

UNU-ONY Book Launch of the fifth volume of the
 Hexagon Series on
 Human, Environmental Security and Peace (HESP)
and of the third volume of the
 Global Environmental and Human Security Handbook
 for the Anthropocene (GEHSHA)
 on
Coping with Global Environmental Change, Disasters and Security
Threats, Challenges, Vulnerabilities and Risks
23 March 2011

Remarks by Úrsula Oswald Spring, CRIM-UNAM, Mexico

Cultural Change and the Fourth Sustainable Revolution

Excellencies, ladies and gentlemen,

It is a great pleasure to talk today to you and I am grateful to our host, Dr. Jean-Marc Coicaud, and to Ms. Portia Gama for organizing this book launch. I thank all the panellists for your comments on this third volume of the *Global Environmental and Human Security Handbook for the Anthropocene*. Why do we need a fourth sustainable Revolution?

Introduction

The global systemic crisis with a financial-economic debacle and a rescue operation that required a bailout of more 27 trillions of US\$ since autumn of 2008; an estimated population growth between 9 to 11 billion people by the year 2050, an increase of the temperature due to anthropogenic induced climate change between 2 to 6.4° C by the year 2100; an urbanization and slum development, where over half of world population are living in cities and demanding employment, basic services and livelihood, may push and maintain 4 to 5 billion people into poverty. Furthermore, the environmental deterioration with an enormous bio-debt in almost all countries, the loss of water security; the food insecurity characterized by billions of overweighed persons and more than one billion of hungry people, are creating food and health threats. Environmental degradation is now in most developing countries of such a magnitude that it is threatening the sustainability of ecosystem services and thus the survival of human beings. Deforestation, desertification, soil and water over-exploitation, combined with air pollution are undermining the caring capacity of the natural supporting systems that nature and humankind depend on. Finally the cascade effects we had recently experienced in the Japanese earthquake-tsunami to a nuclear, evacuation, food and safe water problems shows the high vulnerability of postmodern societies.

In synthesis, the dominant cornucopian vision related to business-as-usual has brought Earth and society to an environmental, financial, and food crisis with the loss of values and has created new, often unknown risks. Thus, this Fourth Sustainable Revolution goes further than the former agricultural, industrial and

technological-communication revolutions and believes in the unity of humankind anchored in solidarity and compassion with nature and human beings.

Towards a Fourth Sustainable Revolution

A desirable future within the frame of a Fourth Sustainable Revolution is a process that involves natural and social sciences, the collaboration of governments, business communities and organized society and deep changes in culture, worldview, mindset and governance.

First culture is understood as a globally organized way of life based on values, norms, beliefs, institutions and productive processes including the development of science and technology. It is transmitted from generation to generation by formal and informal learning processes and is socially constructed to maintain and reinforce structures of power and mechanisms of control. Thus a radical cultural change is overcoming the anthropogenically dominated worldview and rebuilding the complex interrelations between nature and humankind.

Second worldview includes a cognitive orientation of a society, its values, emotions, and ethics. It comprise a descriptive world model; an *explanation*; a *futureology*; *values*; a theory of action; an *epistemology*, on what is true and false and an *etiology*. From an alternative worldview both scientists and policy-makers have repeatedly declared to shift towards a sustainable development in a more cooperative and multilateral world.

Third mindset includes the transformation of fixed mental attitudes or 'cultural lenses' often supported by religious beliefs that filter our reaction to the world, our own aspirations and our consumption patterns but also those of our governments and international organizations.

Fourth participative governance changes "the complex of formal and informal institutions, mechanisms, relationships, and processes between and among states, markets, citizens and organizations, both inter- and non-governmental, through which collective interests on the global plane are articulated, rights and obligations are established" (Weiss and Thakur, 2010), and differences are negotiated in a peaceful way.

Among major structural impediments are the competition and a lack of horizontal coordination among ministries; the dominance of short-term reactive over long-term proactive strategies and policies; a missing longer-term visions; mismanagement, corruption and short-term, selfish interests where the environmental consequences and costs have been ignored for far too long.

On the international level a weak multilateralism prevails with an anarchic inefficiency of international organizations, due to its bureaucratic structure of decision making. The prevailing worldview of the elites and people is often manipulated by the mass media, and also by the mindsets of policy-makers and their advisers.

Some Conclusive Ideas of Agenda Setting: From Knowledge to Action

Thus, the Fourth Sustainable Revolution has to overcome several obstructions: the first systemic obstacle is immerse in the patriarchal culture, consolidated for more than 5,000 years, where the prevailing Hobbesian mindset of the political and military elites applies power concepts, but also the mindset of wasteful consumption patterns are transferring the externality of the environmental costs to nature. To reach the goal of a global limit of temperature of 2°C by the end of this century, enhanced energy efficiency, a shift towards renewables and a gradual dematerialization and decarbonization of the economy together with the recovery and restoration of ecosystems are crucial. Stern (2006, 2009) indicated that proactive policies will in the long run be cheaper and less violent and can avoid major humanitarian tragedies and complex emergencies the Earth and global politics may increasingly face during this century.

In synthesis, the Fourth Sustainable Revolution proposes radical changes in four key elements: peace, security, development and environment, including deeply transformations in the daily habits, beliefs and social representations, but also in the power structures at the international, national and local level. With regard to governance processes the symbiosis of strategies for sustainable development with sustainable peace as two goals of a new peace policy for the early 21st century requires to move from understanding and facing these new security issues to concrete societal strategies, specific policies and economic measures for coping with these new security dangers. Sciences has shown that the existing resources are sufficient to offer every human being dignified live conditions, but excess and concentration of wealth must be redistributed in favor of humans with less access, but especially for Mother Earth. She will be able in the future to care, provide, mitigate and renovate the environmental services, if humans are able to work in a culturally diverse and environmental protective way in harmony with her.