# HUMAN SECURITY, CLIMATE CHANGE AND SMALL ISLANDS

Yannis Kinnas, Ph. D.

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Human security has nowadays become the cornerstone for survival, because human beings have become more vulnerable than ever before. Vulnerability can be distinguished in a biophysical and social sense. In particular, "the vulnerabilities of small islands have increased over the last decade whilst resilience has not kept pace." (Howorth, 2005)

It is well understood that a similar natural event may have different effects in two different societies. Reasons for risk or conflict can be often traced in the variety of cultures (Kinnas, 2001), in lack of infrastructure and/or different priorities. Climate change has contributed to an increase of vulnerability and uncertainty. There is a need for enhancing resilience in societies, which are more vulnerable than others.

Such societies include the Small Island Developing States (SIDS). During the January 2005 meeting of the United Nations at Mauritius to review th3e implementation of the Programme of Action for the Sustainable Development of SIDS, known as BPOA 1994 (Barbados Programme of Action). The Mauritius Declaration was adopted, and covers a set of principles and measures, including the establishment of a regional natural disaster early warning system for the Indian Ocean and the ASEAN region.

While the recent tsunami in South East Asia is a great example of the vulnerability of small islands and low coasts, a larger scale problem lies on the sea-level rise, which threatens low-lying with complete destruction, if extreme scenarios are proven to be correc5t. Sea level rise is going to be one of the outcomes of climate change, which in turn is caused, inter alia, by the greenhouse effect, a consequence of anthropogenic interventions on Nature.

The UN Framework Convention on Climate Change and the Kyoto Protocol are Agreements to mitigate such consequences. In order to improve human security there is a necessity for better education and public awareness so that people can face a complex and vulnerable world and build preventive resilience, particularly in the SIDS.

## **Human Security**

The many dimensions of globalization call for a new way of approaching security in the coming decades. Security is global but it is also human and this is a dimension with greater significance nowadays. Between freedom and security there are thresholds and security has become a manifold concept which goes beyond traditional approach. As Her Majesty Queen Noor of Jordan points out, for most of the world, security tensions center "less on boundaries and external might and more on internal conflict stemming from poverty, displaced peoples, economic instability and competition over shared resources, such as water and arable land." According to her, "a comprehensive definition of security must include growth, poverty alleviation, political stability and peace. In the largest truest sense, security is about quality of life. Ultimately, we need a more holistic and flexible definition of security, not a besieged fortress but a safety net." (HM Queen Noor of Jordan, 2002)

The growing recognition worldwide that concepts of security must include people as well as states has marked an important shift in international thinking during the past decade: the responsibility to protect focuses attention where it should be most concentrated, that is on the cover of human needs (Kinnas, 1992) of those seeking protection or assistance. Human security means the security of people – there physical safety, their economic and social well being, respect for their dignity and worth as human beings, and the protection of human rights and fundamental freedoms. (ICISS, 2001)

The Human Security Network which was established in order to enhance freedom from fear, in order to be productive, needs to find appropriate balance between the international and national dimension. Such initiatives work best when they are tied to clear multilateral processes and need to complement rather than duplicate existing international initiatives. (Hutton, 2002) There is no contradiction between the promotion of human security and the maintenance of national security.

Climate change in particular is leading to a re-examination and expansion of the traditional narrow definition of "international security", focusing more on what has been recently labeled as environmental security. (Brauch et als eds, 2003) Poverty leads to insecurity and environmental degradation. An illustrative example constitute forests: "While forest degradation contributes to human insecurity, the reverse is also true. Insecurity in the form of chronic poverty, civil war or the mass movements of internally displaced people can destroy ecosystem and as resource rich, multifunctional systems, forests in particular often bear the brunt of insecurity." (Hamill/Brown/Crawford, 2005)

When the availability of resources and services is undermined, the resulting insecurity, can range from hunger and susceptibility to disease, to loss of income and livelihoods to social tensions and open conflict, and to acute vulnerability to natural hazards.

According to Mary Caldor, "conventional military forces organized to defend borders or fight wars are not able to cope with the new sources of insecurity." (IHT, 2005) Human security refers to the protection of individuals, as opposed to "state security", which refers to the defense of borders. This means that the question is not whether the international community should intervene in situations of severe insecurity but how. The European Union is in a position to promote human security. It approved a European Security Strategy, which entails a military – civilian planning. In addition, in October 2001 the commission launched a plan of action for global monitoring for environment and security which by 2008 will provide Europe with independent, operational capacity in global monitoring for environment and security (GMES).

#### Small Island Developing States (SIDS)

Following the Rio 1992 Conference to years later at Barbados convened by the United Nations the Conference of Small Island Developing States (SIDS), which

culminated to the adoption of the Barbados Plan of Action (BPOA). During the mid term review in 1999 there were not assessed spectacular achievements.

