

4th International Conference on Environmental Education
CEE, Ahmedabad, India
26-28 November 2007

Moving forward from Ahmedabad ... Environmental Education in the 21st Century

From Tbilisi to Ahmedabad

International conferences mark changes in thinking and approaches. They also set new agendas for action. The first set of international recommendations to guide environmental education were developed in Tbilisi, Georgia, in 1977. Ten years later, in 1987, a conference in Moscow, Russia reviewed progress, and focussed on institutional strategies and action plans to strengthen environmental education. A third international environmental education conference was held in Thessaloniki, Greece in 1997, which debated the role of environmental education in contributing to sustainable development. Following the World Summit on Sustainable Development in 2002, a UN Decade on Education for Sustainable Development (DESD) (2005-2014) was launched, based on earlier recommendations in Chapter 36 of *Agenda 21*. The 4th International Conference on Environmental Education, held in Ahmedabad, India in 2007 within the framework of the UN DESD, marks 30 years after Tbilisi.

This document reflects views and perspectives of over 1,500 people from 97 countries attending the Ahmedabad Conference. It concentrates on common themes raised in the conference, and is complemented by a conference Declaration and recommendations on more than 30 topics discussed by working groups at the conference.

In drafting this set of recommendations, we recognise this document as one in a range of documents that provide orientation to environmental education in the 21st century, most importantly the DESD's *International Implementation Scheme* and associated regional, sub-regional, national, and local strategies and action plans being developed to guide implementation of the UN Decade.

How Environmental Education evolved from 1977 to 2007

In 1977, the *Tbilisi Declaration* made far reaching recommendations that environmental education should be life long, integrated, active and inclusive. This meeting also recognised the complex and multi-dimensional nature of environmental issues, and the need to investigate the root causes of environmental problems.

Since 1977 international thinking about environmental education has changed, mainly through a broadening of participation in the field, as well as rapid changes in society, the

economy and the global world order. These recommendations build on the strong foundations that environmental education has provided in the evolution of education for sustainable development (ESD) and re-affirm the need to further strengthen environmental education.

A broad review of the evolution of environmental education shows the multi-dimensional nature of these changes:

- ***Changes in thinking about education and learning:*** In 1987, the emphasis was on education and training, while discussions in 1997 introduced collaborative learning. Today the emphasis is on experimentation and broader social and cultural situated learning processes that take account of context. These changes in thinking about education and learning have been accompanied by changes in pedagogy and methods. However, there are still great challenges to make these approaches to learning work in formal educational settings that are slow to change.
- ***Changes in leadership and partnerships:*** In 1977, leadership for environmental education was provided mainly by two UN agencies: UNESCO and UNEP. Since then, many international and national NGOs and universities have joined in the process of providing leadership, indicating a growth in institutional contexts for environmental education. Today national governments, national and international organisations are also providing leadership for ESD through various partnerships.
- ***Changes in conceptualising the environment – development relationship:*** In 1987 the focus was on environment *in the context of* social and economic issues, while the 1997 conference recommendations noted that poverty reduction was *necessary* to achieve sustainability. Today, environmental educators are considering the inter-relationships between environment, society, culture and economics, although many are concerned that economics dominates the others. This raises issues of equity and social justice. The concerns and issues of risk and disaster management and mitigation have also gained recognition in environmental education thinking as we begin to experience global climate change impacts.
- ***Changes in communications and access to knowledge:*** The last two decades have seen rapid changes in the knowledge, communications and access to information environment. In 1987, communication was mainly through newsletters, in 1997 worldwide internet communication was just emerging. Today there are a wide range of communication possibilities, and the internet has fundamentally changed the knowledge environment. However, access to communication technology remains unequal, and education is not accessible and available to all.
- ***Changes in emphasis on issues:*** Over the past 30 years the emphasis on environmental issues has changed; from pollution and population growth in 1987 to poverty and sustainable development in 1997 to global climate change, which tops the

international political agenda today. There is a recognition that environmental issues such as global climate change are interconnected with a range of related issues such as health, human rights, the right to education, poverty, pollution, business responsibility, consumption and production, biodiversity loss, water quality and quantity, energy, gender, and environmental ethics amongst others. Environmental justice and social justice have become closely linked. Although the widening scope of issues may make the education process seem more complex, it also requires more holistic, comprehensive discussions and policy synergy.

- ***Changes in sites of learning and participation in learning:*** There has also been a broadening of learning sites, media and methodologies. In 1987, environmental education was mainly practised in a narrow range of institutional contexts such as schools and environmental organisations while in 1997 it had widened to include people in business, local government, community development and other areas. Today, environmental education and ESD is practised in the health sector, disaster relief and a wide range of other social and institutional contexts. The widening of learning sites is accompanied by new media and methodologies that allow for border crossings and multi-site learning, and a broadening of participation in the learning process.

