

**Recommendations from the
UNESCO Expert Meeting on Climate Change Education for Sustainable Development and
Adaptation in Small Island Developing States**

21-23 September 2011

Nassau, The Commonwealth of the Bahamas

UNESCO, with support from the Governments of Japan, Denmark and The Commonwealth of the Bahamas, organized an Expert Meeting on Climate Change Education for Sustainable Development and Adaptation in Small Island Developing States on 21-23 September 2011 in Nassau, The Commonwealth of the Bahamas. The 76 participants from 29 countries adopted the following recommendations on Climate Change Education for Sustainable Development in Small Island Developing States. The recommendations are addressed to UNESCO, Member States, educators and other stakeholders:

- 1. Take into account the interdisciplinary nature of Climate Change Education for Sustainable Development (CCESD),** which is an integral part of Education for Sustainable Development (ESD). CCESD should be integrated **across curricula at all levels to ensure learning across the life-cycle.** It should encompass **formal, non-formal and informal education.** A holistic approach to CCESD must recognize the complexities of climate change, addressing – and drawing upon – a range of disciplines and areas of expertise, including climate science, policy, law, ethics, sociology, economics and culture, and aim for the more effective and inclusive sharing of such knowledge. It must be guided by considerations of equity and the impact of climate change on society.
- 2. Link the local and global perspectives.** To be effective and relevant to the learner, CCESD should be **contextualized and linked to local phenomena and issues** by covering topics such as food security, water resources, gender equality, and human security in pursuing livelihoods of choice. This local focus must be linked to the **global perspective, creating an understanding of the causes and ethical implications of climate change at the global level.**
- 3. Build teachers' and educators' capacities** to deliver accurate information, integrate local content, and promote critical thinking about and take action on climate change mitigation and adaptation. Promote the reform of **teacher education institutions** while ensuring the immediate delivery of community-oriented in-service training and mentoring for teachers to gain confidence in teaching CCESD content.
- 4. Further encourage the development of pedagogies that support quality education,** with special emphasis on the development of knowledge, skills, values and competencies required to mitigate and adapt to climate change in SIDS, including

quality mathematics and science education. This will require replacing traditional, rote-learning methodologies with **problem-solving, inquiry-based and future-oriented learning** anchored in the local community, enhancing the quality of mathematics and science education as well as greening technical and vocational education and training.

5. **Adjust educational planning** to climate change, taking into account the impacts of climate change on migration patterns and school enrolment, infrastructure maintenance and personnel, as well as disaster risk management. This will require a comprehensive analysis of risks, vulnerabilities and opportunities for the integration of CCESD across the education system, that is, in policies and legislation; education sector plans and budgets; curricula and examinations; teacher education; school infrastructure and facilities; learning environments; and school governance and management. This requires capacity-building activities for policy-makers, educational planners, and school governors and managers.
6. **Involve learners and communities, as well as teachers and educators, in the planning and design of educational programmes and activities.** It is essential that learners, whether in the formal, non-formal or informal context, take ownership of their adaptation and mitigation measures. Learners, along with parents and the wider community, must be involved in educational planning, including curriculum development.
7. **Link and where possible integrate education for disaster risk reduction and climate change education.** The preparations and actions for disaster risk reduction are closely related to those needed for climate change adaptation. Establishing this linkage in educational policies and programmes will also allow for the demonstration of the urgency and direct impacts of climate change on SIDS.
8. **Link CCESD to the arts and culture.** The arts, whether photography, music, dance, painting, poetry, video production or other forms of expression, have proven to be an effective means through which to engage SIDS populations on climate change issues.
9. **Support the maintenance of healthy ecosystems.** The degradation of ecosystems and the services they provide caused by land use change and resource exploitation is contributing to increasing the vulnerability of SIDS to climate change. Improving natural resource management and raising awareness about ecosystem services are an integral part of building resilience to climate change.
10. **Support peace-building and peace-keeping,** and prepare learners and educators to cope with forced migration and other potential threats to human security posed by climate change.
11. **Learn from local and indigenous knowledge and respect other systems of knowledge and values.** Educational programmes should be built upon an in-depth understanding of the learners' knowledge, creativity, experience and perceptions. Learning should be based not only on science but also on contributions from local and indigenous knowledge systems, value systems and languages. Establishing this integration is

essential in many SIDS. Among Polynesian and other Pacific peoples, the relationship of people, land, sea, ancestors and the spiritual realm constitutes the very basis for understanding environmental change and its impact on society. Where appropriate, CCESD should be pursued in cooperation with organizations and groups that exercise a key influence on SIDS societies' values and norms, such as faith-based organizations and community elders.

