

Hexagon Series on Human and Environmental
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Jürgen Scheffran · Michael Brzoska
Hans Günter Brauch · Peter Michael Link
Janpeter Schilling *Editors*



Climate Change, Human Security and Violent Conflict

Challenges for Societal Stability

 Springer

**Hexagon Series on Human
and Environmental Security and Peace**

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Jürgen Scheffran, Michael Brzoska, Hans Günter Brauch,
Peter Michael Link and Janpeter Schilling
Editors

Climate Change, Human Security and Violent Conflict

Challenges for Societal Stability

With Forewords by Olusegun Obasanjo, former President of Nigeria; Connie Hedegaard, European Commissioner for Climate Action; Christiana Figueres, Executive Secretary, UNFCCC; R.K. Pachauri, Director General, The Energy and Resources Institute (TERI), Chairman, Intergovernmental Panel on Climate Change (IPCC).

With 159 Figures and 67 Tables

 Springer



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Foreword

It is my pleasure to contribute a foreword to this volume of the Hexagon Book Series, which has arguably become one of the most important resources on climate change, human security and violent conflict.

Over the years, the issue of human security has tended to be conceptualized in terms of external security of protection against physical violence, death and bodily harm, physical attack, or physical incapacity. Thus, providing for human security tended to go hand in hand with providing for state and/or government security by strengthening the military and paramilitary arsenal of the state.

Human security, as it affects people, has a lot more to do with the totality of the welfare and well-being of the citizens than military or police protection which is more the protection and security of the state or the government. While that must not be ignored to ensure the integrity of the state, the human security aspect of the citizens, which buoys up internal state security and government stability, is essential. A citizen without adequate education and skills is basically handicapped in the ability to provide adequately for self, family, community and nation. Consequently, the human security of such a citizen as an effective contributor to the internal peace, progress and cohesion of the community and society becomes impaired.

A citizen debilitated with malaria, chronic disease, or avoidable epidemic is equally human security deficient and he, his family and society suffer the same consequences as the uneducated, ill-educated and unskilled.

A child who is malnourished, poorly developed and stunted in growth - physical and mental development - as a result of inadequate provision of balanced food and nutrition and inadequate healthcare as he grows, will suffer human security deficit throughout his entire life and, rather than being an asset to himself, his community and society, may become a liability.

But, more importantly and more threatening today is the danger posed by unemployed youth who are in three categories. The first group are those with little or no education or skills who have dropped out of school or are prevented by lack of finance from continuing their education. They are mainly street boys who sleep in makeshift places, eking out a living from crimes and nonconformity. I call them 'area boys'. The second group are those who have basic education, some up to secondary and early tertiary levels, and have access to the Internet. They eke out their living from scams using the Internet and other ICT facilities. They are mostly otherwise unemployed. These I call 'yahoo boys'. The last group of unemployed youth are what I call 'blackberry boys'. They have good education and are mostly equipped with good skills but they are unemployed. They even have access to smartphones and such devices as Blackberry and iPad.

The greatest danger I see for Africa including my own country of Nigeria is the coming together of these groups of unemployed youth as a result of their unfulfilled and unsatisfied human security, and this has both a direct and indirect bearing on their fundamental human rights. The rise and coming together of such unemployed youth in Africa would be worse in consequence than the so-called 'Arab Spring'.

But it can be prevented. Indeed, it should be prevented. If the human security aspect, in terms of employment for young men and women in Africa is given local, national, regional and global attention, the danger would be averted. Violence and conflict spearheaded by African youth in Africa will have adverse ramifications globally.

If our modest experience in medium-sized but thriving agribusiness, offering direct and indirect employment for thousands of youth in Nigeria and a few African countries, is a basis for affirmation, I believe that agribusiness will largely fit the bill by providing a full, correct and adequate solution to the issue of human security as far as employment is concerned in Africa, particularly for the youth. But what is the future of agribusiness in the context of climate change?

Oke-Mosan, Abeokuta,
Ogun State, Nigeria, July 2011

Olusegun Obasanjo
Former President of Nigeria
(1999-2007)
Founder of the Centre for
Human Security



Photo by Klaus Holsting

Foreword

The consequences of climate change for human security need greater attention from policymakers and the scientific research community. What we are seeing is that, as well as posing a threat in its own right, climate change is multiplying other threats and exacerbating existing tensions and instability.

The dire situation in the Horn of Africa over recent months is a vivid and tragic illustration of these consequences for human security. Because of climate change, droughts in the region are getting worse and more frequent. Now the most serious drought in decades threatens millions of children and adults with starvation and is leading to mass migration. This disaster has been aggravated by the conflict in Somalia, high food prices, population growth, and deadly competition over resources.

Reduction of arable land, widespread shortage of water, diminishing food and fish stocks, increased flooding, and prolonged droughts are already happening in many parts of the world. In 2010 the UN's *Office for the Coordination of Humanitarian Affairs* (OCHA) has calculated that drought affected more than one hundred million people, and more than 38 million others were forcibly displaced by climate-related events, mainly floods and storms.

All this is happening with global warming of around 0.8°C above pre-industrial levels. As temperatures continue to climb, the human and economic impacts of climate change will become more severe still.

The international community has recognized the scientific case for keeping the global temperature rise below 2°C; there is much evidence that an increase beyond that level would greatly heighten the risk of irreversible and potentially catastrophic global changes. But the reductions in greenhouse gas emissions pledged by developed and developing countries so far are, collectively, not enough to keep us below the 2°C ceiling.

Without more ambitious commitments the world is headed for warming of 3°C or even more, and that will pose serious security risks. It will fuel existing conflicts over limited resources and land, and worsen tension over energy supplies. Rising sea levels threaten coastal regions which are home to about one in five of the world's population. Some small island states even risk disappearing completely. In a worst-case scenario major environmental changes, for example the release of huge volumes of methane gas as the Arctic tundra melts, could cause runaway climate change that would become impossible to control.