Within this changing framework, many thousands of environmental education programmes, projects and materials have been developed and used with millions of learners, community members and decision makers in all countries and learning contexts around the world. Networks and partnerships have been formed, official policies have been developed, and professional courses and qualifications exist. Institutions have grown and a new professional field has emerged. Many smaller meetings and conferences have been held, involving both government and civil society organisations. These programmes and projects have been driven by extremely committed people and groups who share a common ethical commitment to a better world for all people and all life forms. They have concern for the future, for the world, and for equity, democracy, sustainability and justice.

Despite these efforts, the state of the planet has gone from bad to worse. To this, we have added the crisis of climate change which scientists have confirmed is real and requires urgent action.

Thus, we draw attention to a new sense of urgency and the need for a new, broader approach to environmental education in a very different social, economic and political climate, and knowledge environment to that of 1977 when the Tbilisi Declaration was formulated.

A New Sense of Urgency and a Need for a New Paradigm

Our recommendations for Environmental Education and Education for Sustainable Development in the year 2007 must be rooted in the harsh reality that not only are we

exhausting and plundering the resources of the Earth at unsustainable rates, but we are on the threshold of unimaginable devastation that climate change is likely to bring.

We no longer need recommendations for incremental change; we need recommendations that help alter our economic and production systems, and ways of living radically. We need an educational framework that not only follows such radical changes, but can take the lead. This requires a paradigm shift. The roots of our present education paradigm the world-over can be traced to the Enlightenment era, which gave birth to science as we know it today and influenced all areas of human thought, activity and institutions. This Enlightenment paradigm is based on the ideas that progress is rooted in science and reason, and that science and reason can unravel the mysteries of nature. It encourages us to 'know' nature in order to use, transform and consume it for our insatiable needs.

Today, we need a new Enlightenment to redefine our notion of progress. Since we have rapidly exhausted or polluted nature in pursuit of such progress, this new paradigm needs to recognise that we must live within the limits of nature's systems and that that we need to 'know' nature in order to transform societies to live sustainably in happiness, peace and with dignity, amongst themselves, and in relation to Planet Earth.

Such a new Enlightenment not only requires the specific changes that the following recommendations suggest, but demands fundamental changes in the creation, transmission and application of knowledge in all spheres and at all levels.

To implement these recommendations, we need to work for immediate change even as we acknowledge the current state of the planet, the contemporary paradigm under which society and the education system functions, and the need for a fundamental change in the purpose and practices of education.

Environmental Education in the 21st Century: Making it happen

These recommendations reflect the essence of the hundreds of recommendations made at the conference. They call upon education, environmental and sustainable development practitioners and institutions, including international organisations and national governments, to work individually and collectively to transform the words into actions.

The Fourth International Environmental Education Conference:

1. Reaffirms the recommendations made by the Third International Environmental Education Conference and the United Nations' *International Implementation Scheme* for the Decade of Education for Sustainable Development that education must be

recognised as an effective driver of change in conjunction with other drivers, such as ethical actions, government policies and regulations, economic incentives, and technology.

2. Applauds governments that have instituted policies and frameworks for environmental education and ESD, and urges all countries to give greater priority to funding and supporting the implementation these policies and frameworks. We urge citizens to hold governments accountable for this implementation.
3. Supports the work of communities, groups and institutions that are working towards a secure and sustainable world, and urge these groups to build on and extend their work within a broad partnership framework.
4. Realises that we need to search continuously for new paradigms and innovations as we do not have all the answers for creating sustainable futures. We must stimulate learners in all sectors of society to envision and create new development paths, networks, and social practices to achieve sustainability.
5. Urges everyone to learn from history, nature and natural systems to develop understandings of how to respect and live within the limits of nature, and to evolve social, production, technological and economic systems that are creative, innovative, equitable and sustainable.
6. Promotes education that builds capacity to engage critically with contemporary (unsustainable) development discourses and practices and that nurtures and strengthens dialogue and advocacy skills.
7. Endorses education for the achievement of equitable and sustainable livelihoods for all people. Such education develops the knowledge, skills and talents necessary for participating with dignity in a range of sustainable livelihood strategies (including employment, self employment, entrepreneurship, and other forms of work). Innovative livelihood strategies, not based on exploitation of nature or other people, need to be developed in all societies around the globe.
8. Endorses Gandhi's words that "there is enough in the world for everyone's need, but not for anyone's greed" and recognises that there are people who are still unable to meet their basic needs, people living within their needs, and systems that are turning greed into need. Environmental education must recognise and critically engage the tension between needs and greed.
9. Encourages the use of monitoring and evaluation practices that are designed to be a valuable learning process for all involved. A learning-oriented view of monitoring and evaluation can build capacity as well as identify best practices.