The official list of SIDS, as accepted by the UN and registered during the Mauritius 2005 review meeting of BPOA, comprises 37 United Nations Members and 14 non-UN members associated with the Regional Commissions of the UN (see Annex). In addition, there are the members of the Association of Small Island States (AOSIS), a larger group of countries, which emerged as a distinct group during the negotiations for the Framework Convention on Climate Change. Of course there are also bigger island – states, as Sri Lanka or Ireland, and tiny islands which belong to various states in the world. This last category is the most vulnerable and they might vanish in the long–run, depending on the rhythm of the sea-level rise. The Regional Seas Promramme of UNEP is being called upon to play a central role, because all SIDS are part of at least on e Regional Seas programme.

The European Union also has introduced the Islenet, which is the European Islands Network on Energy and Environment, a network of the European Island Authorities to promote sustainable and efficient energy and environmental management. (Howorth, 2005)

Capacity building, including financing, and access to environmentally sound technology are elements of cardinal importance in improving the resilience capacity of SIDS which is decreasing when vulnerability increases.

The small island states constitute, and rightly so, a priority issue in the global agenda. It is also important that saving their coral reefs is a major issue for activity in all major wildlife – related treaties. The Convention on Biological Diversity includes a coral reef programme. The Convention on International Trade in Endangered Species (CITES) protects many corals as well as other species that inhabit reefs. The WSSD 2002 provides also targets on sustainable reefs management and plan of implementation. (Hepworth, 2003)

It is estimated that by 2010, 80 percent of people on our planet will live within 100 kilometers of the coast. It is necessary that the carrying capacity of a coastal area or island has to be constantly under monitoring. The rhythm of development in relati0on to the overall situation of a region can make islands and cities in coastal areas more attractive than others. Such cities present a special interest due to the particular role they may acquire as growth poles and gates to their hinterland in a broader process of spatial integration but also as centers of growing economic activities, such as tourism, transport and fishing. Regarding tourism a concern is that balancing tourism with appropriate use of heritage. Visitor numbers in SIDS should not exceed the island's ability to provide facilities without suffering damage, including to the island's character. (Abrahams/Kelman)

The Mauritius Declaration of January 2005 includes, inter alia: a reaffirmation that SIDS continue to be a special case for sustainable development (§ 5); a welcome to the proposed establishment of a regional natural disaster warning system for the Indian Ocean and the ASEAN region (§ 7); the recognition that good governance is essential for sustainable development (§ 11); the impact of health issues (§ 17); the adoption of the Mauritius Strategy for the further implementation of BPOA (§

18); the recognition that international trade including services is important for building resilience and sustainable development (§ 13).

Of course all the above are linked to developments in climate change. Many human settlements are already facing increased risk of coastal flooding and erosion of soil, which could be exacerbated by storms and sea-level rise. In such cases these populations, especially in the SIDS, are going to be at particular risk of severe social and economic consequences. (WMO, 2003)

#### **Climate Change**

A basic weakness appears to be at the interface between technology and decision makers; it remains almost impossible to eliminate [completely] human error from such systems. "The speed of technological change, whether reflected in new developments or new uses of existing technology, is faster than the ability of regulators and others involved in risk governance to fully assess and control the risks of these new developments." (Bunting, 2005) It is indeed in climate change difficult to solve problems while even if some are resolved the solutions bear with them new problems. An important role is also shared by the insurance sector, because risks are inextricably linked to this sector. (Linkov/Palma-Oliviera, 2001)

"IPCC has defined vulnerability from climate change in terms of three interrelated elements: exposure, sensitivity, and adaptive capacity. Sensitivity is the degree to which a system will respond to a given change in climate including beneficial and harmful effects, while exposure is the degree to which a human group or ecosystem comes into contact with particular stresses. Adaptive capacity is broadly defined as the ability or capacity of a system to modify or change its characteristics or behaviour so as to cope getter with existing or anticipated external stresses... The interaction of climate change and the process of economic globalization are likely to result in more complex sets of winners and losers, hence there is a need to assess differential impacts between regions, sectors, social groups and ecosystems." (Acosta-Michlik/Rounsevell, 2005) Thus it is confirmed the view expressed above that resolution of problems brings to the forefront more complex issues. Moreover, environmental organizations are increasingly aware that poverty and environmental degradation are interrelated, and have indirect impact on the complexity of environmental issues.

Climate Change is defined in Article 1, § 2, of the convention as follows: "Climate change means change of climate which is attributed, directly or indirectly, to human activity that alters the composition of the global atmosphere and which, in addition to natural climate variability observed over comparable time periods." (IUCC, 1992) The Convention was supplemented by the Kyoto protocol, which was negotiated and adopted in 1997 and came into force in February 2005 after the ratification of it by Russia. (Ott, 2001, Kempf, 2005) The Protocol is a legally binding agreement under which in 2012 industrialized countries will reduce their collective emissions of GHGs by 5% compared to 1990 GHGs emission levels.

