DISASTER AND HUMAN SECURITY

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Fabien Nathan
IUED, Geneva,
NCCR-NS/IP8
GMOSS/AFES-PRESS

Mankind has reached an interesting point of its history. It has now the choice either to keep its development unchanged and undergo massive disasters, or to bifurcate and ensure its own sustainability. Information about this choice is not lacking. It is its real integration into consciousness, that is missing.

The purpose of this presentation is to explain how disaster risk is one of the most important threats to Human Security. It also aims at showing that the notion of Human Security could serve as a conceptual tool for raising awareness and bringing solutions to these problems, which are mostly social.

I Risks, Disasters and Human Security

A. Risks, vulnerability and disasters as social issues

First of all, we need to specify the notions, as they are used in several manners and can be confusing.

1. A **risk** is a probability of damages inflicted by one or several hazards in a vulnerable human community. It accounts for latent threats, not yet manifested.

2. **Vulnerability** is the main component of risk. It is a set of conditions, be they physical, social, economical, environmental, political, and the like, that raise the susceptibility of a community to the impact of a damaging phenomenon. Exposure, for instance, is a component of this vulnerability. Exclusion and misery as well.

3. Risk [R] is therefore the combination of **hazards** [H] and **vulnerabilities** [V], mitigated by the **capacities** of the affected to face. [R = H x V]

Between a hazard and its social translation into a disaster, there is a society at risk, more or less vulnerable or resilient. **Resilience** is the capacity to absorb the damaging perturbations in order to come back to an acceptable state.

4. A **disaster** is thus a realised risk. It is a crisis, or disruption in the functionning of a society in a manner that exceeds its ability to cope using its own resources. It thus differs from an accident, which is manageable by the affected society alone. It is therefore the highest form of failure of **Human Security**, the aim of which, according to the Human Security Commission, is " *to safeguard the vital core of all human lives from critical pervasive threats, in a way that is consistent with long-term human fulfilment*".

5. Moreover, risk is an **ongoing process**, shaped by the modifications of the hazards and of the potentially exposed society. Disasters are thus depending on a very high number of parameters, many of which are directly or indirectly influenced by social structures.

6. Usually, one classifies risks and disasters according to the main hazards that triggered the impact : **natural** disasters like floods, landslides, earthquakes, volcano eruptions, and the like ; **biological**, like epidemics or insect infestations ; **technological**, like nuclear accidents, oil spills, etc ; and **human-induced** disasters, like wars or terrorist attacks. But disasters are by no means natural, they are socially defined : if there is no society, or if the impact remains unnoticed, there cannot be a disaster.

Now I would like to explain how disasters constitute a serious problem for security, taking the example of natural disasters.

B. impacts of natural disasters

1. Natural disasters tend to **increase** dramatically since more than 30 years. The number of disastrous events have more than tripled between the 1970s and the 1990s. If the number of deaths seems to lower and stabilise from 2 millions to more than 800 000 per decade, the number of affected people has more than doubled, reaching more than 1 billion 800 million. That would represent 1 human out of 3 if compared with the overall population. On the economic side, the losses have literally exploded, being multiplied by 12 and raising to more than 685 billions US$.

2. The **distribution** of these impacts is of course clearly uneven. It is not only depending on the strength of the natural hazards, but most significantly on the state of development or weakness of the affected countries. For instance, Asian countries concentrate 94 % of the deaths between 1964 and 1998. Bangladesh alone lost 500 000 people, of which 140 000 are due to the cyclone in 1991. The economic damages also affect much more the poorest countries, not in absolute value but in relative terms: more than 13% of their GDP from 1985 to 1999 ! Finally, the weakest people within the society are also most at risk, like the elderly or the most miserable.

C. Hypothesis: local disasters are linked to a "global Disaster"

Now I would like to make a hypothesis. I am proposing a distinction between the *disasters* undergone locally, and a world-wide *Disaster* that is happening on a global scale, and which is exacerbating or even sometimes creating the disasters by increasing both the hazards and the vulnerability factors, that means, the risk process. The difficulty comes from the indirect character of their causal relationship.

1. **Local disasters** are concerning a community or society, usually affecting a certain amount of individuals whose life are partially or totally disrupted. They can be big like the recent Bam disaster in Iran (more than 40

000 deaths), or small like the many thousands landslides or floods occurring each year in Latin America, and which do not even enter the statistics.

These local disasters are clearly linked with a mix of social risks, i.e. a situation of insecurity of the daily life including a state of misery, exclusion of services, goods, networks and rights. It is manifest in the lives of many people in informal settlements like slums. People are forced to live in the most dangerous areas in poorly built houses. As it is increasingly recognised in the disaster research community, this situation of need and survival hinders the capacities to prevent and cope with hazards. This is exactly what the Human Security concept is about : ensuring *freedom from want* and *freedom of fear*.