10. Supports the concept of a Planetary Fund for Environmental Education for building sustainable societies, through development of policies, programmes and initiatives that are equitable, and that are supported and sustained over the long term.

The Conference further recommends changes in several areas of thinking and practice.

1. *Change thinking about education and learning*

- 1.1 Promote earth system literacy and systemic thinking skills in environmental education to understand the nature of interdependency within the human family, the biotic community and the planet's life sustaining processes that explain the causes and solutions for the critical challenges we face.
- 1.2 Orient education towards preparing people to mitigate, live with and adapt to a new risk environment given the way that climate and ecosystem functions are changing.
- 1.3 Redirect education, which is a social process, towards bringing change in lifestyles (in consonance with sustainable consumption and production); building social cohesion and respect for cultural diversity; directing organisational practices towards sustainability; and towards including all people in all walks of life at all stages of the life long learning process.
- 1.4 Take an integrated approach to environmental education so that it can be a process of transformation. Teaching and learning should make use of diverse methodologies and be sufficiently flexible to cater to the various needs of learners in different cultures, contexts and nations. Such teaching and learning should incorporate ethical and critical reflection and creative thinking and learning approaches (such as those that characterise arts, design and creative cultural fields) and be inclusive of various approaches to learning. Educators and learners should explore and draw on local environments and knowledge critically and creatively to inform their work.
- 1.5 Use education to enhance dialogue among educators, community members and leaders, and empower and encourage people to actively participate in civil society. Develop capacity to engage with wider power relations and the effects of power in society.
- 1.6 Employ pedagogies in schools and other formal learning institutions as a means of integrating environmental education and ESD principles and transformative learning approaches across all areas of the curriculum and all aspects of the school / formal learning institution's life. Provide and develop

clear direction for formal education curriculum development to enhance progression in environmental learning over time.

- 1.7 Use non-formal education practices to enhance ties and strengthen the relationship between formal education and the local community.
- 1.8 Help people to review values in relation to policy and behaviour through mandatory interdisciplinary and / or trans-disciplinary courses of learning for sustainability that employ new research and pedagogical approaches. Such courses can be developed (for formal and non-formal learning contexts), shared and reviewed within a learning network approach.
- 1.9 Design monitoring and evaluation of environmental education and sustainability practices in such a way that these processes can become a valuable learning process for all involved. A learning oriented view of monitoring and evaluation has the potential to build capacity for critically reflective practices and educational and social change.

2. *Change patterns of leadership and partnership formation*

- 2.1 Base partnerships on a common vision and principles of equity, the ultimate goal of which is the benefit of communities, the public good and the sustainability of life.
- 2.2 Bridge gaps between different groups, ministries, sectors (particularly public - private), student leadership and youth movements, as well as other stakeholders through new partnerships that develop understandings and actions to achieve sustainable practices.
- 2.3 Encourage new initiatives and organisations where needed, and work towards building synergies through, for example, the use of active coalitions.
- 2.4 Generate educational practices and research that lead to solutions for cross border environmental problems and stronger environmental education and ESD practices at local, national and global levels through inter-country and regional exchanges and co-operative support within a partnership framework.

- 2.5 Develop capacity for leadership based on accountability, and the modelling and demonstration of new practices.
- 2.6 Support the media and other communication and educational organisations to embrace sustainability practices and to lead by example.
- 2.7 Implement and develop strategies that enable decision makers to make informed and accountable evidence-based decisions in the interest of the public good and the sustainability of life.
- 2.8 Encourage interested countries from different regions to work in collaboration with UNESCO, UNEP and other UN organisations to continue providing the leadership necessary to exchange knowledge and experience, identify practical ways of working together, including the development of national policy frameworks, pilot programmes and demonstration projects for wider benefit.

3. *Change how we understand environmental issues*

- 3.1 Base environmental education on an understanding of the inter-related dynamics of environment, society, culture and economics, and an understanding of the nature and causes of risks and issues that impact on socio-ecological relations, systems and structures at local, national and global levels.
- 3.2 Recognise the multi-faceted nature of environmental issues, and mainstream them across all disciplines and sectors as a priority.
- 3.3 Use education to develop capacity for democratic participation in Earth governance through building understandings of the relationship between ethical principles (such as those outlined in the Earth Charter), legal instruments, multi-lateral agreements and national policy frameworks in all areas related to sustainable development.
- 3.4 Integrate education processes as a substantive part of environmental management and sustainable development plans and strategies in all sectors and organisations concerned with environmental change and sustainable development.
- 3.5 Document success stories, new practices from communities and educational organisations as well as stories about conservation, innovation and transformation that can be part of a knowledge commons for wider adaptation and/or replication to broaden knowledge of environmental issues and risks and how to respond to them.

