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**Education for
Sustainable Development
Meaning and Scope**

Education is our bridge from the past to the present and from the present to the future

Anonymous

Education for Sustainable Development: An Emerging Paradigm¹

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Introduction

A cursory glance at the literature of education points out the fact that three kinds of phrases are common in the field. These phrases are (1) education, (2) the adjectival educations, and (3) education for sustainable development (ESD). These phrases are dealt with under the three different paradigms.

1) **Social development paradigm:** When we all say the word “education”, it means the mainstream education, which is under the banner of the “Social Development Paradigm”, where the parts (such as mountain, hills, rivers, forests, plains, snow, etc.) are studied to understand the whole (the Earth). It assumes that the sum of the parts is equal to the “whole”. Education takes place within the framework such as market philosophy, management culture, replicating modernists, or even entrenched modernists. Under this Paradigm, education carries on its traditional role of replicating a modernist society. Knowledge is

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transmitted in specialist and atomistic ways so that learners can be prepared for their role in the machine – to learn how to control and be controlled, to produce and to consume. The red/green and the deep green thinkings seek to counter alternatives to this thinking.

2) **New environmental paradigm (NEP):** The paradigm supports the idea that *“matter is not mechanistic but contains aspects of wholeness and fundamental interconnectedness”*. Ecological insights including Gaia theory support the idea of interconnectedness of life and physical systems. According to this paradigm, *“society too is seen as a web of shared meanings than a collection of individual consumers. Things are coming together; becoming more dependent”*. In education, there has been the revival and extension of the old idea that learning is a dialogue, communication and creation of new meanings in a safe and cooperative environment”. Under this paradigm, there are many movements, which are libertarian, and community education, progressive education, adjectival educations and socially critical and holistic environmental education (EE) and development education (DE). The adjectival educations (such as environmental education, development education, peace education, global education, to name a few) have arrested common expressions such as progressive, learner-centered, socialist, community-based and ecological traditions. DE and EE have played a prominent role which has partly been embraced and partly marginalized by the mainstream education. These movements have attempted to influence the debate in favor of intrinsic values and transformational education. Education carries on the role and need of some special groups of people and philosophy. This paradigm is broadly democratic, more eco-centric, socially concerned and integrative.

3) **Education for sustainable development paradigm:** In order to fill up the vacuum created by these thinking, it is necessary and required to find new model and approach which builds a new model, while retaining continuity with existing good practices. A model is required to continue to distil many contributory elements from these paradigms. The new model looks at the whole to be more than the sum of its parts. The new model holds this potential and has shown some interesting convergences in recent years. Both DE and EE share *“increasingly common aims, objectives, goal, vocabulary and approach”*. And their defining elements should be *“woven into a core framework utilizing the concept*

of sustainability to produce an accessible, balanced and empowering education for sustainable development". This is what is to be called education for sustainable development (ESD). It differs from the other educations because it is radical in nature, and it does not subscribe to technocratic interpretation of sustainability. Rather, it is rooted in eco-centric view. To be different from EE and DE, it should be noted that the adjectival educations are their own cultural baggage and support only their interest groups. So ESD holds the prominence of a more coherent, far-reaching and integrated responses than other adjectival educations but it has to be manifested and meaningful.

Approaches and intentions of these paradigms are different. The contexts under which they emerged vary greatly. Their pedagogies differ from each other. Yet, their ultimate goal remains the same i.e. to develop the full potential of an individual so that he/she become competent in promoting sustainability in the society. Due to time and space constraints, it may not be possible to dwell on these paradigms and is left up to the reader to explore. Instead, ESD will be explored and discussed in detail.

The primary purpose of the paper is to outline the concept of ESD as a framework to refocus the education system to achieve the goal of a better future so that the present generation is engaged adequately for their own well-being while ensuring even better quality of life for the successive generations.

Sustainable development and ESD

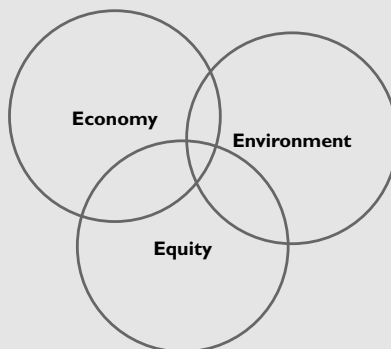
ESD is considerably broader in scope and complements the adjectival educations. In other words, ESD encompasses many aspects of these respected and established fields of study. The explanation of the phrase ESD, its concept, composition and intentions can be found in Bhandari & Abe (2003 a & b).

Sustainable development or sustainability is not a new idea; it is deeply embedded into the cultures of the Asia-Pacific region under different forms and names. It means caring not only for ourselves but also our children and their children. The world we live in, should be a better place (at least, not worse off), when we leave it for our children. So in a nutshell, sustainable development means "*living well within the means of nature*".

Let us talk briefly how the word “sustainable development” got its international prominence. The word, coined by Lester Brown (Thompson, 2001) was for the first time, used by ICUN-The World Conservation Union, in its famous document “*The World Conservation Strategy*” in the 1980’s. The world got its prominence in the Brundtland Commission’s report, which came out as “*Our Common Future*”. The Brundtland Commission has defined sustainable development as “*meeting the needs of the present without compromising the ability of the future generations to meet their own needs*”. Later, the Report was endorsed at the Earth Summit in 1992. In this way, sustainable development came into wide use and became synonymous with Agenda 21. This is internationally accepted as the most popular definition in the late 1980’s and 1990’s. It is still as valid as it was two decades ago. The recognition of this definition is well-reflected and well-informed in major international and national documents, plans, treaties and conventions.

Various efforts are underway to characterize sustainable development; some of the major ones are given below.

- It is an interface of the three “E’s” as in Figure 1. They are inter-connected and inter-dependent. They are not mutually exclusive. They should go together and cannot be separated and divided.
- It is an enlarged view of development that extends beyond simple measures of “growth”. It raises quality of life (happiness, satisfaction, secured and descent life, fair, equitable and accessible).



» Figure 1: Interconnection and interdependence among the three “E’s”

- It is a long-term thinking with a commitment to social equity and fair distribution of benefits and costs, both geographically and across current and future generations.
- It is about ecological equity (between human and non-human beings) on the Earth.
- Its vision is simple: a society in which people understand the world they live in; that possess rich biological diversities and cultural heritage; that has stable and well-informed population, and that has sustainable production and consumption within the carrying capacity of the Earth.
- It means living in a way to create lasting economic prosperity, environmental health, and social justice for current and future generations.
- It means humans would enjoy a secured, decent quality of life, and that has a fair, equitable access to the Earth's resources.
- Thus the society would enjoy universal equity among all living creatures.
- It means that we must reinvent the world socially, economically and environmentally, if we want to achieve this stage. This vision of a sustainable society requires a Herculean task.

But the greatest challenge we are facing today are the growing population, absolute poverty, environmental problems, conflict, violence, terrorism and inappropriate development, which are clasping together to weaken the ecological system on which we depend and live. Not only these forces, but also other forces (natural calamities, human actions and their combined effects) are in the loom. It is for these reasons that a huge shift in our thinking, values and action is required. To paraphrase Einstein, "*The significant problems we face cannot be solved by the same level of thinking we used when we created them*". The existing paradigms of education are yet to prove that they are adequate enough to address these burning issues. Results until now do not indicate any green signals. It is in this recognition that ESD is taken as a process to reach the apex of sustainable development.

Meaning and scope of ESD

Many scholars agree at the point that ESD is an extension of environmental education that would promote a sense of responsibility and active learner's

participation in resolving environmental problems (Tilbury 1995); a successor of environmental education (Hesselink et al., 2002); a basic understanding of the interrelationships among environmental, economic and social equity issues (PCSD, 1996); a dynamic extended environmental education, emphasizing critical thinking, problem solving skills and sensitivity (Huckle and Streling, 1997); a trick because it is a way of thinking as much as what we are thinking about (Wheeler and Bijur, 2000); and the recent version of environmental education (Bhandari, 2003 a & b). Its distinguishing features are presented in the next section. Here we present definitions only.

1. According to UNESCO, “ESD is an emerging but dynamic concept that encompasses a new vision of education that seeks to empower people of all ages to assume responsibility for creating a sustainable future.”
2. IUCN-The World Conservation Union articulates ESD “about how to stimulate and guide participation and learning in achieving a society that develops sustainability.”
3. “ESD means a lifelong learning process that leads to an informed and involved citizenry having the creative problem solving skill, scientific and social literacy, and commitment to engage in responsible individual and cooperative actions. These actions will help ensure an environmentally sound and economically prosperous future (PCSD, 1996).
4. According to CCES⁴, an US-based non-profit organization, “ESD is an approach to teaching and learning that meets the challenge of balancing the three “E’s” and intergenerational equity. It is a lifelong process of gaining the knowledge, skills and values needed to create lasting economic prosperity, environmental health, and social justice.”
5. Similarly, TCSF⁵ another US-based non-profit organization has defined ESD as “a new way of looking at the environment in which students (1) examine the network of dependant relationships that exist between the environment, the economy and the culture, and (2) come to understand that these interrelationships exist on the local, regional, national and global levels”.

⁴ CCES (Creative Change Educational Solutions): Ypsilanti: http://www.creativechange.net/se/what_is_se_what_is.htm

⁵ TCSF (Tahoe Center for a Sustainable Future), California: <http://ceres.ca.gov/tcsf/seg/page2.htm>

6. According to Agenda 21 ESD should “deal with the dynamics of the physical, biological, social, economic and spiritual environment” (United Nations, 1992).

