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Organización  
de las Naciones Unidas  
para la Educación,  
la Ciencia y la Cultura

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منظمة الأمم المتحدة  
للتربية والعلم والثقافة

联合国教育、  
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**Address by Irina Bokova,**

**Director-General of UNESCO**

**on the occasion of the Seminar on Climate Change and Education**

**at the UN University**

**“Responding to Climate Change Starts with Education”**

**Tokyo, 26 November 2010**

Professor Konrad Osterwalder, Honourable Rector of the United Nations University,  
Honourable Won Jung Byun, Chief Coordinator of the Regional Centre of Expertise  
on Education for Sustainable Development,  
Honourable Hirofumi Abe, Dean of the Graduate School of Environmental Science,  
Okayama University,  
Excellencies,  
Ladies and Gentlemen,

It is a pleasure to open this Public Symposium on ‘Education and Climate Change:  
UNESCO's Role in the 2010s.’

I wish to thank the United Nations University for organizing this event. As always,  
the United Nations University is accomplishing its mission to foster cutting-edge  
research and teaching on the most pressing issues facing humanity.

Climate change is certainly one of the greatest challenges that we face.

And it raises some of the most complex questions of global governance, with  
ethical, economic, gender and social dimensions. How can the international  
community work better together to mitigate its impact? Where must we adapt to its  
consequences?

These questions involve a multitude of actors and a spectrum of emerging issues.  
They have global implications. I have no doubt that we must craft stronger

international legal mechanisms and mobilize greater financial resources at the global level.

At the same time, responding to climate change must start with each of us, with the ways that we think and act. It must start with our attitudes and behaviours.

The importance of education in this respect is beyond dispute.

Article 6 of the 1992 United Nations Framework Convention on Climate Change underlined the importance of education, training and activities to raise public awareness at the national and international levels.

Education is the way to shape new ways of thinking and to forge new practices and behaviours. It can help build the foundations for more resilient societies that are able to respond and adapt to the pressures of change. Through quality education for every child and adult, we can develop the skills and attitudes that are necessary for rethinking behaviours and for making sustainable decisions.

Ladies and Gentlemen,

UNESCO has a key role to play in pursuing these objectives. Our actions are as multi-disciplinary and multifaceted as are the challenges posed by climate change.

Climate change education lies at the heart of the *United Nations Decade of Education for Sustainable Development* (2005-2014), which UNESCO leads. I hardly need to remind this audience of the role that Japan has played in promoting this Decade and in supporting UNESCO's action.

The Decade of Education for Sustainable Development provides an over-arching inter-disciplinary framework through which UNESCO promotes active learning and innovative thinking about the issues raised by climate change.

UNESCO has developed four angles for approaching education for sustainable development.

The first concerns the provision of quality basic education. The droughts, floods and rise in sea levels that are associated with climate change can have a severe impact

on educational infrastructure and the availability of educational services. These, in turn, pose a number of problems related to school enrolment and attendance, and for the quality of teaching/learning processes.

We must seek to protect educational provision from the effects of immediate disasters and longer term pressures arising from climate change and other challenges -- including, for example, by giving greater attention to the spatial planning of educational services.

The second angle is to re-orient existing education programmes. This involves revisions of curricula in science and mathematics education as well as the social sciences and the humanities, in order to educate the younger generation about climate change and to stimulate the problem-solving and critical thinking skills needed to generate solutions at local and global levels.

Third, UNESCO works to raise public understanding and awareness. We need deep behavioral changes in many of the ways by which we lead our lives -- from energy use to consumer habits. Major public awareness campaigns are vital for supporting such lifestyle changes.

Finally, training is important. Most adults today were educated before climate change was an issue. Professional development and training on climate change is needed for all sectors of our societies.

The overall aim of the United Nations Decade of Education for Sustainable Development is to equip individuals with the knowledge, attitudes and skills that will allow them to make informed choices and responsible decisions -- now and in the future. This will provide the basis to re-shape the social, cultural and economic context of our development. Faced with the ever-increasing impact of climate change, this objective is more relevant than ever.

In this framework, UNESCO is working to facilitate partnerships with a wide range of players, including youth and media groups. We are fostering research and the sharing of information and good practices. We provide a framework for monitoring and evaluating policies and their progress.

The UNESCO World Conference on Education for Sustainable Development held in Bonn in 2009 took these initiatives several steps further. Climate change education figured prominently in the Bonn Declaration.

The Bonn Conference was followed up in July 2009 with the UNESCO International Seminar on Climate Change Education, supported by the Government of Denmark. Discussions addressed several aspects of climate change education – including how to integrate climate change into educational policies, programmes and curricula, identifying climate change educational tools and good practices; and mobilizing networks and partnerships in support of climate change education.

Earlier this month, UNESCO presented the mid-Decade report to the United Nations General Assembly in New York at a session devoted to the multiple aspects of sustainable development, including climate change. In parallel, UNESCO worked with Japan to organise a side event, where I launched a new publication entitled *Tomorrow Today*.