- 12. Tailor education programmes and public awareness campaigns to the human rights and unique needs of different learner groups.** Different learner groups have different information needs. Children and adults understand and react differently to the learning experience. Likewise, communication and education strategies must take account of learners' languages, gender, cultures and their relative positions within society. Throughout, respect for every learner's human rights is imperative.
- 13. Reach and empower the most vulnerable.** The most vulnerable to climate change are those facing the greatest difficulty accessing information and education. These include children and adults, especially girls, women and those with disabilities, those from poor families, indigenous groups, ethnic minorities and communities living in particularly vulnerable locations such as coastlines. In Pacific SIDS, the engagement of vulnerable and marginalized groups has been achieved through partnership arrangements between NGOs and Ministries of Education, where NGOs address ESD and CCESD needs in remote and marginalized communities and in informal contexts.
- 14. Diversify climate change communication.** The use of information and communication technologies, especially social media and mobile phones, represents a powerful resource for CCESD, enabling active exchange and networking among SIDS learners and educators at the local, regional and global levels. The use of such resources should be complemented by a concerted effort to utilize other means to reach populations without internet access, who are often among the most vulnerable to climate change.
- 15. Link education and research.** The nexus between education and scientific research is a powerful domain with the potential to empower SIDS communities. Cooperation between the **educational and research communities should be further developed, with an emphasis on active engagement of schools and communities in the research endeavour** – for example through their participation in data collection. This can be achieved through the design and promotion of educational programmes through which learners experience their local social and natural environments first-hand, collecting data, analyzing and sharing their findings – and taking action to address problems identified. This will lead to a better appreciation of the environment among learners and researchers alike, generate essential local data, and link the research and education agendas. However, this will require long-term efforts that go beyond the standard project cycle. UNESCO World Heritage sites have the potential to serve as places of learning and research on the environmental and socio-cultural aspects of climate change and adaptation in SIDS.
- 16. Encourage the development of common research agendas for SIDS,** including the identification of areas where schools and communities can contribute through

participation in research in their communities and out-of-classroom project activities. The leading role of SIDS in climate change research may benefit from the potential of SIDS to serve as living laboratories for long-term climate studies. For example, the Bahamian blue holes - marine sinkholes up to 200 metres deep - represent a unique and largely unknown geological, paleontological and archaeological record of climate and sea level variations over long periods of time.

- 17. Support intra- and inter-regional SIDS-SIDS cooperation.** Although SIDS regions and sub-regions are very diverse, they share a particular vulnerability to climate change and face similar adaptation constraints and opportunities. **Encourage cooperation between SIDS and other countries** that are and will be seriously affected by climate change. Sharing and exchanging knowledge, good practices and information among SIDS education and research communities has the potential to promote partnerships, and inform and advance CCESD as well as the research agenda. Make use of existing networks and SIDS knowledge management platforms like SIDSnet, Islands Communication Network and the University Consortium of Small Island States (UCSIS) for these purposes.
- 18. Adopt a system-wide approach.** Engage with sectors other than education, including the private sector, and develop a cross-sectoral approach to CCESD to create awareness about the benefits of addressing and incorporating CCESD into regional and national climate change plans and policies and poverty reduction strategies. Build regional and national capacity for the integration of education in SIDS climate change mitigation and adaptation strategies.
- 19. Ensure that adaptation funds** are made available to support CCESD, which represents an important strategic dimension of climate change adaptation efforts in SIDS.
- 20. Advocate for Climate Change Education in SIDS and mainstream CCESD in international mechanisms and processes** such as the United Nations Framework Convention on Climate Change (UNFCCC) Article 6 and the United Nations Conference on Sustainable Development (UNCSD), particularly its meeting in 2012 in Rio de Janeiro, as well as the wider global development and education agendas such as the UNESCO-led United Nations Decade of Education for Sustainable Development (DESD), the drive for Education for All (EFA), the United Nations Literacy Decade (UNLD), and the Millennium Development Goals (MDGs). Ensure that CCESD activities continue after the end of the DESD in 2014. Create synergies with the outreach programmes of other major multilateral environmental agreements such as the Communication, Education and Public Awareness (CEPA) Work Programme of the Convention on Biological Diversity (CBD).

The participants offer these recommendations for consideration and adoption by all stakeholders engaged in climate change education for sustainable development and adaptation in small island developing states.

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