are critical. Additionally, the media is presumably allowed to offer criticism of Government projects as long as it is deemed “constructive”, and can report on natural disasters and poverty as long as it does not interfere with the “national interest”. Thus, the major source for widespread public education and awareness is handicapped by the Government’s desire to monitor and track international aid organizations.

Subsequently, when Cyclone Nargis made landfall in May 2008, the ramifications of the Government’s counter-insurgency campaign on the country’s social and health infrastructure, travel restrictions, MoU agreements between NGOs and the Government, and poor

Climate changes will affect the periodicity and prevalence of natural disasters, such as cyclones. Governments and communities have to enhance their capability to cope with these phenomena. Local villagers in Orissa, India, get training in emergency preparedness.
governance structures, laid the framework for the Government’s ultimate unwillingness and inability to responsibly respond to the devastation of Cyclone Nargis. Burma’s poor governance vis-à-vis disaster management and its counterinsurgency campaigns strike at the very heart of basic human security interests as a means to demoralize and unlink civilian support for insurgents.

Consequently, lines of communication, information, and access to basic lifeline resources are void, as are the means and will to deliver them, especially in post-emergency situations. Climate change will almost guarantee an increased occurrence and magnitude of such storms in Southeast Asia, and so the Government of Burma must remove these institutional blockades and erect an improved disaster risk reduction contingency plan.

**Darfur: Climate change, desertification & natural resources**

The situation in Sudan’s Darfur region has a clear resource link, especially access to water. According to the United Nations Environmental Programme, Sudan has been witnessing a south-bound desertification of 100 km over the past forty years. The scarcity of water initially prompted Arab nomads to press further south where they came into conflict with Black African farmers. Alex de Waal, a leading scholar of climate change in Sudan, argues that subsequent Government policies have always tended to favor the large, mechanized farms that are highly profitable, as compared to the small farms that are indispensable to the livelihoods of Sudan’s rural poor.

These land development policies, supported by the International Monetary Fund (IMF) and the World Bank, have placed a heavy burden on the sustainability of the land and soil, leaving wide areas unusable after ambitious mining projects. Additionally, poor environmental management, deforestation, overgrazing due to population growth, and the long-term effects of climate change have seen a 30 percent decrease in rainfall, stunting crop yields as much as 70 percent.

Environmental degradation has given way to social and political disruption, and large swaths of Darfur’s people have been forced to flee. The five million IDPs and refugees that reside in the Darfur region have placed an overwhelming strain on these resettled lands. Firewood collection to be used for fuel by this segment of the population has contributed to the nearly two-percent annual deforestation rate in Darfur. Moreover, since African Union Peacekeepers aborted their “firewood patrols”, and since women usually carry the burden of seeking out the fuel, Darfur’s women have become increasingly vulnerable to rape and other violent attacks, let alone exacerbating the desertification process. Many observers claim that the country’s approach to its natural resources, coupled with the effects of climate change, played a role in initially triggering the instability. They attest that proper environmental management and policies that promote sustainable development and equitable access will be instrumental in bringing about a lasting stability to Darfur.

**Looking forward: Possible solutions & challenges**

It should be clearly evident to the reader that conflict and poor governance place an intolerable burden on...
the social and health services of any given country, and so limit their ability to quickly respond and react. As evidenced in the case of Burma, specific policies and counterinsurgency methodologies that were already in place greatly inhibited the country’s ability to respond. In effect, Burma needs to dismantle its current inhibitors and invest in a contemporary disaster risk reduction scheme.

One of the few organizations operating with success in Burma is the United Nations Development Programme (UNDP). Long ago, the UNDP instituted the Human Development Initiative (HDI), a community-based framework for developing local capacities and skills in the pursuit of human development. Under the HDI umbrella, and by training individuals at the grassroots level, UNDP was able to execute an Integrated Community-based Early Recovery Framework in the aftermath of Cyclone Nargis.

There is also the notion that “development be done right.” Sustainable policies on land use and natural resources will ensure that conflict will not further exacerbate climate change, or vice versa. Many of Burma’s ethnic groups rely on illicit ruby, jade, and teak trading to fund their insurgency provisions on natural resources, land rights, and property rights.