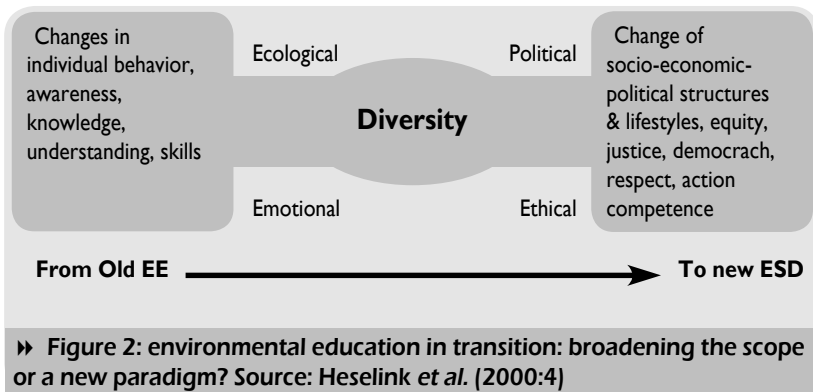
It can be elicited from these definitions that ESD is an empowering process in which the individual and community learn the connectivity among the three “E’s” together with three “R’s” (reading, writing and doing arithmetic skills) and use this knowledge to improve the quality of life of humans. The core strands of ESD embrace the following.

1. ESD is considerably broader in scope and complements the adjectival educations.
2. ESD is a new model of education that builds on the existing good practices.
3. ESD puts emphasis on practical skills that are good for self-employment and are increasingly sought by employers.
4. ESD involves learner until their behaviors are changed and new values and ethics, formed.
5. ESD goes beyond knowledge, skills and attitudes and blends them together.
6. ESD is context-oriented and puts emphasis on learning, action, reflection and action research to respond to the local issues.
7. ESD is student-centered⁶ and (2) activity-based⁷ (Janse van Rensburg, 2000).

Figure 2 shows how the focal point of EE is shifting towards ESD and how it is becoming broader and more inclusive in content. ESD is a stage in the evolution of environmental education and has a strong link with social, political and development educations (Hesselink et. al, 2002).

⁶ Learner-centered teaching is a shift away from an authoritarian approach (where teacher’s authority and the authority of the textbook prevail; learners are to be “seen and not heard”). It emphasizes on “starting teaching with the student, rather than the subject matter, and guiding the student to his/her discoveries, rather than teaching them the subject-matter”. Learner-centeredness is, therefore, often interpreted as a change in the teacher’s role, from authoritarian dispenser of knowledge to a mediator of learning.

⁷ Activity-based teaching is an attempt to improve on rote learning. It encourages “interactive” teaching and learning environments. This draws on Jean Piaget’s observation that young children develop new understandings through the active manipulation of objects. Piaget’s work also promoted “discovery learning” and the importance of exploration. This was also called “experiential learning”. These theories assume that “to engage learners in active meaning-making is to encourage better learning”. Active learning and activity-based learning are many times synonymous.



Distinctive features of ESD

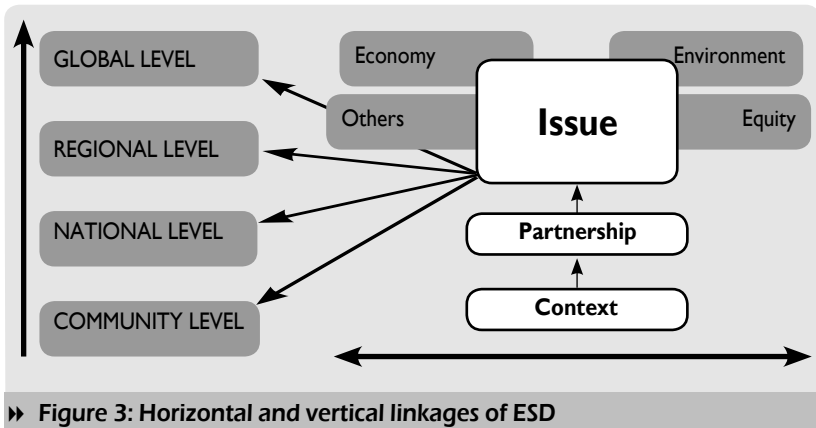
The goal of ESD is simple: *to prepare responsible and caring citizens for a rapidly changing society*. It empowers the student to fuse a sense of connection, purpose, relevance and meaning across academic disciplines as well as ability to think critically. It seeks to find out collaborative solutions to complex issues. ESD supports the integration of these skills, knowledge, and values. From the reviews of works and definition of ESD, it can be said that ESD is a new way (lifelong learning process) of looking at the issue in which the individual and community learn the three “Es” and their connectivity - along with the traditional three “R’s”; explain the understanding of their connectivity and use this knowledge as resource to improve the quality of the present and future generations.

ESD is an innovative and constructivist approach to education (or teaching and learning). It is not the subject, or discipline of its own rights. Nor can the teaching be relegated to a single course. Its themes must come to permeate all subject areas at all educational levels (Munson, 1997).

Sitarz (1998) mentioned that ESD is not a new course of study or new content, but rather *"it involves an understanding of how each subject relates to environmental, economic, and social issues"* (p. 202). Developing the content of this new educational dimension will require *"educators at all levels to reach beyond school walls to involve parents, industry, communities, and government in the educational process"* (p. 200).

From Figure 3 below, some of the distinctive features of ESD can be drawn.

1. ESD is context and issue-based, and locally relevant
2. ESD seeks partnership across the society.
3. ESD adopts an inter-disciplinary or trans-disciplinary approach. The issue comes before the discipline.
4. ESD explores links between students' personal lives and wider environment and development concerns (both horizontally and vertically).
5. The pedagogy combines the best practices of content integration (the economy, the environment and equity), inquiry-based learning⁸; and authentic assessment⁹. It takes the deep ecology approach¹⁰.



► Figure 3: Horizontal and vertical linkages of ESD

⁸ Instruction begins with meaningful questions relevant to students' lives. Teachers act as facilitators of in-depth investigations. Students investigate issues that matter through active analysis, research, reflection, interpretation, and problem-solving. This helps students move beyond acquiring facts to developing a deep understanding of complex ideas.

⁹ Students apply their learning in authentic situations through purposeful and positive actions. Powerful learning is framed by defining meaningful outcomes and providing authentic opportunities for students to demonstrate their learning.

¹⁰ The deep ecology approach sees humans as "stewards seeking to live in harmony with the Earth on a local scale; technology is used when it is considered "appropriate" by using renewable resources such as solar." However, a deep ecologist would choose a native tree species to plant that supports the habitat of a locally endangered animal. In addition, a deep ecologist would plant the tree in the northern hemisphere on the south side of a building if it was deciduous to provide summer shade or on the north if it was evergreen to provide winter wind breaking. All approaches are needed in solving our environmental problems, but the deep ecology approach may well offer the more holistic approach.

How can we begin ESD? Because the topic “sustainability or sustainable development does not appear in the curriculum framework. But the reality is that sustainable development offers multiple entry points across the curriculum. Practically any topic can be used as a starting point to investigate the related social, economic, and environmental factors. A teacher can begin with a topic on economy and then broaden the scope to include environmental and social aspects. Some educators have begun to use the topics such as resource use, the future, quality of life, consumption patterns, equity, and energy use. Thus the concepts and spirits of SD can be found across the existing curriculum.

Contrasts from EE

Some educationists argue that if ESD is the extension of EE, then why do not we call it EE? Why do we need this new vocabulary? If it differs from EE, then what is the main difference? This is what is discussed in the following section:

Firstly, EE as mentioned earlier belongs to the category of the adjectival educations. It is argued that the adjectival educations are not broad enough to include concerns other than the ones designated by their adjectives because they tend to meet the concerns of some selected interest groups only. In this regard EE is no exception. Secondly, EE views the environment within the context of human influences i.e., in terms of economics, social equity, culture, political structures, etc. In other words, EE is environment-based and attaches its values on the environment. Thirdly, the Tbilisi principles focus on values related to “*environmental sensitivity*” and demands the active involvement of learners in “*planning their learning process*”. Participation and equity values are meant only for students, but not for society or community in general. The three E’s are presented as a series of necessary trades off, i.e. one can be had at the loss of other.

On the contrary ESD demands that the three “E’s” are considered a whole and should be promoted together, never one at the cost of other. Thus, ESD goes beyond EE to grapple the more complex issue of how to promote all three “E’s” together. This is how the phrase ESD became the consensus word in WSSD and other international meetings.

Conceptually, no significant difference exists between EE and ESD. However, at the operational level, there are some differences, especially in their approach and methodology (see Table 1 for details). Despite these differences, environmental education experts such as Fien (1993), Tilbury (1995), Huckle and Sterling (1997), Wheeler *et al.* (2002), Heselink (2000) and many others are of consensus that ESD and EE are synonyms. In other words, ESD is the advanced form of EE.

Table 1: Difference between EE and ESD

Description	EE	ESD
1. Content	Knowledge and understanding of the natural environment and impact of social and political systems	Environment in the context of social, political, economic. Focus on local to global issues and their solutions. <i>Add more content equity and technology.</i>
2. Context	Formal and non formal mode	Lifelong learning process (any time, any where)
3. Method	Interdisciplinary, learner-centered, experiential and inquiry-based.	Interdisciplinary, learner-centered, experiential and inquiry-based. <i>Stresses on partnership and systemic thinking.</i>
4. Action	Environmentally sound skills and behaviors for decision making and citizen action.	Focus on citizen action skills
5. Values	Environmental protection in social and economic context	Environmental sensitivity. <i>Inseparability of three E's.</i>

Source: Wheeler *et al.* (2002)

The focus of ESD

ESD gets beyond the reduction and analysis approach to the synthesis and integration approach of what we know and can know. In other words, the understanding of interconnections between environmental, economic and social systems is core to ESD. ESD develops in learners the critical thinking skills, political knowledge and values required to analyze the complex interdependence of social, cultural, economic and political aspects of sustainable development. In other words, ESD cultivates in learners the habit of system thinking, interconnections

and multiple perspectives (Wheeler *et al*, 2000). The three examples presented below show some core themes included in ESD.

- i) The North American Association for Environmental Education (1998) has suggested the four themes for K-12 education.
 - Questioning and analysis skills.
 - Knowledge of environmental processes and systems.
 - Skills for understanding and addressing environmental issues.
 - Personal and civic responsibility.
- ii) According to the Tahoe Center for a Sustainable Future¹¹ ESD should embrace the following.

Focus: The complex relationships between ecological systems, economic structures, and community dynamics.

Process: Community and project-based process that supports student investigation and participation.