This publication sets a benchmark. It clarifies opportunities and challenges in the area of sustainable development and it identifies innovative ways to address them. Drawing upon many areas of expertise, this publication reaffirms the need to place the principle and objective of sustainability at the heart of our education systems.

This UNESCO publication provides a compass for moving in the right direction.

We also need to focus more on climate change mitigation and adaptation.

2010 has been marked by devastating natural disasters -- headlined by the earthquake in Haiti and record floods in Pakistan. There have been tsunamis, volcanic and seismic activity, floods and drought, from Chile to the Indonesian archipelago.

These events -- I personally witnessed the devastation in Haiti and Pakistan -- remind us of the toll that natural disasters can have in devastating loss of life and infrastructure, setting development back for decades in some regions. They remind us also that investing in disaster reduction and preparedness *today* can save an untold number of lives and infrastructure *tomorrow*. Here, once again, education is vital.

UNESCO is active in this area of interface between climate change education and education for sustainable development. The Organization has developed teaching materials and a training manual on *Natural Disaster Preparedness and Response*. With a special focus on the Asia-Pacific, we have also designed teaching materials on climate change from an inter-regional perspective.

UNESCO's Education Sector is reviewing its work on the theme of 'Disaster Risk Reduction and Education' with a view to formulate a strategy for this area of work, including how it interfaces with education for sustainable development and climate change education.

The Organization has also developed a *Teaching Resource Kit for Dryland Countries*. Designed for primary and secondary school teachers worldwide, this kit takes an innovative approach that draws on the creativity of students.

This builds on the experience we developed for the *Environmental Education Kit on Desertification*. This kit was pilot tested through the UNESCO Associated Schools in countries affected by desertification. The objective is to show that desertification is not inevitable and that everyone, at his or her own level, has a role to play in shaping the Earth's future.

*YouthXchange* is another concrete example.

In partnership with the United Nations Environmental Programme, YouthXchange works on the link between youth and consumption. This initiative seeks to raise awareness and provide educational resources to develop more sustainable consumer choices. Youth must be empowered to make better decisions.

A thematic YouthXchange guidebook on climate change is being jointly developed, and a preliminary version will be presented at the Climate Conference in Cancun next month. The guidebook will be published in early 2011.

Ladies and Gentlemen,

At the 15<sup>th</sup> Session of the Conference of Parties (COP 15) that was held last year in Copenhagen, I presented a new UNESCO climate change initiative, with education

as one of its four pillars. This is also the core idea that UNESCO will bring to the United Nations Conference on Sustainable Development in 2012 (Rio +20).

Our focus falls within the overall context of Education for Sustainable Development and builds on its activities. In practice, we are developing guidelines to integrate climate change issues into school curricula, teacher training, educational programmes and policies, particularly at secondary school level and within technical and vocational education and training.

We are working also to develop teaching, learning and advocacy materials on climate change issues. Identifying and disseminating good practices and materials is important to this process. The networks provided by the UNESCO Associated Schools Network, the World Heritage sites and the Biosphere Reserves are vital here.

The *Sandwatch* programme is another example that provides insight to UNESCO's work.

It is a volunteer network of schools, youth groups, non-governmental and community-based organizations that was initiated in the Caribbean in 1999. It has become global since then, with a particular focus on small island developing states. From the Cook Islands in the Pacific, the Seychelles in the Indian Ocean to the Bahamas in the Caribbean, these states are deeply engaged with the programme.

Sandwatch seeks to modify the lifestyles and habits of children, youth and adults by developing awareness of the fragile nature of the marine and coastal environment.

The approach is very much 'hands-on,' and seeks to integrate the values inherent in sustainable development into all aspects of learning. Again, the idea is to empower citizens to act for positive environmental and social change.

The second edition of the Sandwatch manual -- *Adapting to Climate Change and Educating for Sustainable Development* -- will be launched during the Climate Conference in Cancun next month.

Ladies and Gentlemen,

I wish to explore with you three additional aspects of UNESCO's work. The first concerns the link between gender equality and climate change education.

Girls and women are on the front lines of climate change. They are often primary producers of staple food and water collectors. They are often the unpaid labour that is most directly affected by climate change.

UNESCO collaborated in the writing of the *Training Manual on Gender and Climate Change*, led by International Union for Conservation of Nature and the Global Gender and Climate Alliance. This tool is designed to strengthen the capacity of decision-makers to develop gender-responsive climate change policies. The Manual has been put to wide use, namely for the training of trainers on climate change negotiations.

UNESCO works closely in this area with the United Nations Environmental Programme, with whom we are developing a *Starters Guidebook on Climate Change*. Targeted at education practitioners and planners, the Guidebook has a wide angle. It includes a strong section on gender equality and the importance of climate change education.

Greater international coordination is vital here. With the United Nations Development Programme, UNESCO is co-manager of the Inter-agency Network on Women and Gender Equality's Task Force on Gender Equality and Climate Change. Our objective is to better integrate gender equality into the overall climate change efforts of the United Nations system.

The second angle to note concerns local and indigenous communities.

Many local and indigenous communities are especially vulnerable to the impact of climate change, due to the nature of their territories - small island, Arctic, high altitude, or arid zones - and their reliance on resource-based livelihoods. It is vital that their voices are heard. Their experience must be developed and shared.

In partnership with other stakeholders, UNESCO launched the *Climate Frontlines* project in 2008 to address these issues. This multi-lingual internet-based forum

promotes the exchange of community-level observations and innovations regarding climate change. Some 50,000 individuals are actively engaged—including from small island states and from local and indigenous communities worldwide.

A Funds-in-Trust grant from the Government of Denmark in 2009 has allowed Climate Frontlines to expand from online discussions to the facilitation of small-scale projects on climate change impacts and adaptation. These projects feed into the online forum and will constitute a global database on community-level climate change information.

Thirty field projects are now underway. Their outcomes will be compiled into a publication on community-level perceptions of and responses to climate change.

In addition, we are working with the United Nations University Institute of Advanced Studies and the United Nations Development Programme Small Grants Programme within the framework of the Intergovernmental Panel on Climate Change.

The objective is to throw the spotlight on the role of indigenous knowledge in climate change adaptation. Expert meetings will bring together indigenous knowledge holders, natural and social scientists, and policy-makers, with lead authors of the Intergovernmental Panel on Climate Change – to explore case studies and draw out relevant data for the Fifth Assessment Report to be released in 2014.

Ladies and Gentlemen,

The last angle that I wish to highlight is the role of UNESCO Chairs.

As you know, UNESCO has created a network of 664 UNESCO Chairs spread across 127 countries. These Chairs serve as bridges between research and policy-making, between the academic community and civil society. They act as think tanks and as poles of excellences.

Roughly fifty UNESCO Chairs address sustainable development, environmental, biodiversity and other issues related to climate change education.



In contribution to the Decade of Education for Sustainable Development, a number of UNESCO Chairs have established partnerships with core UNESCO programmes, including our flagship Man and the Biosphere Programme.

We are honoured to have a very active UNESCO Chair in Research and Education for Sustainable Development at Okayama University. This Chair works to promote an integrated system of research, training, information and documentation in the field of education for sustainable development.

UNESCO's university education twinning and networking programme is also important. At Waseda University, for instance, we established a UNITWIN Network on emergency preparedness and responses. The aim is to develop an integrated system of research, training, information and documentation activities in this strategic field.

UNESCO Chairs and the UNITWIN network build the bridges that are necessary to promote teaching and research on issues relevant for climate change education. They are a rich resource to develop.

Ladies and Gentlemen,

Education is often overlooked in climate change debates, strategies and national action plans.

UNESCO, together with other United Nations partners and NGOs, is committed to changing this. At the upcoming Climate Conference in Cancun – COP 16 – you can count on us to promote education on climate change as a core strategy to enhance mitigation and adaptation.

To sum up, I see three overall points to take away from UNESCO's work on climate change education.

First, UNESCO works as a beacon for climate change education at the international level. We perform a standard-setting and a clearing-house role globally, in coordination with the United National Framework Convention on Climate Change and other partners. Setting goals concentrates minds. Sharing practices and experience is vital.

Second, our approach is concrete. We work through practical projects and ‘hands-on’ initiatives that are holistic and inclusive in scope. Practical experience and real interaction are the best ways to change attitudes and to forge new ways of thinking and behaving.

Finally, a profound belief in humanism guides UNESCO's activities. This is anchored in a positive vision of humanity, where individuals can change their minds and can alter their destinies – to shape the future of the world.

It was Albert Einstein who said:

*“You cannot solve a problem from the same consciousness that created it. You must learn to see the world anew.”*

Education is the way to see the world anew.

UNESCO will continue to raise awareness and seek the dedication of greater resources. We will continue to develop innovative approaches to reach new audiences. We will continue to build strong partnerships with all members of society.

I thank the Japanese Government for their continuing leadership role in UNESCO.

This support extends beyond the government.

Yesterday, I visited the Shibuya Junior and High School. This is one of the 155 Japanese members of the UNESCO Associated School Programme.

Education for Sustainable Development is a priority theme of the network of Associated Schools. The theme is especially well-developed in Japan.

I thank the Government of Japan for its support to the Associated School Programme network.

I wish to congratulate again the United Nations University. We must link more closely the ‘local’ and ‘global’ levels and tie more coherently individual responses with international measures. The work of the University in applying global

knowledge for local solutions and in promoting indigenous knowledge to widen the climate dialogue is vital.

I am also grateful to the Institute for Advanced Studies for agreeing to chair for one year the Decade's Inter-Agency Committee. This brings some seventeen United Nations bodies together in support of the Decade's goals.

I wish to acknowledge here the important contribution of the Regional Centres of Excellence promoted by the United Nations University within the framework of the Decade.

Ladies and Gentlemen,

Strengthening the sustainability and resilience necessary to address the impact of climate change goes deeper than financial, economic and material structures and policies. These will succeed on the ability of individuals to change the way they think, to develop new attitudes and to craft new skills.

Responding to climate change starts with education.

Thank you.