4. *Change how we conceptualise and engage with the environment – development relationship*

- 4.1 Orient thinking and educational practices that deal with the environment towards concepts and practices of *sufficiency* and *sensibility*, in addition to the current focus on *efficiency*.
- 4.2 Integrate a philosophy of care (for oneself, one another, future generations and the larger living world), peace, truth, justice, tolerance and kindness amongst people, nations and generations in ways that are informed by values such as those presented in the Earth Charter into environmental education and ESD actions and practices. Also, acknowledge the need for critical ethical reflection in education.
- 4.3 Treat environment as intrinsic to development decisions, and not as an externality. Educators should engage with decision makers and other stakeholders to include full environmental and social cost accounting in development decisions so all can learn how to avoid past developmental mistakes.
- 4.4 Use environmental education to build capacity to engage critically with contemporary (unsustainable) development discourses and practices, particularly amongst the poor, marginalised and vulnerable, and amongst development thinkers and planners.
- 4.5 Build capacity for achieving equitable and sustainable livelihoods, and the knowledge, skills and talents necessary for participation in a range of livelihood strategies (including work, self employment, entrepreneurship and new forms of work). New, more sustainable livelihood strategies are required in all parts of the world, amongst rich and poor.
- 4.6 Mainstream environment into the development agenda, on an *equal par* with social and economic concerns, and provide adequate resources for the education and learning processes needed for this mainstreaming.
- 4.7 Bridge the gap between environment and development through effective use of information and research findings, collaborative planning processes (e.g. scenario planning strategies), and systemic and critical thinking.

5. *Change how knowledge is viewed, and our communication practices*

- 5.1 Adapt and use systemic, critical and creative thinking and holistic approaches to knowledge that are grounded in sustainability practices to facilitate ESD in schools, communities and societies.
- 5.2 Value traditional wisdom and indigenous knowledge for their potential contribution to re-thinking practices and opportunities for sustainability. Accept a multiplicity of knowledge systems as legitimate in the educational process since many of the solutions may be inherent in knowledge systems practiced in indigenous and traditional systems, now and historically.
- 5.3 Strengthen and extend educational processes based on exploration, negotiation, deliberation and dealing with risks and challenges as these are the basis of a critical mass of 'people's and community' knowledge and coping systems.
- 5.4 Value conflict, dissonance and diverse points of view in the learning process as a legitimate basis for knowledge creation and learning. Use active networks to link up and juxtapose a plurality of sources and points of view.
- 5.5 Provide citizens and learners with a dynamic space to share visions, educational practices and resources through applications of ICT and other communication mechanisms, systems of portals and other decentralised communication strategies (e.g. radio). Through this, facilitate joint monitoring and evaluation of the status of the Earth, the status of human and non-human governance processes and provide a self-validating and democratic knowledge commons. Make efforts to link up the knowledge of communities not digitally connected to ensure inclusivity in the creation of such a knowledge commons.
- 5.6 Nurture and strengthen advocacy (including dialogue) skills to enable better negotiation at all levels (local, regional, national, global) and critical and positive approaches to change. Identify and develop opportunities for developing advocacy skills for change towards sustainability goals.

6. *Change sites of learning and participation patterns and practices*

- 6.1 Review and change existing educational structures, roles and forms to allow for effective environmental education and ESD practices.
- 6.2 Create and strengthen new opportunities for participation in sustainability practices through integrated communication between various stakeholders

including the educators, media, communities, men and women, and youth groups etc.

- 6.3 Create and extend educational efforts to mobilise diverse groups to participate in planning at different levels to regain control over resources to meet livelihood needs and ensure sustainability of ecological systems.
- 6.4 Strengthen and extend learning capability through participation in communities of practice and networks oriented to existing and new sustainability practices.
- 6.5 Carefully design and agree upon the components of assessment and evaluation as these are interconnected. All stakeholders should be part of this process so that criteria and processes are transparent, inclusive and change oriented.
- 6.6 Integrate emancipatory, participatory and other transformative research approaches into international, national and institutional research agendas.
- 6.7 Emphasise and value the role of teacher education as a catalyst for orienting educators to sustainability practices and real world concerns.
- 6.8 Draw on the surrounding socio-ecological and cultural environment as a setting for learning and support learning in these settings with appropriate mediation practices.
- 6.9 Contribute directly to hands on action and change through environmental education and ESD practice.

**These recommendations were adopted by the Delegates of
the 4th International Conference on Environmental Education
on 28th of November 2007 at the Centre for Environment Education, Ahmedabad,
India**