The need for sound environmental management and development in Sudan’s Darfur region is even more poignant, since the quest for natural resources is at the very heart of the dilemma. A New York based group, Water for Sudan, has ambitiously sought to drill 40 wells per year, and has already drilled 29 wells of uncontaminated water servicing 80,000 people. The United States Agency for International Development, the largest donor in Sudan, has also implemented water projects. While IMF and World Bank policies have garnered growth in Sudan’s Gross Domestic Product, not prioritizing human development policies will almost certainly continue to be a source of instability.

Climate change knows no boundaries, and neither do the policies that stem from it. It is interesting to examine how global governance norms such as the Responsibility to Protect (R2P) can provide assistance to vulnerable populations from irresponsible Governments. While the R2P has yet to be invoked, many did call for the application of the principle in post-Nargis Burma, since Yangon (Rangoon) refused to allow international aid and aid workers into the country, leaving scores abandoned. Even if we put aside the debate surrounding the legality or international will to apply the principle, the global community should be extremely cautious in applying the R2P if we only concern ourselves with the intervention phase, and do not commit ourselves to the reconstruction phase – something that the R2P obliges intervening states to undertake.

Ultimately, there is a clear consensus that it is better to invest in prevention than in recovery, and so early warning systems and preparedness are key. It will take great measures at the local, national, regional, and international levels to mitigate and reverse the affects of climate change. While the costs may seem high in the short-run, if we sit on our hands for too long, we may end up paying the ultimate price.

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3 Ibid, supra note 2

4 As reported in Ibid, supra note 2.


8 Ibid, supra note 3

9 Back Pack Health Workers Team, “Health & Human Rights in Eastern Burma: Chronic Emergen- cies Against the military regime, which has significantly led to deforestation and the destruction of the region’s biodiversity. The military junta has continuously sought to push these ethnic groups further into the highlands in order to cut off their illicit funding source, and in several cases, the junta has turned these lands into large scale farms or mining operations. Additionally, Burma’s ethnic minorities have been forced to flee into the remote jungles of the Thai-Burmese border, creating spillovers in the forms of refugees and violence. Needless to say, this campaign has further polarized the conflict. Clearly, whatever peace settlement that will be negotiated between the warring groups will necessitate

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Conflict and poor governance place an intolerable burden on the social and health services of any given country.
Staff changes

Peter K. Sjögren from Uppsala, Sweden, has been appointed the new Executive Director of LPI. He is replacing Peter Brune, who left his position last summer. Since then, Lena Furberg has been the Acting Executive Director. Mr Sjögren will gradually take up his new position in April.

At present Mr Sjögren works as the Managing Director at the Sensus Study Association, and earlier worked with organisations such as the Church of Sweden, Swedish Church Relief and the Sudan Council of Churches. During a period in the 1990’s, Mr Sjögren worked as the Finance Officer at LPI. His work has included some assignments in Sudan and Australia.

Mr Sjögren has studied law, education, training and management. He is actively involved in the parish work of the Church of Sweden.

Senior Researcher Tarekegn Adebo has left his position at the Uppsala office after more than six years for a 2.5 year secondment to the College of Social Sciences of Addis Ababa University, Department of Political Science and International Relations, in Ethiopia. He will work as an Associate Professor within the fields of conflict transformation and peace studies, in close cooperation with colleagues at the Department and under the supervision of Dr Yacob Arsano, Dean of the Faculty.

LPI would like to welcome Elin Göthe as a new Communications Officer to the Uppsala office. She has a background in media, communication and TV production. She is a member of the board of Sweden’s oldest and largest shelters for battered women. At LPI, Ms Göthe will, among other things, work with the internal newsletter, do the layout for the Horn of Africa Bulletin and update the webpage.

‘Approaches to Conflict Transformation’

A four-day workshop to explore partners’ approaches to conflict transformation and to introduce LPI’s four-dimensional approach (personal, relational, structural and cultural) was held in Hargeysa, Somaliland, in November. Participants included members from the Somali Peace line, the Somali Women Contact Committee and the International Horn University.

Seminar on the situation in the DRC

In connection with LPI resident representative of the Democratic Republic of Congo (DRC), Pieter Vanholder’s, visit to the Uppsala office, LPI organised a public seminar on the current situation in the country and on LPI’s work in North and South Kivu. The seminar was attended by a number of key stakeholders working in or with the DRC. Pieter Vanholder visited the Uppsala office in January to have in-depth discussions with colleagues on different topics.

Elin Göthe

After 1.5 years of great merit as Chief Accountant at LPI, Anette Telenius has stepped down from her position. Until the question of her successor has been resolved, Anna Björklund and Åsa Borgström are in charge of LPI finances.