It is remarkable that the European Union emissions instead of being reduced they have been increased in 2003, according to recent assessments compared to 2002, and thus do not allow the EU to respond properly to its engagements vis-à-vis the Kyoto protocol Therefore, SIDS, in particular complain that industrialized countries do not respond to their commitments regarding reduction of emissions. This is one of the reasons for the implementation of the EU Emissions Trading Scheme (EU-ETS), so that the Kyoto targets might be achieved. According to some view, while the EU tends to drive technology through policy (EU-ETS), the US wants to drive it by a separate package of R&D policy. The international regime which will prevail over time will have a separate technology chapter, be it Kyoto protocol or whatever (Egenhofer, 2005), It is well known that in addition to ETS, there are to other methodologies included in the Kyoto Protocol: joint implementation (JI) and clean development mechanism (CDM)

Besides, another consequence regarding the sea-level rise because of climate change was commented by the then Chairman of the IPCC Professor Bolin as follows: "Undoubtedly, the rise of the sea level that would be associated with a change of climate and its impact on the coastal zone is one of the most important issues need our careful attention. The fact that a large part of world's population lives in the vicinity of the coast adds further justification to address this problem with some urgency". (IPCC, 1994) It goes without saying that the term 'of the vicinity of the coast' includes predominantly islands and particularly the SIDS. If such islands are submerged or vanish completely, further deterioration of global social problems will occur. The latest tsunami in the Indian Ocean resulted in approximately two million people without shelter and if there is no understanding of the urgency of the situation in SIDS and countries of Africa global problems will become more acute. Therefore greater attention has to be given to the way the land is used or abused. (Watson et als eds, 2000)

## Conclusions

In order to be able the SIDS to respond with high and not low capacity there is a need for strengthening further "regional and international cooperation and education, training and awareness raising. Countries also need to be encouraged to perform integrated impact assessments in addition to sectoral ones." (SPREP, 1997). There is a need for further implementation of the provisions of Chapter 36 of Agenda 21. There is also the implementation through various channels of the Decade of Education for Sustainable Development. The efficient coordination of the UN system agencies has to be a primer task. This means that WMO, ITU, UNEP, FAO, UNESCO, UNDP and others together with regional organizations like the European Union have to demonstrate their contribution to the climate change challenges. As professor Yash Tandon has put it, "a much more radical shift in the pattern of consumption and production" has to be considered, otherwise humankind is heading for an environmental catastrophe. (Tandon, 2005)

Further on "Risk evaluation and assessment need to become two of the focal points of environmental and sustainability research. These are essential for decisions being made with incomplete knowledge" (Proclim, 1997). In substance incomplete knowledge means increase of uncertainty. (Prigogine, 1996) We have to pay attention to cross-cutting issues of a more general nature: monitoring,

financing and governing. Monitoring needs criteria and reporting, something which is mostly done by the secretariats of the intergovernmental organizations but needs more refining and coordination. Financing is a sensitive issue and the recent relief of debt to a number of countries is part of the solution of it. Finally, the international institutions in general have to be more effective collectively and individually. Within this range of issues of general nature there is also the implementation of the targets of the Millennium, the MDGs. Both the President of South Africa HET. Mbeki and the Nobel Prize of Kenya for 2004 Ms Wangari Maathai have stressed the fact that Africa lags behind other regions in progress toward the MDGs. The same is valid for SIDS. Therefore the United Nations meeting in September 2005 in New York is of crucial importance.

There are also issues of more specific nature for the SIDS, such as infrastructure, education, and cooperation between the public and private sector. Regarding infrastructure the need of transfer of technologies and organizing the public sector in a way that constructions are suitable to avoid any repercussions from climate change and thus decrease vulnerability of SIDS and increase their resilience. Resilience includes also food security and health issues.

Education refers mostly to reliable and useful information, but also to public awareness. Facilitation of access to environmental information for citizens, local, regional and national authorities, and business is fundamental for improving protection of environment and improvement of local geographical information technology with implementations of Geographic Information Systems (GIS). The Sustainable Development Networking Programme (SDNP), or the International Network of Information Referral System (INFOTERRA) of UNEP can be helpful in this respect.

At a more substantive educational level, the initiative of UNESCO has to be expanded to other SIDS, that is the establishment already of chairs on sustainable development in two Universities in the Pacific Islands. <u>www.unesco.org/csi</u> Training in interdisciplinarity and integrated approaches is thus being reinforced. In addition to the information provided to the public at large through the various media and NGOs, there is also a need for training of specific segments of scientists, particularly lawyers and judges, but also the educators themselves. There is not adequate awareness of the existing problems and there is a knowledge gap but there is also the digital divide. An easy access to internet facilities and the necessary local infrastructure is absolutely necessary. Finally, a better framework of cooperation between the public and private sector is pertinent and feasible in order to be faced the complex problems and needs of the SIDS and the developing countries in general. The Global Compact, which was introduced by the United Nations on a voluntary basis, is one of this kind of cooperation between the private and public sector. <<u>www.unglobalcompact.org</u>>

A particular reference has to be made to forests, because all start with human security and end with it:

- Forests need human security as much as human security needs forests.

<sup>—</sup> There is a need after the calamity of December 2004 to reassess the important role of forests in natural disaster prevention and mitigation.

— Forest conservation must become a central part of disaster resilience and human security strategies. (Hammill/Brown/Crawford)

According to all the above, solidarity and cooperation have become imperative in a planet which is in need of an equilibrium of ethics, environment and spirituality according to the veteran of the United Nations Prince Sadruddin Agha Khan so that human security including human dignity will prevail. (Maniere de voir No 81, 2005)

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