At the local level, it is thus a mix of different types of causes, both ecological and social, which create the disasters.

My hypothesis is that these disasters are part of a bigger process, the global Disaster.

2. At a **global** scale, there is a general degradation which is both ecological and social.

This ongoing, creeping Disaster is now constantly reinforcing and threatens the *habitability* of the planet, in the ecological but also in the social sense. This means that the world is becoming less suitable for the life of human beings : on the ecological side, land degradation, climate change, losses of biodiversity, pollution, and the like are perturbating the big biogeochemical and climatic cycles, thus provoking sudden or slow-onset disasters. If coastal lands are unhabitable, droughts and floods commonplace, soil fertility exhausted and polluted, forests destroyed, ozone depleted and the carbon and oxygen cycles perturbated, life could be seriously damaged, and the earth system's homeostasis broken. This degradation is sometimes called *global change*.

On the social side, there is also a general process of degradation, which could be interpreted as a reinforcement of the structures of domination throughout the world. Impoverishment, rising inequalities, increasing violence, forced migrations, massive unemployment, unplanned urbanization, increasing concentrations of misery and extreme wealth, and destruction of public collective structures, are part of this global Disaster. This threatens Human Security and reinforces or creates the local disasters, be they ecological or man-made.

Therefore, disasters are increasingly linked with this world Disaster, the latter reinforcing the former and the former the latter.

II. Human security's answers to disasters

In front of this situation, classical State security has proven unsuccessful. Command and control schemes are not adapted. On the contrary, Human Security is an attempt to place the people at the center and provide flexible solutions, adapted to local realities. What would then be the answers of Human Security in front of disasters ?

A. Classical prevention, mitigation and precaution

Classical mitigation of natural and technological disasters is of course very important. Its main elements include awareness raising ; hazard, vulnerability and capacity analysis ; risk assessment ; institutional intervention and application of specific measures (such as land-use planning, building codes, protection of critical facilities, environmental management, insurance and economical tools, structural and non-structural works, etc.) ; early warning systems ; preparation ; and training[1].

In order to ensure a greater efficiency, each of these steps need to be done either directly by the population at risk, or if not possible in strict collaboration with these people, under the form of popular mitigation, i.e. a disaster mitigation that solves in priority the problems actually preoccupating the population, even if they are judged as misplaced or not important by external experts. All levels of governance should be concerned, but the most local one should be preferred, and the subsidiary principle respected. With its people-centered focus, Human Security could be a good conceptual line for this type of mitigation.

Besides this classical disaster risk managament, I would add that Human Security should also include the precaution principle, when severe and irreversible damages are possible, for example before the implementation of a potentially damaging technology.

B. Long-term and broader vision

But this contextual prevention and mitigation of disasters is bound to specific and contextualised risks, in time and space. It is necessary but not sufficient to efficiently reduce the risks globally. A long-term vision, incorporating the future generations' interest, is needed. It is a question of responsibility towards mankind but also towards life in general.

As Pr Bohle mentions, « *Human security can only be achieved through challenging the structure and processes, both natural and social, that contribute to insecurities, vulnerabilities and risk.* »[2] Human Security

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[1] See UN/ISDR (2002), *Living with Risk. A Global Review of Disaster Reduction Initiatives,* Preliminary version, Geneva, July 2002, www.unisdr.org .

[2] Bohle, H-G. "Land degradation and Human Security", paper presented to the UNU/RTC Workshop on "environment and Human Security", Bonn, 23.10 to 25.10 2002, p 4.

therefore requires to enlarge the time and space scale of risk management and security, as well as to extend it to areas not traditionally concerned, like social insecurity and justice.

It also requires to go beyond individual measures. Security is linked to thinking and acting collectively, as it is more and more generally recognized. Cooperation only can ensure a sustainable security, and reinforce the solidarity necessary to mitigate the global Disaster.

C. A new ethics of security

1. Security is about the future : is starts from a fear in the present based on anticipations of an undesired future. As Dupuy has shown, the precaution principle is even not sufficient. We need to go further and postulate the *certainty of the worst*, in order to avoid it.

2. A new ethics of security is thus required. Human Security could form the basis of this socio-ecological ethics. It would be about struggling in the mean time against the social and ecological Disaster, by re-establishing a sustainable society for the human beings that do not destroy the life system support, nor the conditions of social life.

Human Security thus needs to be rethought in a holistic way, and not split into different dimensions that could be treated separately[3]. It could serve as a conceptual tool to transform the world and bring in-depth solutions, inventing a *security with a human face*.

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[3] Like the 7 securities mentioned by UNDP: economic, food , health , environmental , personal, community, political.