The consequences of climate change for human security are rightly receiving increasing attention from the world's governments. In July 2011, the UN Security Council debated climate change and its security implications for the second time, at the initiative of Germany and the European Union. This work on security must proceed in tandem with actions both to reduce the emissions that are at the root of the problem and to adapt to the impacts of climate change that are already unavoidable.

Further scientific research and analysis of climate change and its security implications is crucial for underpinning the comprehensive global agreement on climate change that the world badly needs. Publications such as this one which highlight the links between climate change, human security and violent conflict, make an important contribution to this process.

Brussels, November 2011

Connie Hedegaard
European Commissioner for
Climate Action
European Commission, European Union



Foreword

The title of this book, “Climate Change, Human Security and Violent Conflict: Challenges for Societal Stability” points to an emerging reality that must be taken very seriously: climate change as a potential driver of violent conflict and forced migration. The book looks very concretely at which groups of people in which parts of the world are already being affected by the steady rise in the number and severity of extreme weather events. And it looks at what this means for peoples’ livelihoods, what the security-related implications are, and what the policy responses need to be. Policymakers across the government spectrum would do well to study these examples as a matter of urgency.

The academic world is clearly coming to grips with the new realities that climate change is bringing, but it is not alone. Military establishments around the globe are also starting to assess the impacts of climate change. Security chiefs have a keen eye for looming threats and have begun adjusting their strategies, priorities, and budgets to factor in climate change impacts. But while the military establishments of the globe can and must plan ahead, they and their governments also need to exert their political and societal influence to make their populations more aware of the consequences of climate change and how best to deal with them.

Clearly, the only way to create a world which is more resilient to this challenge lies in drastically reducing the greenhouse gas emissions which drive climate change and providing populations, particularly the poor and vulnerable, with the assistance they need to adapt to climate change. This in turn requires urgent investment in environmentally sound technologies, especially renewable energies, as well as increased efforts to adapt economies and societies to the inevitable impacts which are already on the way. And it requires developing the right, coordinated policies at the regional, national, and international levels.

At the end of 2010, in Cancun, Mexico, the international community provided a renewed foundation for more ambitious action by adopting the Cancun Agreements on climate change. Governments agreed on a comprehensive set of new climate institutions, including an international committee to coordinate work on adaptation, a technology mechanism to promote environmentally sound technologies, and a new fund to channel the billions of dollars developing countries require to respond to climate change in a sustainable way. Governments also sent the clearest signal yet that they are moving collectively towards a global, low-carbon society by agreeing to prevent average global temperatures from rising more than two degrees Celsius and pledging to review the adequacy of this goal against actual progress in the near future.

This international response to the challenge of rising greenhouse gas concentrations in the atmosphere was the most significant yet, but it still falls short of ambition. The sum of national emission reduction pledges so far made by the international community amounts to only 60% of what science says is required to have the best chance of limiting the global temperature to the agreed two degrees.

In order to rise to the challenge, governments must undertake much steeper cuts in their greenhouse emissions, with industrialised countries taking the lead to bridge that gap. This year, at the UN Climate Change Conference in Durban, the world needs to push forward with the further development of a global framework to limit and reduce greenhouse gas emissions in line with the known scientific milestones. At the same time, the institutions agreed in Cancun must be speedily completed, so that they can begin concrete work to stimulate the financial, technology, and adaptation support which developing countries urgently need.

It is in the best interests of all parts of society to press for swift action, including the military establishments whose core responsibility it is to protect their populations from major threats. In climate change, tackling the root cause of the problem by reducing greenhouse gas emissions directly lives up to that responsibility in an altogether peaceful way that may yet secure us all a peaceful future.

Finally, I would like to express my gratitude towards the authors of this book for providing valuable academic inputs to the design of policies which can help societies adapt to climate change and take the necessary steps to reduce emissions. And I would like to express my thanks to them for raising awareness of the explosive linkages between climate change, human security and violent conflict.

Bonn, in August 2011

Christiana Figueres
Executive Secretary,
United Nations Framework
Convention on Climate Change



Foreword

I am pleased to write the foreword for this very useful volume on *Climate Change, Human Security and Violent Conflict: Challenges for Societal Stability*. The importance of this book lies in the fact that while the physical sciences have seen a mushrooming of literature related to climate change and its implications, we have not seen a similar scale of effort in the field of the social sciences related to climate change. The contents of this volume are particularly relevant to a range of policy initiatives. For instance, by exploring the linkages between climate change, human security, social stability and violent conflict the authors have been able to shed considerable light on those issues which arising out of climate change could cause serious disruption in the social order. Similarly, in dealing with the issue of migration in relation to climate change the authors have analysed an area of human activity in which there is likely to be a substantial increase in numbers of people who could move as a result of climate change and the serious problem that this could cause in case the world is to face unmitigated climate change in the future. Of particular interest and significance is the subject of climate change and security in the Middle East. This is a region which has hardly received interest in the context of climate change in the past even though problems of water stress, increase in summer temperatures and security dimensions related to the export of oil are all issues that need enhanced analysis and attention.

Overall, this book should stimulate considerable debate on the social, geopolitical and strategic implications of climate change and through its contents perhaps a major contribution will be made to initiating a dialogue round the world on these critical issues. I am sure the average reader would feel greatly interested in the issues covered in this volume.

New Delhi, in July 2011

R. K. Pachauri
Director General, The Energy and
Resources Institute (TERI)
Chairman, Intergovernmental Panel
on Climate Change (IPCC)
Peace Nobel Laureate, 2007

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