Jeremy Muthoka is LPI Nairobi’s new Research and Analysis Technical Advisor. He has a Bachelor’s Degree in Political Science and Public Administration and a Master’s Degree in Development Studies, both from the University of Nairobi, Kenya. Before joining LPI, Mr Muthoka worked with the Korea International Cooperation Agency in Kenya, Trocaire (Horn and East Africa Regional Office), and the Institute for Development Studies at the University of Nairobi. He will be handling the Protocol on Citizenship, Nationhood and Belonging on the Great Lakes Region, together with LPI’s Regional Partner FECLHA.

Peter Langat is the new Finance Officer for LPI Nairobi. He holds a Bachelor’s Degree in Business Administration (Accounting Option) and is now pursuing his Master’s Degree in the same field. Before joining LPI, Mr Langat worked as an accountant for World Vision Kenya. He also has experience in working with commercial companies.
One year grant from CEEAC

LPI’s Conflict Transformation Programme in the Democratic Republic of the Congo (DRC) has been awarded a grant from the Economic Community of Central African States (CEEAC). CEEAC is an organisation with a mandate to promote regional economic cooperation in Central Africa. The grant is part of CEEAC’s Programme on Peace and Security, and will be used by LPI/DRC to finance the Participatory Action Research to be undertaken by LPI partners in the Minembwe Highlands in South Kivu, Eastern DRC.

Through the execution of this project, LPI/DRC aims to improve the security on the border (Rwanda-Burundi-DRC), to play a part in the restoration of peace and cohesion among communities in the area, and to strengthen the capacities of LPI partners in conflict research/analysis in order for them to establish/maintain Conflict Transformation centres.

EPLO General Assembly

LPI has participated in the European Peacebuilding Liaison’s (EPLO) General Assembly in Brussels, Belgium. EPLO is the platform for European NGOs, networks of NGOs and think tanks active in the field of peacebuilding, who share an interest in promoting sustainable peacebuilding policies among decision-makers in the European Union. The General Assembly meeting discussed a number of issues, including the European Community Peace Building Partnership under the Instrument of Stability and the upcoming Swedish EU Presidency.

Back to back with this meeting, LPI attended a workshop on Strengthening European Networking for Peace in Brussels, arranged by the European Centre for Conflict Prevention, Nansen Dialogue Centre and the German Platform for Peaceful Conflict Management.

Reviews and resources

Minorities confronted with climate change


Last year marked a significant peak in the global debate on climate change, as the issue advanced on the international agenda. The current authoritative research on climate change, combined with a higher degree of awareness among the general public and relatively strong political will, make the international community better equipped to respond to the challenges connected to climate change than ever before.

For the minorities around the world this may seem like a positive development. However, according to Minority Rights Group International, minorities remain largely neglected both as victims of climate change and as part of the solution. The organisation reports in its publication State of the World’s Minorities 2008 that extended drought and rising water levels often put minorities in the risk zone, as they tend to inhabit areas rejected by the wealthy just because of this factor. Furthermore, changes in the growing season and rainfall affect minorities to a large degree, as they often live close to, and depend on, nature, but are often the last to be assisted in the event of a catastrophe. In addition, as oil palm and bio fuel crops are planted to combat global warming, indigenous people are affected, inter alia, by “forced evictions, the denial of rights to lands and resources and habitat loss – leading to the destruction of livelihoods”.

The annual report produced by the 40-year old organisation includes a climate change special with a preface in the first section by the 2004 Nobel Peace Price Laureate, Professor Wangari Maathai. The section continues with a groundbreaking analysis of the impact of climate change on minorities and ends with first-hand accounts of the impact of global warming from the minorities themselves. The second section presents an eyewitness report on the religious minorities of Pakistan, perspectives on minorities and tourism (Kenya case study) and highlights of regional areas of progress and concern for minorities around the world. It finishes off with a new unique statistical analysis and ranking of Peoples under Threat 2008.

As research on the impact of climate changes remains scarce, this report serves as a vital instrument for attaining an overview of the state of the world’s minorities with regard to the changes in the climate. At the same time, the reader is also provided with knowledge of people who are most under threat of genocide or mass killings. Not surprisingly, over half of the countries on the top twenty of the list are in Africa.

Catrin Rosquist

Before the presidency ...


It does not happen too often that the newly elected Head of State of a superpower (even though it is one on the decline) like the United States of America can be measured not only against his performance in an election campaign or
At the Heart of Darkness

Revisiting the heart of darkness – Explorations into genocide and other forms of mass violence. Development Dialogue no 50/December 2008

In 1902, the Polish author Joseph Conrad published his novel Heart of Darkness, which came to be seen as the symbolic story of colonial rule and its cruelties. In 2004, the film Hotel Rwanda, with a brave hotel manager as the hero, focussed on the 1994 genocide in which roughly one million people were killed.

These two stories and realities are discussed and analysed in a most impressive issue of Development Dialogue, published by the Dag Hammarskjöld Foundation (DHF). It draws upon two seminars with many scholarly contributions, discussing both theories and practises. The term genocide was first coined by the Jewish Polish refugee Raphael Lemkin. Thanks to him, the United Nations General Assembly in 1948 adopted the Convention for the Prevention and Punishment of the Crime of Genocide, defined as: “acts committed with intent to destroy, in whole or in part a national, ethnical, racial or religious group”. It was the first modern human rights treaty, adopted one day before the Universal Declaration of Human Rights (see also New Routes, no 4/2008, pp 3-6).

The background to the Convention was of course the holocaust, but the focus of this issue is primarily a colonial context. The right to the use of violence was taken for granted by the colonial powers, not excluding mass violence if deemed to be necessary. Exterminate All the Brutes, the title of a critical book by the Swedish author Sven Lindkvist, catches the dominant attitude in its extreme consequences.

Drawing upon his Namibian roots Henning Melber, the Executive Director of the DHF, shows that colonialism, genocide and mass violence are integral parts of European modernity and that even a respected humanist like bishop Bartholomé de Las Casas was infected by racial hierarchy: whites, Indians, blacks. Even Lemkin had a racial bias, not being against colonialism as such, only against some practices.

The history of slavery and the colonial past – should this not lead at least to economic compensation for the heirs of the victims? Is this maybe the reason why former colonial powers refuse to confess their responsibility regarding earlier mass violence and genocide? The fear of guilt being transformed into debt?

Several authors analyse the role and thinking of Hanna Arendt, but the most stimulating and thought-provoking chapter is the one written by Jürgen Zimmerer on colonialism and the holocaust. Arendt argued in her book The Origins of Totalitarianism that imperialism was the precursor to national Socialism, but her thesis was forgotten, as the scholars on Nazism and colonialism went separate ways. Now Zimmerer argues that the “German war against Poland and the USSR was without doubt the largest colonial war of conquest in history”. The aim was to create lebensraum for the Germans far beyond the Ural Mountains.

In the discussion regarding the singularity of the holocaust Zimmerer places himself somewhere in between, but he shows convincingly that space and race are key concepts in both colonialism and Nazism, and with genocidal consequences. The German ruthlessness in the extinction of the Herero and Nama people in the German Southwest Africa between 1904 and 1908 was followed-up by the Nazi strategy both in the warfare in the East and in the holocaust of homosexuals, Jews, Roma and Sinti. At the heart of darkness Kurz and Hitler were blood brothers.

Henning Melber

Bernt Jonsson
Connection between health and violence

Small Arms Survey 2008: Risk and Resilience, Graduate Institute of International and Development Studies, Cambridge University, 2008

The eighth edition of the annual Small Arms Survey provides extensive, updated information and statistics on arms and arms distribution around the world. The first part of the Survey highlights the dilemma of illicit arms proliferation and transfer diversion together with the challenge of managing surplus arms and ammunition. States’ engagement in controlling small arms transfers is included in the discussion. In addition, this section presents a case study of South Africa, taking up the diversion of firearms in the country and charting its sources.

The data used in this publication originates from many different sources – different research projects, governmental sources, experts and numerous organisations from different parts of the world – which can weaken the comparability of information and thus undermine the reliability of it. On the other hand, there is a clear mechanism of how to manage the collected information, and the data is presented and classified in a comprehensive and structured manner. This can be viewed as the fundamental methodological contribution of the Survey.

The 2008 volume presents a thematic study of how a public health approach can help to identify risk and resilience factors in preventing violence. This approach was originally created as a reaction to diseases targeting entire societies in order to promote “the health of a population as a whole”. In this context armed violence is considered a social phenomenon and a community problem that should be analysed on several levels, where norms, behaviours, attitudes and circumstances play critical roles.

The authors argue that this approach provides a scientific model that facilitates the systematic collection and analysis of data, but its primary weakness is that the approach does not capture all of the factors that lead to armed violence. Nonetheless, this is a rather common problem when using interdisciplinary methods and should not be seen as an elementary obstacle in itself.

The second section presents research projects in the United States and El Salvador. The ambition of these case studies is to demonstrate how the countries have responded to armed violence through different intervention strategies, programmes and policies based on the public health method.

Developing and implementing a framework for analysis to understand the correlation between individual decisions and environmental impact is indisputably the main finding of the second part of this Survey. It will certainly give rise to subsequent analysis of how to adequately address the causes of armed violence and of possible means to reduce the risks of it occurring.

Global patterns in armed conflict and non-state violence

States in Armed Conflict 2007, eds Lotta Harbom & Ralph Sundberg. Department of Peace and Conflict Research, Uppsala University, UCDP, 2008

The latest edition of the Uppsala Conflict Data Programme’s (UCDP) annual summary of ongoing trends in violent conflicts, States in Armed Conflict 2007, marks the publication’s 20th anniversary. In a similar fashion to past volumes, this year’s report contains up to date information on the global and regional incidence of conflicts. Recent developments, the report concludes, have neither been overwhelmingly positive nor negative.

On the one hand, the downward trend in the overall number of armed conflicts appears to have reached a standstill. In fact, between 2005 and 2007 this number slightly increased – making the current number of active conflicts 34. Another distressing trend has to do with the level of conflicts categorised as “internationalised” (that is, conflicts with active involvement of external forces to aid one of the parties to the conflict). This often contributes to weakened possibilities of finding peaceful solutions and increases the risks for conflict contamination of surrounding countries.

One such example is the Russian intervention in the crisis between Georgia and Abkhazia and South Ossetia in August 2008. At the same time, however, the intensity of armed conflicts (i.e. the amount of battle-related deaths) has remained relatively stable.

In addition to information on state-based conflicts, since 2002 the UCDP has also collected data on non-state conflicts and one-sided violence. In non-state conflicts – as opposed to state-based ones – none of the actors are the government of a state. Instead, these conflicts often consist of various rebel groups fighting each other. Also here the findings are mixed. Whereas non-state conflicts on the whole are steadily decreasing, particularly in Africa with some few exceptions, the opposite is true of the Middle East and Asia due to instability in places like Israel/Palestine, Iraq, Afghanistan and Pakistan. One-sided violence, which denotes the use of armed force by a government or rebel group against civilians, has on average decreased in number. So has the intensity of these attacks.

As the UCDP data set on global armed conflicts and its definition of armed conflict have become the standard at many institutions, the widening of the scope of the data set to also include human security aspects is most welcome. The latest edition of States in Armed Conflict will therefore certainly benefit scholars and practitioners seeking a better understanding of trends and developments in the area of global peace and human security.

Erik Brattberg

Tiina Saksman Harb
New publications from LPI

Two new Occasional Papers have recently been published by LPI, and we are now happy to introduce them to New Routes’ readers.

“Elders Councils”
A way to peace in the Horn of Africa
by Ephraim Isaac, Ph. D.

Spiritually-motivated eldership, mediating, peace keeping and promotion of reconciliation is a well-established ancient institution. The spiritual connection of the elders with the grassroots population and their active involvement in mediation can be critical in establishing conciliatory meetings with the relevant parties.

– Peace is the absence of war, reconciliation the active life of steadfast friendship and vigorous collaboration. Without reconciliation, peace is always in danger, says the author.

Ephraim Isaac’s own involvement in peacemaking is deeply rooted in the concept of spiritually inspired elders. In this paper he lifts up his experiences of spiritual eldership based on his knowledge of Ethio-Eritrean history and culture. 2008, 28 pp, ISBN 91-87748-91-6

Divine disputes?
Exploring the religious dimensions of armed conflicts
by Isak Svensson, Ph. D.

The relationship between religious dimensions and the escalation, duration and termination of armed conflicts is being increasingly explored. This study examines the conditions for negotiated settlements. Utilising unique data on the religious demands and identities of the primary parties, all intrastate conflict-dyads in the Uppsala Conflict Data Program, 1989-2003, are examined. The study finds that if governments or rebel groups have made explicit religious claims, these conflict-dyads are less likely than others to be terminated through negotiated settlement. 2008, 28 pp, ISBN 91-87748-89-4

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