Approach: Integrating existing and new curriculum vertically as well as horizontally.

Method: Discussion and dialogue methods to address diverse issues both complex and controversial.

Materials: Use of local resources, tools and techniques.

- iii) Sterling (21997:34-36) suggests five indicators of ESD which cut across the themes of environment, the economy and social quality of life of all. These indicators are;

Sustainability values: Values that need to be reflected in education are intergenerational equity, conserving biodiversity and ecological integrity, qualitative development, community development, etc.

Personal and community values: Values such as a sense of responsibility to the environment and other people, abilities to translate this responsibility into action in both personal and public life, the ability to respond positively to change and uncertainty; the capacity to see the links between individual and group actions,

¹¹ Lake Tahoe. Tahoe Center for a Sustainable Future: <http://ceres.ca.gov/tcsf/seg/page2.html>

external events and other factors; an interdisciplinary and holistic outlook; and a sense of self-worth combined with a respect for other individuals and cultures.

Pedagogy: Pedagogy should be based on meaningful, rather than token, empowerment, participation and ownership. Action research and experiential and cooperative learning should be part of pedagogy. And it should aim at developing ecoliteracy and political literacy for full and active citizenship. Methodology includes experiential learning.

Curriculum: Values that should be reflected in the curriculum are vertical progression and horizontal integration (inter and trans-disciplinary); development of process, not content; establishing relation between areas more important than the de-contextualized studies.

Structures: The structure and organization focus on democratic decision making process; greening the physical and management of institutions; using institutions as learning center for the whole community; establishing networks and links; teachers and leaders being facilitators rather than authorities and education for life.

Major issues

As has been mentioned elsewhere that ESD is a new “constrictivist” approach. It is an emerging body of values, content and methodology that need to be “sown and grown”. A balance between “top-down” and “bottom-up” approaches needs to be maintained if ESD is to realize its full potential and thereby developing a new skill and approach. Sterling (1997) reiterates that the educational system needs the wholesale reorientation if ESD is to succeed. This is possible when we understand that “... *all issues connect and impact on each other and should be seen as an advantage rather than a problem. By working in one issue in one area, it is often possible to show links with and make a positive impact on other connected issues - to promote positive synergies intentionally*”.

ESD is purposive and indicative but not prescriptive. It needs to be negotiated according to local conditions, needs and perceptions. ESD has to go a long way to clarify some of the burning issues such as the following.

- Is ESD a convergence of all the adjectival educations oriented towards social change?

- Is ESD as the next step in the development of EE?
- Is ESD more than the sum of its parts?
- How can we motivate the establishment (the education community) to change their policy and program in favor of ESD, or to shift readily from specific, discrete educational topics to a more integrated system approach?
- What are the local sets of goals and indicators? What does ESD mean for a community?
- How do we develop guidelines for integrating ESD across the curricula?

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Emerging Issues in Education for Sustainable Development

Dr Daniella Tilbury¹

Education for sustainable development

“Education is (...) the key to sustainable development and peace and stability within and among countries, and thus an indispensable means for effective participation in the societies and economies of the twenty-first century (Dakar Framework for Action, April 2000).”

Since Agenda 21, education has been increasingly recognised as critical to the attainment of sustainable development globally. United Nations agreements and resolutions, of major conferences held since 1992, acknowledge that education is the key to a sustainable future and have attested to its importance as a tool to initiate and sustain social change processes towards sustainable development (Tilbury and IUCN CEC 2001).

Education is seen as vital to enable public engagement in sustainability issues, to enhance people’s abilities to find solutions to unsustainable practice as well as to envision sustainable futures. It is also critical to strengthening governance and global partnerships which build institutional support allocate rights and enforce responsibilities towards sustainable development.

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Intergovernmental meetings, such as the World Education Forum (2000) recognise that there is a need for substantial reorientation of formal curriculum structures and increased support for life-long learning for sustainability. Growing recognition of the need to prioritise actions in this area has led the Trondheim Youth Group, amongst others, to call for education to be identified as a major group within the UN CSD and the Japanese Forum for Johannesburg to push for a UN Decade in Education for Sustainable Development.

Progress since the Rio Summit

Ten years after Rio, there has been some, although not substantial, progress towards advancing the role of education in sustainable development. There were warning signs in 1996 in the Secretary General's Report to the Commission on Sustainable Development that identified education as the 'forgotten priority of Rio'. Since then, however, there has been growing momentum in education for sustainable development.

At one level, the Environment Conventions, arising out of the Rio Summit, are now addressing the articles on education and public awareness. The parties to the Convention on Biological Diversity approved a work programme on CEPA – communication, education and public awareness in April 2002. The Climatic Change Convention is currently discussing the development of a work programme on Article 6 on education, awareness and training and the Desertification Convention has embarked on a 'bottom-up approach' to involve people in seeking solutions (Tilbury, Hamu and Goldstein 2002).

At another level, there are examples of how formal and higher education institutions and a limited number of government agencies, social groups and individuals have embraced education for sustainable development as a tool for change (see Tilbury and IUCN CEC 2001).

However, as the process of implementing Chapter 36 of Agenda 21 unravels, a number of key issues are emerging which are worth reflecting upon. The following section contains some brief reflections which provide a preliminary assessment of progress in education for sustainable development and help identify key areas in need of attention.

Formal education—the focus of attention

Since Rio, formal education (including higher education) has received much of the attention with teacher education initiatives and resources mobilising most of the support in education for sustainable development (Tilbury and IUCN CEC 2001). This is, perhaps, to be expected, given that teacher education was earlier identified as the 'Priority of Priorities' (UNESCO 1990). Major initiatives in this area include: the production of international guidelines to reorient teacher education; the establishment of an international network of teacher education; and, the development of resources including a multimedia teacher education programme entitled 'Teaching and Learning for a Sustainable Future' (UNESCO 2001a) as well as 'Learning to Live Together' (UNESCO PROAP 1998).

Partnerships such as the UNESCO International Associations of Universities, the 'Global Higher Education for Sustainability Partnership', 'Cre-Copernicus' and 'University Leaders for a Sustainable Future' are recognising the importance of educating for sustainable human development with many Universities moving to become sustainably managed institutions (UNESCO 2001b).

A recent needs assessment in education for sustainable development found that few programmes are targeted at government or corporate organisations, indigenous peoples or the scientific and technological communities (IUCN CEC 2001a). Many initiatives focused on greening curricula, schools or higher education campuses, placing a strong emphasis on formal approaches to professional development and training. Handbooks and workshops were the preferred media, whilst informal and traditional approaches to community development and learning (through story telling, religious and cultural festivals, etc.) were infrequently used.

Targeting key multipliers

Targeting key multipliers is a strategic and effective approach to improving provision and access to education for sustainable development. However, key multipliers in government agencies or within indigenous, women, religious or other community groups have not received much attention over the past ten years (Tilbury and IUCN CEC 2001). As mentioned previously, key multipliers in formal education have been the focus of activity in this area. The result of this

has been that many associate education for sustainable development as solely a curriculum rather than a social process.

Progress at the policy level

Much of the progress in education for sustainable development has occurred at the policy level, with many countries (including Australia, Canada, China, England, Hungary, Jamaica, The Netherlands, El Salvador, Scotland, Spain, Norway, Poland) developing national strategies in education for sustainable development and some financial mechanisms to encourage implementation both in and out of formal schooling. These developments have been recent and demonstrate national recognition of the critical role that education plays in the attainment of sustainable development. However, most countries are still in the early stages of implementing the goals identified by these strategies and have only just begun to establish frameworks that support changes at the practical level.

Education for sustainable development is more than basic education

Whilst recognising that meeting basic education needs is critical to sustainable development, concerns arise when education for sustainable development is interpreted solely as basic education. To reach the Millennium Development Goals, recent efforts in education for sustainable development have been focused mostly on improving literacy in developing countries and often fail to address unsustainable consumption and lifestyle patterns in developed nations. They omit consideration of content and approaches, which are necessary to assist people to make changes towards sustainable development and often give the impression that developed nations, do not need education for sustainable development.

Other emerging issues

As well as presenting an overview of progress in the field, this paper attempts to review current trends in practice. The following section identified a few issues and assumptions underpinning practice in educating for sustainable development.

Avoiding conceptual maps

In an attempt to assess progress towards sustainability, 'The Wellbeing of Nations 2002 reported that: *"at present no country is sustainable or even closer... Nobody knows how to meet these new demands. There is no proven recipe for success. In fact, no one has a clear sense of what success what be. Making progress towards ways of living that are desirable, equitable and sustainable is like going to a country we have never been to before with a sense of geography and the principles of navigation but without a map or compass. We do not know what the destination will be like, we cannot tell how to get there, we are not even sure which direction to take (Prescott Allen 2002 pp.1-2)."*

The question is, therefore, how do we educate for a concept that is difficult to conceptualise and define? The conceptual pathway to sustainable development is not clear and this has implications for how we educate for sustainable development. The quest for sustainability demands new approaches to involve people in futures thinking and stakeholder dialogue rather than in conveying a body of knowledge or a conceptual map of how to get to sustainable development. Education for sustainable development should provide opportunities for people to engage in reflecting upon preferred futures and defining their vision for sustainable development. This process of envisioning is critical for individuals and groups to determine their own relevant and realistic pathway to sustainable development. However, sharing these visions, experiencing other's visions and constructing dialogues on sustainable development are also critical to this process.

Educators could interpret the ambiguity associated with sustainable development as a strength - a context that permits an inclusive and active approach to engaging stakeholders in conceptualising sustainable development. However, there seems to be a preoccupation with defining 'sustainable development' as well as arriving at a concrete definition of 'education for sustainable development'. This has lead to 'paralysis by analysis' and detracts from the goal of achieving sustainable development in practice (Fien and Tilbury 2002 p.3). It could also be argued that an agreed universal definition of sustainable development contradicts the key premise which will make it work. It is the fuzziness associated with this terms that has proven useful in arriving at consensus that sustainable development is important and relevant to all (Pezzey 1989; Fien and Tilbury 2002).

Educating about and for the future

“Visioning means imaging, at first generally and then with increasing specificity, what you really want. That is, what your really want, not what someone has taught you to want, and not what you have learned to be willing to settle for. Visioning means taking off all the constraints assumed ‘feasibility’ of disbelief and past disappointments, and letting your mind dwell upon its most noble, uplifting, treasured dreams (Meadows et al. 1993 p.3).”

Hicks and Holden (1995) believe that we need to explore the origins and consequences of current unsustainable practices but more importantly “establish the need for, and nature of, a more sustainable society (p.17).” Despite the futures rhetoric associated with education for sustainable development, current practice is focused on trying to problem-solve our way out of unsustainable development rather than on creating alternative futures.

Educating about and for the future is critical to education for sustainable development. This can be achieved through ‘envisioning’ - a powerful futures education tool which can help drive changes towards a better world. It assists people in defining where they want to be and think through how to get there. Using approaches, such as futures scenario planning, motivates and empowers people to make changes as they begin to appreciate the relevance and importance of the ill-defined concept of sustainable development. It also help people focus on the positive, as images of the future can offer hope and direction.

Hicks and Holden (1995) argue that vision offers direction and energy because it harnesses deep aspirations. The test of any vision, they argue, is whether “it speaks to people’s hearts, to their sense of compassion and justice, for both people and planet (p.138).” This process enhances participation in decision-making and helps people to deal with change more effectively. For these reasons, it is critical that education for sustainable development programs and resources begin to address the futures dimension within its content and approach.

There are programs and resources which do offer a particular view of the future, but Hicks and Holden (1995) point out, the ‘virtues or likelihood [of these futures] are not questioned in any way...or offered as one amongst several alternative possible futures’ (p.61). A characteristic of these ‘taken-for-granted

futures' are that they assume increased economic growth or developments in science and technology will resolve all problems (Hicks and Holden 1995).

The Johannesburg Summit (UN 2002a and UN 2002b) reminded the world community of the important choices that need to be made. Many side events at the Summit have helped scope the cultural territory that has to be explored and marked out some critical questions we need to ask when making these profound choices. This is critical to progress, but progress, for the reasons identified above, also depends on the ability to envision a better society. As Duane Elgin (1991) reminds us, "We cannot build a future we cannot imagine'. A first requirement, then, is to create for ourselves a realistic, compelling and engaging vision of the future that can be simply told (Elgin 1991 p.6)."

This vision he argues will provide a strong sense of future and meaningful orientation of our actions.

Poverty alleviation and not just biodiversity

Education for sustainability is about learning to prevent the destruction of ecosystems, biodiversity threats, loss of forests and fisheries, air and water pollution but also addresses issues of intellectual property rights, over-consumption, increasing poverty inequality, exclusion and alienation, social conflicts and violence, aids, health, trade and aid as well as cultural erosion. In order to improve our quality of life we need to reflect not only upon human-environment relationships but also on human-human relationships.

At the Rio Summit, there was a realisation that issues of biological diversity could not be separated from issues of sustainable use and equitable benefit sharing. The Convention of Biological Diversity (1992) enshrines this logic and commits its signatories to take steps to link conservation with sustainable development. However, the reality at Rio was that poverty was overshadowed by the attention given to conservation and protection of natural resources. This nature conservation and environmental protection focus has been reflected in the programs and resources which have emerged since 1992 (IUCN CEC 2001a). In recent years, single species campaigns overshadow the core issues underpinning threats to biodiversity. Few links are made between the social reasons why biodiversity is under threat and strategies developed to resolve this critical issue.

In 2002, the Johannesburg Declaration (UN 2002a) and the Implementation Plan (UN 2002b) placed a strong emphasis on the need to alleviate poverty for progress to be made towards sustainable development. One of the objectives of Implementation Plan is to eradicate poverty. Education is to be included in country-owned poverty reduction strategies and national programmes for sustainable development and local and community development. The intent is to promote the empowerment of people living in poverty and their organizations and increase access to “productive resources, public services and institutions, in particular land, water, employment opportunities, credit, education and health. Poverty reduction strategies are to promote women’s equal access to and full participation, on the basis of equality with men, in decision-making at all levels, and improving the status, health and economic welfare of women and girls through full and equal access to economic opportunity, land, credit, education and health-care services. Education for sustainable development is to play a key role in attaining these goals. However, once again transforming this rhetoric into practice will be challenging, as higher profile issues begin to steal the agenda. This was evident at the Johannesburg Summit where poverty alleviation could have once again been overshadowed, not by conservation, but by anti-colonialism and anti-terrorism discourses. Poverty did emerge as a key component of the Summit’s Implementation Plan (UN 2002b), however, educators working in the field of sustainable development will need to keep poverty eradication and issues of improvement of quality of life at the core of their work and explicitly identify how these themes underpin the issues which attract social and political concern.

Culturally Critical not just Socially Critical

“To be empowered is not only to speak with one’s own voice and to tell one’s own story, but to apply the understanding arrived at to action in accord with one’s own interests (Mishler 1986 p.119).”

The socially critical education approaches of critical reflective thinking and action research promote critical praxis - a pedagogy that integrates reflection and action. Critical praxis provides opportunities for people; to engage in critically reflecting upon the basis of their socio-cultural values and assumptions; to identify how they are conditioned and confined by the socio-cultural structures they are operating in and, more significantly, to build their capacity as agents of change

(Huckle and Sterling 1996; Huckle 1997). It is essential to build social capacity for sustainable development through education.

Critical praxis was developed by Freire (1972) to raise the consciousness of learners to dominant ideological interests present in their socio-cultural environment and to engage them in reflective action (praxis) to transform it (Fien 1993). It is the process of reflective action that empowers citizens to embrace the possibilities of action and work towards a more sustainable world.

There are, however, concerns on how socially critical education is practiced. Saul (2000) argues that models of critical rationality currently used blinds learners to cultural complexities. Teaching critical rationality, he argues is not enough, we need to teach learners that often conflicts are not only about rational arguments, but about the clash of cultural values and perspectives: “Environmental problems result from environmental practices and environmental practices are cultural activities.....we need to teach how culture works, because cultural differences frame what are seen as rational arguments (Saul 2000 p.7).”

To achieve sustainable development we need critical reflective models which will help learners ‘not only think critically but also culturally’ (Saul 2000 p.8). Values clarification is a process that can help learners uncover the layers of assumptions and deconstruct socialised views. It can help them engage in a critical review of their own environmental and political values as well as help them comprehend that other complex cultural perceptions exist (Tilbury 1995; 2002). It has been used extensively in environmental education but originates from the global studies and development education movement of the 1970s that developed alternative and interactive approaches for teaching for a better world. Values clarification resists the reduction of complex situations into simplified binary oppositions that often develops when controversy arises. It can develop learners who are aware and critical of cultural perceptions and processes that lead us to unsustainable development.

Uncovering the layers of assumptions which inform our actions, is a critical first step to educating for sustainable development. Critical reflective thinking and values clarification must, therefore, be key components of learning for change towards sustainable development in the next decade.

The next decade

Ten years after Rio, no nation has yet made significant advances towards sustainable development (Prescott Allen 2002). It is within this context, that the world leaders gathered in Johannesburg reaffirmed their commitment to protecting environments and improving the quality of life of people around the world (UN 2002a/b). The question is, 'will there be anything to report at the next Summit?' or more critically 'when and how will progress occur?

A review of the Johannesburg Implementation Plan seems to suggest that education is key to meeting the commitments made in this document (Goldstein 2002), and thus, to answering the questions identified above. The Implementation Plan demands communication of the issues and engagement of people in action and informed decision-making for an improved environment and quality of life. It positions education as a critical tool for social change and places high expectations upon education.

However, offering a preliminary assessment of progress in education for sustainable development, this paper has indicated that the process of implementing international commitments in education has been slow and limited. The UN Decade of Education for Sustainable Development, which was adopted at the World Summit on Sustainable Development and then at the UN General Assembly in December 2002, could provide the impetus for addressing these emerging issues in education for sustainable development. Ideally, the Decade would bring together those working in education for sustainable development and consolidate partnerships to implement international commitments in education. The next three years will be critical, as plans for the UN Decade are drawn. They hold the answers to the questions: 'Will there be anything to report at the next Summit?', 'Will there be another World Summit?'

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IUCN CEC: The IUCN Commission on Education and Communication (CEC) strives towards raising the profile of Education for Sustainable Development (ESD)

at the international, regional and national level; to persuade key decision-makers to value and support ESD; to promote and support quality work in EFSD; and to help develop tools, partnerships and strategies for addressing ESD needs at the strategic, institutional and program level (IUCN 2001b). CEC has played a role in promoting ESD to achieve the objectives of Agenda 21. It has offered international workshops at Rio and Johannesburg and has been active in supporting the development of the Convention of Biological Diversity work program on education. For more information about the CEC's work see <http://iucn.org/cec>.

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Sustainable Development Education: Need for Ethical Approach

Dr. Ratna SJB Rana¹

Current scenario: A cursory look

- Today, the rich one-fifth of the world's people consumes some 75-80 percent of world resources and generate the most pollution, both absolute and in relative terms.
- If all people alive to-day were to have rich world's per capita oil consumption, the world oil production would have to be about 5 times more. If this increases exponentially with the increase in population, oil reserves will run out by 2050.
- It is estimated that up to 100 species become extinct every day. One estimate indicates that about 40,000 species were lost by the year 2000 (a rate far exceeding any in the last several centuries).
- In one example using the 'footprint' analysis, "it has been estimated that to provide one person living in Sydney with water, settlement area, energy and food requires at least 4 to 5 hectares of productive land. Therefore, if 9 billion people were to live as they do in Sydney, we would need about 40

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billion hectares of productive land. However, this is approximately 6 times all the productive land area of the planet.”

- Another estimate suggests that, if the world pushes ahead to the consumption levels reached in the US today, we would need about 5 or 6 more earths.

Though certainly not exhaustive, the figures cited above are indicative of the direction human society is moving. The essential elements of the current scenario is that, despite substantial progress in various areas, (a) population continues to grow, (b) poverty has not diminished, but increasing, (c) inequalities between the rich and the poor are widening, and (d) the environment is being pushed beyond its limits. This situation becomes even more pronounced with the rising tide of globalization. It also indicates that the consumption and production patterns of the present generation are endangering the survival of future generations, both human and non-human life forms. Such a situation has created much concern locally, nationally and globally. Rio (1992) and Johannesburg (2002) World Summits are some of the key examples of these concerns.

Why sustainable development?

Whereas the poor people and poor countries need to increase their consumption levels even to meet the basic minimum requirements, the resource and environmental situation has already given clear signals that this may not be possible. Global warming, ozone shield ruptures, land degradation, decrease in biodiversity and so forth, are mentioned as clear evidence that the Earth has reached its limits to carrying capacity.²

While ecologists and environmentalists have long known that the existing economic system is unsustainable, economists have yet to fully appreciate the negative implications of relentless pursuit of growth, which accompanies increased consumption, to our environment. As early as in late 1960's, the Club of Rome had already mooted the idea that we might be reaching the limits to economic growth.³ We now have a situation that while the economy continues to expand, the ecosystem

² Robert Goodland, The Case That the World Has Reached Limits in Robert Goodland, Herman E. Daly and Salah El Serafy (eds.), Population, Technology and Lifestyle, Washington, D.C.: Island Press, 1992, pp. 3-22.

³ See, D. H. Meadows, et. al., The Limits to Growth, New York: Potomac Associates, 1972.

or the environment on which it depends does not create an increasingly stressed relationship.

The endless pursuit of more is becoming too costly. It is now apparent that “business as usual” cannot go on for much longer, and we have to consider doing things differently and leading a life, which seeks happiness not in increased material consumption but in other ways. Hence the need to pursue “sustainable development” in every possible way.

What is sustainable development?

In simple term, sustainable development may be understood to mean the capacity for the current state or condition of development to be continued more or less indefinitely. According to the Brundtland Report, which detailed the urgent need for achieving global sustainable development, sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.⁴

This definition contains within it two key concepts: (a) the concept of “needs,” in particular the essential needs of the world’s poor, to which the overriding priority should be given; and (b) the idea of limitations imposed by the state of technology and social organization on the environment’s ability to meet present and future needs.⁵ It should be emphasized that the concept of sustainability concerns itself with maintaining development on some steady state for the future. It is against this background that the Rio de Janeiro Accord, known as Agenda 21, of the UN Conference on Environment and Development (UNCED) came into being.⁶ The Agenda 21 action plan for sustainable development concluded that the major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialized countries.

⁴ World Commission on Environment and Development, *Our Common Future (The Brundtland Report)*, New York and Oxford: Oxford University Press, 1987, p. 43.

⁵ Salah El Serafy, *Sustainability, Income Measurement, and Growth* in Robert Goodland, Herman E. Daly and Salah El Serafy (eds.), op. cit., pp. 63-89.

⁶ The Agenda 21 final document was signed by virtually all States participating in the UN Conference on Environment and Development, held in Brazil in June 1992.

Agenda 21 highlighted the deep divide in consumption and pollution between the industrialized and developing countries. It pointed out that the 20 per cent of the world's population in the rich "North" account for 50-90 per cent of consumption and pollution. To remedy this, the Agenda 21 action program for sustainable development agreed at the UNCED highlighted special responsibility of the industrialized countries to take the lead in making the necessary shift towards sustainable consumption and production patterns.

Since UNCED, the urgency of the need for change has been recognized and some promising signs of progress have emerged. Several governments and business have recognized the need to change consumption and productions patterns in ways to improve environmental conditions. Most efforts, however, have been limited to cleaning up the production process, particularly in the industrialized countries, but the overall perspectives may be grimmer today than in 1992.

Sustainable development calls for some basic changes. The first is with regard to policies and practices that perpetuate growth in material consumption and in population. The second is regarding drastic increase in the efficiency with which energy and materials are used and recycled.⁷ Just tackling the various problems of production process in increasing the efficiency of energy and raw materials use will not be sufficient to achieve sustainability. Even if the idea of resource productivity of "factor four", or even "factor ten",⁸ are technologically and economically achieved, all the people of the developing countries will still not have a fair chance of meeting their basic needs if the current consumption patterns remains unchanged.

Continuing growth in material consumption will eventually overwhelm gains from efficiency, causing total resource use and all the corresponding environmental damage to rise.⁹ The Independent Commission on Population and Quality of Life observes: The poor increase their consumption in order to escape poverty, while the non-poor aspires to even greater material prosperity. All governments

⁷ D. H. Meadows and J. Randers, op. cit., p. xiv.

⁸ Factor Four refers to the idea that resource productivity should be quadrupled so that wealth is doubled, and resource use is halved. The concept has been summed up as "doing more with less". Likewise, Factor Ten is the idea that per capita material flows should be reduced by a factor of ten.

⁹ Lester R. Brown, Sandra Postel and Christopher Flavin, *From Growth to Sustainable Development* in Robert Goodland, Herman E. Daly and Salah El Serafy (eds.), op. cit., pp.119-127.

advocate higher consumption as a means of stimulating the economy and reducing unemployment. Yet higher consumption, under present conditions, is bound to result in an unsustainable level of energy use--energy coming from fossil sources and poisoning the air and water.¹⁰

Consumerism and lifestyles

One of the fundamental issues that has to be properly addressed for sustainable development is the issue of human consumption. Our present consumption patterns are characterized by direct and indirect use of fossil fuels, indiscriminate use of natural resources in the manufacture and food production, short life-cycle of products and rising levels of waste and pollution.

Perhaps only population growth rivals high consumption as a cause of environmental problems. The sad thing is that whereas population growth is now viewed as a problem, consumption is almost universally seen as good and desirable and remains one of the primary goals of national economic policy. Thus, rethinking of core moral and ethical values in terms of changing consumption pattern and lifestyles is crucial for attaining sustainable development.

Today, the consumer class, some 1.1 billion people, lives mostly in North America, Western Europe, Japan, Australia, Hong Kong, Singapore, and the oil sheikdoms of the Middle East. Some members of this consumer class also live in Eastern Europe, the former Soviet block countries, and in the urban pockets of almost all countries of Latin America, Africa and Asia.

They enjoy a lifestyle unknown in earlier periods. They dine on meat and processed or packaged foods, and drink soda pops and other beverages from disposable containers. They spend much of their time in climate-controlled and electrically lighted buildings equipped with refrigerators, clothe washers and dryers, running hot water, dishwashers, microwave ovens, TVs, and various other electric gadgets. They travel mostly in private automobiles and airplanes, and surround themselves with a wide variety of short-lived, throwaway goods.

¹⁰ Independent Commission on Population and Quality of Life, *Caring for Future: Report of the Independent Commission on Population and Quality of Life*, New York & Oxford: Oxford University Press, 1996, p. 57.

Consumerism, in the sense of possession and use of an increasing number and variety of goods and services, now seems to represent the principal aspiration and the surest perceived route to personal happiness, social status and success. In industrialized societies consumerism now permeates social values. The emergence of consumerism or consumer society has been the hallmark of our time, and consumerist attitudes are spreading far and wide due to economic liberalization, advertising and globalization.¹¹

For many of the poor around the world, the lifestyles in what appears in the land of milk and honey—the western world—are becoming visible on TV sets. Beside this, the lifestyles made in the US, usually as exported by its entertainment industry such as the motion pictures, videos, TV programs, etc. have become the model to emulate for those who can afford it. Globalization is further increasing this trend.¹² As a result, aspirations for lifestyles are set forth by the current norm in the western countries, particularly the US, and expectations have gone global but not the riches.

Our global environment cannot support this kind of lifestyles. It is already becoming clear that the present consumer class of some 1.1 billion people, living like American consumers, might not be able to do so without jeopardizing the carrying capacity of our planet Earth. Under such circumstance, it is unthinkable that the rest of the world's population shall ever be able to enjoy a consumer lifestyles of the western countries aspired by them. If the life-support ecosystems of our planet are to survive for future generations, the only option seems to be to change our consumption patterns and lifestyle. Even this may not be sufficient and we may have no choice but to restrain our consumption.¹³

¹¹ According to economic theory, no market can function without information, and advertising serves this purpose. However, the danger posed by advertising is that it not only uses lots of paper and thereby impacts on environment but, more importantly, it does so by raising consumerism and human desire. Advertising creates “needs” and makes the allure of consumerism, which is already powerful, even more irresistible.

¹² Globalization should be viewed not only in economic terms, that is, trade, investment and technology flows, but as a process in which ideas and behaviors are disseminated, effecting cultural homogenization, on a worldwide basis, or at least encompassing large geographical areas.

¹³ The 1998 Human Development Report has admirably highlighted the various issues involved in sustainable consumption and pointed out that the current consumption patterns are unacceptable. James Speth, Administrator of UNDP, remarks: When consumption erodes renewable resources, pollutes the local and global environment, panders to manufactured needs for conspicuous display and detracts from the legitimate needs of life in modern society, there is justifiable cause for concern.

Values and ethics

The difficulty of transforming present consumer society into something sustainable by changing our value systems can hardly be overestimated. The momentum of history and the structure of the global economy lie on the side of increasing consumption. Our economies have become such that in order for growth to continue, more and more goods and services will have to be produced, which in turn will have to be consumed to keep the wheel of production turning. Only this will allow maintaining high employment level so that earned wages and incomes could be spent to sustain continuous production. As such, consumption is viewed as the engine of growth.

The global economy is structured primarily to feed the consumer lifestyle of the world's affluent, and shifting it from high to low consumption would shake that structure to the core.¹⁴ We may be, therefore, in a situation for which a satisfactory solution may be difficult. Nevertheless, some efforts need to be made to seek acceptable solutions, for we do not have much choice left.

Already in 1973, Schumacher, a German economist and intellectual, in his famous book *Small is Beautiful*, had concluded that the biggest problem facing humankind was the disappearance of a comprehensive set of values and attitudes that would prevent economic activity from becoming all-consuming.¹⁵ He had argued that Western civilization had already reached a point in history where a value-based worldview was regarded with diminishing importance.

It is difficult to imagine how the goals of sustainable development could be attained without a set of comprehensive values and ethical standards.¹⁶ After all, values and ethical standards are individual and social creations, which influence our choice and actions, and can direct our behavior. I think it is absolutely necessary

¹⁴ See Durning, *op. cit.*, p. 107.

¹⁵ E. F. Schumacher, *Small is Beautiful: Economics as if People Mattered*, New York: Harper Collins, 1973.

¹⁶ The term "values" can have different meanings. In anthropology and sociology, this term is used to denote shared cultural standards. In economics, it refers to exchange value (price), or value in use (utility). Here the term "values" is understood in terms of common attitudes and standards that have evolved as a result of common experience and understanding. Values when applied to certain area may be called as the ethics of that particular area, for instance medical ethics, business ethics, etc. In general, ethics is that part of philosophy of value concerned with questions of human moral judgement of right and wrong with respect to human actions.

to rekindle the questions of values and ethical standards if we want to pursue the course of sustainable development seriously.

The basic question of value involved in sustainable development is quite simple. This is stated thus in the Brundtland Report: each generation should meet its needs without jeopardizing the prospects for future generation to meet their own needs. That is, consumption of some does not compromise the wellbeing of others. However, when we consider the ramifications of these statements when put into practice, then these simple sounding principles translate into radical demands for changes.

In short, it implies that we as consumers have an ethical obligation to curb our consumption. Unless we do so, our children will inherit this planet impoverished by our affluence--a planet whose climate has been drastically altered, whose air and water are badly polluted, whose fertile soils have been non-productive, whose living species have been considerably reduced, and whose wild habitats have been shrunken and fragmented.

For many, sustainable consumption is not a scientific or a technical question, but is first and foremost a new “ethic of living sustainably”.¹⁷ The basic question of ethics is, “What should I do? Or how should I act?” Ethics is supposed to provide us with “moral principles” or universal rules that tell us what to do. So far no universal rules seem to have evolved and there are different approaches to ethics each based on certain value and belief systems. Basically, these are the (a) virtue approach, (b) utilitarian approach, (c) rights approach, (d) fairness or justice approach, and (e) the common good approach.¹⁸ In addition, there are

¹⁷ See Nick Robins and Sarah Roberts (eds.), *Unlocking Trade Opportunities: Case Studies of Export Success from Developing Countries* (conducted in connection with implementation of the International Work Program on Changing Consumption and Production Patterns of the UN Commission on Sustainable Development), London: International Institute for Environment and Development, 1998, p. 9.

¹⁸ The virtue approach focuses on such aspects like honesty, courage, trustworthiness, integrity, etc and its main principle states: “What is ethical is what develops moral virtues in ourselves and our communities.” The utilitarian approach focuses on the consequences that actions or policies have on the “utility” of all persons directly or indirectly affected by the action or policy. Its principle states: “Of any two actions, the most ethical one will produce the greatest balance of benefits over harms.”

The rights approach identifies certain interests or activities that our behavior must respect, especially those areas of our lives that are of such value to us that they merit protection from others. Each person has a fundamental right to be respected and treated as a free and equal ▶▶

such other ethics related to different professions like business ethics, legal ethics, medical ethics, etc.

None of these will singularly work for sustainable development. For example, the basic ethics of utilitarianism underlying economics will have to be re-examined because it fails to take into account the consideration of justice as well as future. The common good approach, which simply means “what is ethical is what advances the common good” is appealing because it considers social responsibilities and may take into account various issues such as environment, lifestyles, education, etc. which a society perceives as important. However, some philosophers argue that the very idea of a common good is inconsistent with a pluralistic society like ours.¹⁹ Ethical relativism, which holds that morality is relative to the norms of one’s culture, also poses another problem. So there are several difficult issues involved but we should still try to evolve ethics of sustainable consumption for human survival nonetheless.²⁰

Keeping the poor frozen in their poverty and making the rich poor is inconceivable. First of all, from an ethical perspective, how could we limit the consumer lifestyles of those who have already attained it? Likewise, how could we ask the rest of the third world not to aspire for the consumer lifestyle, which has been made the “model” for them to pursue? Obviously, this will be neither

▶▶ person capable of making his or her own decisions. This implies other rights (e.g., privacy, free, consent, freedom of conscience, etc.) that must be protected if a person is to have the freedom to direct his or her own life. Its principle states: “An action or policy is morally right only if those persons affected by decision are not used merely as instruments for advancing some goal, but are fully informed and treated only as they have freely and knowingly consented to be treated.”

The fairness or justice approach focuses on how fairly or unfairly our actions distribute benefits and burdens among the members of a group. There should also be consistency in the way people are treated. In short, this principle states: “Treat people the same unless there are morally relevant differences between them.”

See the home page of Markkula Center for Applied Ethics at <<http://www.scu.edu/Ethics/practiing/decision/approach.shtml>>

¹⁹ Ethics requires consistency in the sense that our actions and values should not be contradictory. Consistency is regarded so central in ethics that some moralists have held that it is the whole of ethics.

²⁰ There appears to have been considerable discussions on the ethical dimensions of relations between the industrialized and developing countries. (See, for example, Moorhead Wright (ed.), *Rights and Obligations in North-South Relations*, London: The Macmillan, 1986). Similarly, ethical issues involved in aid programs and armaments have also been the subjects of discussions. (See, for instance, *Proceedings of the Tokyo Forum: Ethics of Human Survival*, International Conference Report Series 1, Tokyo: National Institute for Research Advancement, 1986). However, an attempt to provide an overall survey of moral and ethical issues presented by sustainable development seems to be lacking so far.

politically feasible nor morally defensible. Yet we should come up with some acceptable solution because our choice is getting limited if the life-support systems of this planet are to survive for future generations.

It appears that most of the fundamental problems we are facing today may have to find recourse to it for the simple reason that our value and belief systems and morality are so much shaped by religion. Should our choice be guided only by the principle of “rationality”? Could not there be some moral and ethical principles whereby choice could be made on an agreed basis of cooperation, rather than according to what would give an individual the greatest expectation of value (or utility)?²¹ This essentially implies that we look into our core values. How do we look at life, and living? What is our worldview, and how we seek happiness?

Why is it that no one seems to think that he/she has had enough money? What is the basic purpose or motive, which drives our actions? Is it to pursue different ends such as satisfying hunger and thirst, living a healthy and long life, enriching and amusing ourselves with diverse forms of entertainment, or finding some other self-fulfillment? More importantly, what is it that we ultimately seek in life? In most cases, we may never think about it and just go on doing whatever we might think is “right” at the moment.

Need for new ethical education

New values and ethical standards never arrive in abstract. They arise in view of new realities and new understanding of the world. We should realize that our society has become an accumulation of self-centered desires that threaten the life-support system of Mother Earth. We should also realize that our lifestyles based on ever increasing materialistic consumption could be changed gradually by inculcating or embracing new values and ethics.

As education is basic to recognizing new values, acquiring and clarifying new concepts and relieving these in our individual and social behavior, our response to the need for sustainable development must be based on new kind of education. In

²¹ Gauthier has argued for such a case in which he has tried to show that this approach will ensure not only mutual benefit and fairness, thus satisfying standards of morality, but also that each person may actually expect greater utility by adhering to morality. (David Gauthier, *Morals by Agreement*, Oxford, UK: Oxford University Press, 1986).

short, new values and ethics should be ingrained in our educational system; thinking and acting for sustainable development must stem from mass education.

Perhaps “cure-all” for sustainable development could be an educational system that would combine environmental education and ethics for changing our consumption patterns and behavior, not just raising new awareness. It should go beyond acquiring knowledge and “skills” as such but in embracing new values and ethics, or simply a new morality and attitude, influencing people’s thoughts and actions. It must search for old values that are conducive to sustainability and try to balance economic “greed” on ethical paths. Our education must instill in us a new morality and respect for sustainable development.

In short, our educational systems will need to reform, innovate and focus towards sustainability. Conventional methods of teaching and learning will not meet the needs for sustainable development. Only through re-orienting towards new ethical education will human society be able to achieve sustainable development.

In the final analysis though, it depends upon us all as consumers and stakeholders. One simple way, among others, we could support sustainable development may be by acquiring and using things, preferably environmentally friendly, only if we need, not because we like, or because someone else we know has it.

Let us hope educational reform and innovation will bring sustainable development to its track and give us all an opportunity to be creative and useful, loved and appreciated, secure and happy.

United Nations Decade on Education for Sustainable Development

Framework for a Draft International Implementation
Scheme (UNESCO, 2003)¹

Preamble

The United Nations resolution on the decade of education for sustainable development 2005-2014.

The United Nations General Assembly proclaimed the ten-year period from 2005 to 2014 as the United Nations Decade of Education for Sustainable Development.² Governments around the world are invited to use the Decade to integrate education for sustainable development into their national educational strategies and action plans at all appropriate levels.

As Lead Agency in the promotion of the Decade, UNESCO is required to consult with the United Nations and other relevant international organizations, governments, non-governmental organizations and other stakeholders to develop a draft international implementation scheme for the Decade, bearing in mind

¹ The compilers are thankful to Dr. Malika Ladjali for her kind approval to include this draft framework in this report. Since this framework is in a draft form, UNESCO would appreciate comments and suggestions for its further improvement. Please send your comments to Dr Malika Ladjali (Chief of Section a. i. Education for Sustainable Development, Division for the Promotion of Quality Education, UNESCO, 7, Place de Fontenoy, 75352, Paris 07. Tel: 33 1 45 68 01 24; Fax: 33 1 45 68 56 35; E-mail: m.ladjali@unesco.org

² United Nations General Assembly, draft rResolution A/C.2/57/L.71254, December 9, 2002.

the relationships between education for sustainable development and current international educational priorities, especially the Dakar Framework for Action adopted at the World Education Forum and the UN Literacy Decade (UNLD).

The Executive Board of UNESCO ratified the Decade of Education for Sustainable Development at its 166th Session in April 2003 with the activities to support the Decade incorporated into UNESCO's operational plans of the next biennium

This paper presents a framework upon and from which a draft international implementation scheme for the United Nations Decade of Education for Sustainable Development can be prepared through consultations with UN and other partners-.

Section I elaborates the nature of education for sustainable development and clarifies its links with other major international educational processes and priorities. This serves to highlight the synergistic nature of sustainable development and education and the priority areas of poverty alleviation, gender equality, health promotion, the conservation and protection of the natural resource base upon which social and economic development depends, rural transformation, human rights, peace, international understanding, cultural and linguistic diversity and the potential of ICTs.

Section II describes a partnership approach to the development of a draft international implementation scheme for the DESD. This identifies a range of partners at the sub-national, national, regional and international levels who will need to be involved to ensure the successful implementation of Decade activities and that these activities have maximum impact upon education policy, programmes and practice around the world. It also outlines a range of possible strategies for enhancing participation, ownership and commitment by partners in the Decade. Emphasis is placed upon supporting initiatives at the local level and ensuring that structures at the national, regional and international level provide direction and guidance for local initiatives.

Section III concludes the paper with a proposed schedule of activities aimed at catalyzing world society in preparation for the DESD over the period July 2003 – December 2005. These are organized in the two areas of (i) communication

and advocacy and (ii) building momentum, partnerships and support for the Decade.

Section I: Education for sustainable development

The Rio Declaration from the World Conference on Environmental and Development 1992 began by stating: *“Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.”*

The Johannesburg Declaration at the World Summit on Sustainable Development in 2002 built on this aspiration and expressed the commitment of world leaders “to build a humane, equitable and caring global society cognizant of the need for human dignity for all.”

Meeting millennium development goals

The Millennium Development Goals provide a pathway to attaining sustainable development. Sustainable development is a dynamic and evolving concept with many dimensions and interpretations and reflects locally relevant and culturally appropriate visions for a world in which development “meets the needs of the present without comprising the ability of future generations to meet their own needs”.³ The Millennium Development Goals provide targets for international actions to bring such visions into reality by: overcoming poverty; improving child, maternal and sexual health; expanding educational provision and redressing gender inequalities in education; and developing national strategies for sustainable development.

While considerable progress has been made around the world, it has been uneven, with regions such as sub-Saharan Africa, South Asia and many small island states yet to see the benefits promised by globalisation. Thus, despite many notable achievements in improving health, new problems such as HIV/AIDS have reversed hard-won gains in infant survival and life expectancy in a growing number

³ World Commission on Sustainable Development (1987) *Our Common Future*, Oxford University Press, p. 43.

of countries and communities worldwide. And around the world, unsustainable processes of development maintain pressure on natural resources while unsustainable patterns of production and consumption, especially in developed countries, threaten the fragility of the natural environment and intensify poverty elsewhere.

Thus, the Secretary General of the United Nations, Mr Kofi Annan, has argued that: “Our biggest challenge in this new century is to take an idea that sounds abstract — sustainable development — and turn it into reality for all the world’s people.”

Education: making the abstract real

Making the abstract real, and developing the capacities of individuals and societies to work for a sustainable future is, essentially, an educational enterprise. Indeed, the four principles for achieving sustainable human development enunciated at the World Summit for Sustainable Development in 2002 reflect the four pillars of education described in the Delors Report⁵:

Achieving sustainable development requires:	Education provides the skills for:
Recognition of the challenge	Learning to know
Collective responsibility and constructive partnership	Learning to live together
Acting with determination	Learning to do
The indivisibility of human dignity	Learning to be

Thus, education is the primary agent of transformation towards sustainable development, increasing people’s capacities to transform their visions for society into reality. Education not only provides scientific and technical skills, it also provides the motivation, justification, and social support for pursuing and applying them. The international community now strongly believes that we need to foster—through education—the values, behaviour and lifestyles required for a sustainable future. Education for sustainable development has come to be seen as

⁴ United Nations press Release: SC/SM/7739 “Secretary General Calls for Break in Political Stalemate over Environmental Issues”, 15/03/01.

⁵ Learning: The Treasure Within. Report of the Independent Commission on Education for the 21st Century, UNESCO, 1996.

a process of learning how to make decisions that consider the long-term future of the economy, ecology and equity of all communities. Building the capacity for such futures-oriented thinking is a key task of education.

This represents a new vision of education, a vision that helps people of all ages better understand the world in which they live, addressing the complexity and interconnectedness of problems such as poverty, wasteful consumption, environmental degradation, urban decay, population growth, health, conflict and the violation of human rights that threaten our future. This vision of education emphasises a holistic, interdisciplinary approach to developing the knowledge and skills needed for a sustainable future as well as changes in values, behaviour, and lifestyles. This requires us to reorient education systems, policies and practices in order to empower everyone, young and old, to make decisions and act in culturally appropriate and locally relevant ways to redress the problems that threaten our common future. In this way, people of all ages can become empowered to develop and evaluate alternative visions of a sustainable future and to fulfil these visions through working creatively with others.

The four domains of education for sustainable development

Education for Sustainable Development has four major domains, reflecting diverse goals and audiences: promotion and improvement of basic education, reorienting existing education at all levels to address sustainable development, developing public understanding and awareness of sustainability, and training.

Basic Education: The content and duration of basic education differ greatly around the world. Access to basic education remains a problem for many, especially girls and illiterate adults, the majority of whom are women. However, simply increasing basic literacy and numeracy as currently taught will not significantly advance sustainable development. Instead, basic education needs to focus on sharing knowledge, skills, values and perspectives throughout a lifetime of learning in such a way that it encourages sustainable livelihoods and supports citizens to live sustainable lives. This approach to basic education also supports public participation and community decision-making, which in turn, help communities to achieve their sustainability goals.

Reorienting Existing Education Programs: Rethinking and revising education from nursery school through university to include a clear focus on the development of the knowledge, skills, perspectives and values related to sustainability is important to current and future societies. This implies a review of existing curricula in terms of their objectives and content to develop transdisciplinary understandings of social, economic and environmental sustainability. It also requires a review of recommended and mandated approaches to teaching, learning and assessment so that lifelong learning skills are fostered. These include skills for creative and critical thinking, oral and written communication, collaboration and cooperation, conflict management, decision-making, problem-solving and planning, using appropriate ICTs, and practical citizenship.

Developing Public Awareness and Understanding of Sustainability: Progress towards sustainability requires that the growing global awareness of social, economic and environmental issues is transformed into understanding of root causes and that local, national and global visions of what it means to live and work sustainably are developed. Thus, achieving the goals of sustainable development requires widespread community education and a responsible media committed to encouraging an informed and active citizenry.

Training: All sectors of the workforce can contribute to local, regional and national sustainability. Business and industry are thus key sites for on-going vocational and professional training so that all sectors of the workforce have the knowledge and skills necessary to make decisions and perform their work in a sustainable manner.

Linking DESD to other international educational priorities

The plan of implementation of the WSSD focuses largely on policies, programmes, resource mobilisation and institutional frameworks. The United Nations Decade of Education for Sustainable Development is an opportunity to put the human element at the forefront of efforts to facilitate the plan. The understandings, values, commitments and skills outlined above, that only education can provide, will support the more technical elements of the plan, reminding everyone – children, youth, adults – that the sustainable development agenda is in fact an agenda for all of us. It is about the way we live our lives, the way we

respect the lives of others – far and near, present and future – and our attitudes to the world around us.

Sustainable development requires a holistic approach: Education for sustainable development has connections with other programmes and concerns in education. It is not a new programme but a call for a process to re-orientate education policies, programmes and practices so that education plays its part in building the capacities of all members of society to work together to build a sustainable future.

Thus, the focus of DESD activities will be advocacy, communication and networking directed at facilitating all educators to include sustainable development concerns and goals in their own programmes. are key activities of the Decade.

UNESCO currently has the responsibility for coordinating two major world initiatives in education: Education for All (EFA) and the United Nations Literacy Decade (UNLD). Coordination of EFA was established at the World Education Forum in 2000, but has roots in the previous decade, following Jomtien (1990). The UNLD started in 2003 and is in the initial stages of implementation. Thus, in terms of efficient management and maximizing impacts, it is essential that the DESD is coordinated in conjunction with both EFA and the UNLD.

There is clear basis in the WSSD Plan of Implementation for linking the aims and strategies of these initiatives with the DESD. Firstly, the WSSD Plan of Implementation endorses the EFA goals and cites the Dakar Framework for Action as the point of reference for educational development. Secondly, it endorses the two education-related goals of the Millennium Declaration.

The Dakar Framework for Action sees education as ‘the key’ to sustainable development, especially in the areas of poverty reduction or alleviation. Citing the role of education as the key to equitable and sustainable development, the International Strategy to put the Dakar Framework for Action on Education for All into Operation, published in 2002, sees education as part of the basic economic and social infrastructure for sustainable development” (p.8). It also called for broad-based co-operation between all concerned partners so that educational strategies build peace, hope, stability, tolerance and mutual understanding as a platform for sustainable development” (p.25).

Similarly, the UN General Assembly resolution and plan for the UNLD both state that “literacy for all is at the heart ... of ensuring sustainable development, peace and democracy.”

These references establish clear common ground. Whether from the point of view of sustainable development, or from that of EFA and the UNLD, education is a central strategy for sustainable development.

Key Themes in Education for Sustainable Development

Common ground also exists in the critical issues that underpin ESD, EFA and UNLD. These issues constitute the priorities for planning programmes and activities that will support the objectives of DESD, and include:

Overcoming Poverty: It is axiomatic in all three initiatives that poverty alleviation is key in development efforts. However, there is an important distinction to be made. While EFA and UNLD see poverty alleviation as the framework within which action for development is undertaken, the DESD sees it as one of the key pillars (appropriate economic development) by which sustainable development will be supported. There is room therefore for ESD to work with EFA and UNLD so that this broader view of development becomes the norm. All three initiatives should advocate for education that recognises the complexity of poverty and its alleviation and refute a view of education as merely a means to increase income.

Beyond that, poverty alleviation is central to all Millennium Development Goals that recognize the importance of gender issues, education, health and environmental protection to sustainable human development. This makes gender equality, health and protecting the resources base upon which social and economic development depends important educational concerns.

Gender Equality: This forms the basis for one of the EFA goals, and is elaborated in one of the twelve EFA strategies. The General Assembly also identified it as one of the motivating reasons for establishing the UNLD. In the WSSD Plan of Implementation gender equality is seen as both an aim and a pre-condition of sustainable development. Gender equality in formal education is also the main objective of the UN Girls’ Education Initiative (UNGEI). All these initiatives

emphasise the need for gender-sensitive approaches and materials, and for the integration of gender perspectives into all educational activities.

Health Promotion: The issues of development, environment and health are closely entwined, reflecting the complex links between the social, economic, ecological and political factors that determine standards of living and other aspects of social well-being that influence human health. A healthy population and safe environments are important pre-conditions for sustainable development. However, the education of many children and young people around the world is compromised by conditions and behaviours that undermine the physical and emotional well-being that makes learning possible. Hunger, malnutrition, malaria, polio and intestinal infections, drug and alcohol abuse, violence and injury, unplanned pregnancy, HIV/AIDS and other sexually transmitted infections are just some of the health problems we face that have enormous implications for health. The WSSD Plan of Implementation, EFA and UNLD embrace health education activities to achieve their goals, with schools acting not only centres for academic learning, but also as supportive venues for the provision of essential health education and services.

Environmental Conservation and Protection: There can be no long-term economic or social development on a depleted planet. Education to develop widespread understanding of the interdependence and fragility of planetary life support systems and the natural resource base upon human well-being depends lies at the core of education for sustainable development. Key resource priorities identified by the World Summit on Sustainable Development include: water, energy, housing, agriculture and biodiversity – the issues that came to be known at Johannesburg as the WEHAB Agenda. ‘Environmental literacy’ depends upon such understandings – and EFA and UNLD are central to developing the capacity for such learning. It also entails the capacity to identify root causes of threats to sustainable development and the values, motivations and skills to address them.

Rural Transformation: The challenge of education to serve rural transformation is one of the main themes of the Education for All effort. The problems of poverty and deprivation in rural areas, and their spill-over into urban areas, cannot be solved by preventing urbanisation and keeping rural people confined to rural areas. Rather, many, if not all, of the EFA and Millennium Development Goals require special attention to the situation of rural populations. In spite of rapid urbanization,

three billion or 60 per cent of the people in developing countries, and half of the people of the world, still live in rural areas. Three quarters of the world's poor, those earning less than a dollar a day, live in rural areas. One in five children in the South still does not attend primary school and, while rural-urban statistics on education are scarce, many countries report that non-attendance in school, early dropout of students, adult illiteracy and gender inequality in education are disproportionately high in rural areas, as is poverty. Urban-rural disparities in educational investment and in the quality of teaching and learning are widespread and need to be redressed. Rural people and rural areas are not homogeneous, and so for education to be relevant, it needs to respond to the diversity of rural situations. Educational activities have to be linked to the specific needs of the rural community for skills and capacities to seize economic opportunities, improve livelihood and enhance the quality of life. A multi-sectorial educational approach involving all ages and formal, non-formal and informal education is necessary.

Human Rights: Without respect for human rights there will be no sustainable development – this view emerges in the WSSD Plan of Implementation, and one of those rights is the right to a quality basic education, of which literacy is a part. Both EFA and UNLD underline the rights-based nature of their agendas. It is not just a matter of exercising an individual right, as an adult or child, to be educated, but of arriving at a point where societies see fulfilment of that right as a sine qua non of sustainable development. This common approach should inform policy formulation at national level with particular attention to the implications for educational systems of a rights-based approach.

Intercultural Understanding and Peace: Many opportunities for education and sustainable human development are being undermined by the lack of tolerance and intercultural understanding, upon which peace is made founded. The resulting aggression and conflict causes significant human tragedies, overwhelms health systems, destroys homes, schools and often whole communities, and has led to increasing numbers of displaced people and refugees. The goals of literacy and EFA cannot be met under such circumstances. Education for sustainable development therefore seeks to build skills and values for peace in the minds of humankind, as enshrined in the UNESCO charter.

Sustainable Production and Consumption: Sustainable lifestyles and ways of working are central to overcoming poverty and conserving and protecting the

natural resource base for all life. Sustainable methods of production are needed in agriculture, forestry, fishing, and manufacturing. Use of resources need to be minimized, and pollution and waste reduced. and city and office services are needed to need to minimize resource use and reduce pollution and waste. Likewise, there is a needa need to reduce the social and resource impacts of lifestyle consumption habits to ensure the equitable availability of resources for all around the world. Education and training for sustainable production and consumption depends upon literacy and basic education, and education for the world of work and responsible citizenship, are key goals of both EFA and UNLD.

Cultural Diversity: “Our rich diversity... is our collective strength” was the way that the Johannesburg Declaration trumpeted stressed the importance of this concept. The WSSD Plan of Implementation focuses on the protection of biodiversity as an essential component and indicator of sustainable development, within the broader context of cultural diversity. For the UNLD, the recognition and analysis of cultural and linguistic diversity is a premise on which the design of literacy programmes is built – the ‘literacies’ approach is defined, in part, by differences in cultural patterns of learning and in the use of languages. A key aspect of diversity is respect for indigenous and other forms of traditional knowledge, the use of indigenous languages in education, and the integration of indigenous worldviews and perspectives on sustainability into education programmes at all levels.

Information and Communication Technologies (ICTs): All three initiatives see ICTs as a useful tool of learning and expression. The common problem is expanding access to ICTs and developing their use to enhance basic education. The Dakar Framework for Action articulates the dilemma that their increasing use ‘may tend to increase disparities, weaken social bonds and threaten cultural cohesion’. This dilemma applies also to the promotion of literacy and of context-sensitive education for sustainable development, and includes the question of how use of ICTs relates to traditional learning tools (paper and pen, chalk and talk, for example). This is an area where common cause should be made by advocating strongly for local input into how ICTs should be used.

These many areas of overlap and common interest, both in approaches to education and in areas of substantive objectives, suggest that joint initiatives

across DESD, EFA and UNLD can add value to the common effort of each individually.

Section II: A partnership approach to the DESD

As the agency designated to take the lead in coordinating the DESD, UNESCO has the role of working to strengthen the vision and commitment of partners over the ten-year period. It is particularly important to build broad ownership at the start of the Decade, through a clear articulation of the value added by each partner.

This section identifies key principles upon which a partnership approach can underpin the development of an international implementation scheme for the Decade.

Partners

Partners in the DESD include all those organisations, networks, bodies and alliances that share the conviction that sustainable development depends to a large extent on broad-based awareness through educational and learning processes. As Table 1 shows, there are partners at all levels – sub-national (local, community) level, national, regional and international levels, and from all spheres – governmental, civil society and NGOs, and private.

Table 1: A sample list of potential partners in DESD

	Governmental	Civil society and NGOs	Private
Sub-national	<ul style="list-style-type: none"> • provincial/state/district departments of education and development sectors • municipal authorities • schools, adult learning programmes 	<ul style="list-style-type: none"> • Community-based organisations • local sections of NGOs • faith-based groups • village development committees • adult learning groups 	<ul style="list-style-type: none"> • local business • clans and families • individuals

	Governmental	Civil society and NGOs	Private
National	<ul style="list-style-type: none"> • national government departments of education and development sectors • universities and research institutes • EFA networks 	<ul style="list-style-type: none"> • national NGOs and NGO coalitions • branches of international NGOs • faith-based organisations • teachers' associations and trade unions 	<ul style="list-style-type: none"> • private sector businesses • business associations
Regional	<ul style="list-style-type: none"> • regional inter-governmental groupings • regional EFA networks 	<ul style="list-style-type: none"> • regional CS and NGO groupings and networks 	<ul style="list-style-type: none"> • regional business associations
International	<ul style="list-style-type: none"> • CSD • EFA High-Level and Working Groups • UNDG member agencies • Millennium Project Task Forces • official/semi-official watchdog bodies 	<ul style="list-style-type: none"> • sustainable development education networks • NGO UNESCO Liaison Committee • CCNGO/EFA • Global Campaign for Education • international environmental NGOs 	<ul style="list-style-type: none"> • international associations of businesses (eg in the extractive sector) • TNCs (eg media corporations)

Principles for developing partnerships

With such an enormous and diverse group of potential partners, there is a need to focus on networks and alliances. Three key principles are: (i) vision, (ii) demonstration programs and (iii) networking.

Vision: If each partner is to play its role within the DESD, it is essential that they are able to articulate clearly what the vision of ESD is in two ways: first, the overall vision of ESD to which all partners subscribe, and second, the particular vision for ESD within the parameters of their own aims, concerns and programmes.

To facilitate this, it is essential that UNESCO develop a general statement of vision before the commencement of the DESD on the basis of extensive consultations. This should be widely distributed and then revised in partner-specific adaptations. The key to this will be ownership of the general statement. Further

guidance may be useful for ways of sharing the vision with partners' own networks and contacts, based on a plan of advocacy and communication.

Demonstration activities: Ultimately the DESD aims to see ESD implemented in thousands of local situations on the ground. This will not involve ESD as a stand-alone programme, but the integration of ESD into a multitude of different learning situations. Therefore, no standardised programme can or should be proposed. However, demonstration activities and programmes for adaptation in locally relevant and culturally appropriate ways can be developed and disseminated as catalysts for action. Each demonstration activity should include, among other things and for the situation it addresses:

- ways to discover what the key local issues of sustainable development are
- adaptive processes to accord with relevant teaching and learning strategies
- ways of fostering links between the learning situation (school, adult programme, etc) and the community
- ways of integrating local knowledge and culture
- curriculum development processes enabling content to be decided locally relevant (imp. change)

Such demonstration activities can serve as a resource for local discussion of how ESD can best be put into effect.

Networking: As has been mentioned, sustainable development links with most aspects of life and development. Education for sustainable development concerns all kinds of educational structures and learning situations. From the outset, therefore, the orientation of DESD partners must be outward-looking, seeking to make connections with initiatives, programmes, groupings and networks through whom ESD will be further promoted and implemented. