

**UNESCO contribution to the intermediate review of the  
New Delhi Work Programme on the Article 6 (Education, Training and Public awareness) of  
the UNFCCC Convention**

UNESCO has long recognized the mounting challenge presented by climate change, and its five programme sectors have contributed to UN efforts to respond effectively. The Organization's educational response has been positioned within its responsibilities under Chapter 36 of Agenda 21 and in the framework of the DESD. Climate Change is one of the key action areas of the UN Decade of Education for Sustainable Development (DESD, 2005-2014), which UNESCO leads. The Decade provides a framework for enhancing and promoting active learning and innovative ways of framing the climate change issue so that it makes sense in the context of people's daily lives, helping to translate passive awareness into active concern and behaviour change. The aim of Education for Sustainable Development (ESD) is to equip individuals with the knowledge and skills to make informed choices and responsible development decisions, now and in the future, and to participate actively in re-shaping social, cultural and economic development so that it becomes truly sustainable.

UNESCO is currently developing a flagship initiative to make an enhanced and more visible educational contribution to the international response to climate change: the Climate Change Education for Sustainable Development Initiative. The initiative will help young people understand and address the impact of global warming today, while also encouraging the changes in attitudes and behavior needed to place our world on a more sustainable development path. CCE for sustainable development should further help children and young people to adapt to the changes that climate change will bring.

The priority objectives of the initiative are to:

1. Strengthen the capacity of Member States to provide quality climate change education for sustainable development at primary and secondary school level.
2. Encourage and enhance innovative teaching approaches to integrate quality climate change education for sustainable development in school.
3. Raise awareness about climate change and enhance non-formal education programmes through media, networking and partnerships.

**The following programs have contributed to the implementation of Article 6:**

A **Climate Change Education Seminar** organised by UNESCO and the Danish government in July 2009, gathered a total of 54 participants, many from Small Island Developing States (SIDS), representing a multi-disciplinary and diverse group of stakeholders including: teachers and educators, national education representatives/curricula development experts etc. The seminar focused on three themes: the integration of climate change into educational policies, programmes and curricula; identification of climate change education tools, materials and good practices; and the mobilization and engagement of networks and partnerships in support of climate change education.

Find the workshop report including recommendations at:

[http://www.unesco.org/science/doc/cc/CC\\_seminar\\_report\\_071209.pdf](http://www.unesco.org/science/doc/cc/CC_seminar_report_071209.pdf)

Through **Climate Frontlines**, UNESCO provides a platform for indigenous peoples, small islands and vulnerable communities' knowledge on climate change, in partnership with the Secretariat of

the Convention on Biological Diversity, the Secretariat of the UN Permanent Forum on Indigenous Issues and the Office of the High Commissioner of Human Rights. Knowledge built up through Climate Frontlines provides for non-formal education through awareness raising and provides a resource for the development of educational materials oriented on the role and contributions of local and indigenous knowledge in climate change.

The goals of Climate Frontlines are to:

- Draw international attention to the knowledge and experiences of indigenous communities and peoples living in small islands, the Arctic and other vulnerable environments;
- Seek community-level observations on climate change impacts, as well as local efforts to cope with and adapt to these changes;
- Provide an opportunity for communities to voice their observations, experiences and concerns, and to share and exchange them with other communities;
- Build up a global database of local observations, experiences, practices and coping strategies;
- Support community-based research and educational activities related to climate change;
- Heighten the profile and impact of indigenous peoples and their knowledge in international climate change fora.

The Climate Frontlines global internet forum reaches more than 50,000 people worldwide and connects islanders from the Atlantic, Caribbean, Indian and Pacific sub regions. It solicits inputs from small island and indigenous communities concerning local level observations of climate change impacts, and their efforts to cope and adapt to sea level rise, climate variability, the increased intensity and frequency of extreme climatic events, accelerated melting of circumpolar or high altitude ice, and other climate change related events. Of equal interest is local level reporting on negative impacts of mitigation measures, such as the expansion of tree plantations, increased production of biofuels, and resultant loss of access to lands and resources or positive impacts such as the reinforcement of traditional practices contributing to carbon sequestration. In addition, Climate Frontlines currently supports a worldwide network of 25 projects, the experiences and results of which will contribute towards a global database of local observations and knowledge on climate change. Knowledge built up through Climate Frontlines provides for non-formal education through awareness raising and provides a resource for the development of educational materials oriented on the role and contributions of local knowledge in climate change.

<http://www.climatefrontlines.org/>

**Sandwatch** is an educational program through which school students and community members learn and work together to critically evaluate the problems and conflicts facing their beach environments and to develop sustainable approaches to address these issues. With a strong field monitoring component, Sandwatch seeks to make science 'live' yet remains inter-disciplinary with applications ranging from biology to woodwork and from poetry to mathematics. With its focus on monitoring and assessing environmental changes and developments in coastal areas, Sandwatch presents and discusses climate change impacts and adaptation, and encourages the sharing of results and achievements between practitioners around the world. A global Sandwatch database that will allow practitioners to upload information data from their projects is currently under development. Sandwatch is a volunteer network of schools: students, teachers and principals; youth groups; non-governmental and community-based organizations; working together to monitor and enhance their beach environments. The programme was started in the Caribbean in 1999, and has since evolved into an inter-regional activity involving islands as far apart as Cook Islands in the Pacific, Seychelles in the Indian Ocean, and the Bahamas in the Caribbean; as well as countries in Europe, Africa, Asia and South America. Sandwatch is supported by the United Nations Educational, Scientific and Cultural Organization (UNESCO) through the education and science sectors, and has received support many national organizations, both governmental and non-

governmental. The network is coordinated by The Sandwatch Foundation, a non-profit organization.

<http://www.sandwatch.ca/>

**Pedagogical material, tools and resources on Climate change.** UNESCO has developed several education materials addressed to teachers, curriculum developers, teacher trainers education planners and media. The publications include policy briefs which provide recommendations and guidance to decision-makers in terms of appropriate ESD policy formulation; a module on Natural Disaster Preparedness and Response composed of a conceptual framework, a glossary of natural disaster terms, a training manual containing learning lessons, activities and tasks, and resources including case studies and worksheets; a teaching module on climate change which provides an inter-regional perspective on climate change, with a specific focus on the Asia-Pacific; an e-learning module for the training of educators, students, key stakeholders, UN agencies and UNESCO staff to communicate and advocate for ESD and its practical implications, with reference to climate change issues. UNESCO has also produced an ESD media training and resource kit, with the Thomson Foundation, called *Media as partners in education for sustainable development which*, seeks to assist media professionals in their efforts to report on sustainable development issues, help provide relevant information resources and establish a model for media training on sustainability topics, and contains a chapter focusing on climate change. Further have been developed a Training Manual on Gender and Climate Change and guidelines to incorporating climate change issues into curricula. YouthXchange is a UNEP/UNESCO project on youth and sustainable consumption, designed to assist teachers, youth groups, and NGOs to raise awareness of sustainable consumption and empower youth to put theory into practice. Several other tools are currently being developed.

**Networking activities in climate change.** Climate Change Education has further been promoted through formal and non-formal education, using UNESCO's extensive networks such as the UNESCO Associated Schools Network, World Heritage sites, Biosphere Reserves, the International Hydrological Programme networks, UNEVOC, etc. to develop formal and non-formal teaching programmes and to test and disseminate materials developed. The networks further help with the development of good practices and innovative educational materials in climate change education.

**Country-level support to climate change education initiatives.** UNESCO is currently supporting the Vietnam's Government's endeavor to develop an Action Plan for 2011-2015 on Climate Change Responses in Education Sectors. Vietnam's Ministry of Education and Training and UNESCO held the 'International Consultative Workshop on the Action Plan for Education Sector Response to Climate Change in Vietnam. Support to several other countries to develop climate change policies and programs will follow shortly.

#### **Areas in climate change education to be addressed and strengthened**

- Policies: Climate Change should be integrated into education policies and also include education response to CC within climate policies and action plans.
- Whole school approach: Entire schools, including students, educators, administrators and communities, should be actively engaged in working towards a sustainable school..
- Themes: specific thematic gaps in particular the social aspects of CC such as climate change ethics, justice and uncertainty, and adaptation need to be included in education and awareness programs.
- Teachers: Climate change requires educators to include new content into education, training and public awareness programmes. Teacher education is therefore an area of priority to advance climate change education.

- Clearing house: a doorway for exchanges of good practices, experiences and other information for CCE is needed to provide support for the development of valuable networks/partnerships and between communities. undertake a full and relevant inventory of CCE related resources.
- Curricula: All levels and forms of existing educational and teaching and learning programmes need to be reviewed and re-oriented to address the causes and consequences of climate change. Climate change education should be interdisciplinary and holistic, integrating scientific, social, gender, economic, cultural, human rights and ethical dimensions, and incorporating local, traditional and indigenous knowledge perspectives and practices.
- Methods: Climate change requires problem solving and social transformation skills to be developed and nurtured. And therefore positive, participatory action and solution-centered approaches to education and learning need to be promoted.
- Education for Sustainable Development should be mentioned in the New Delhi work program is an appropriate framework for climate change education.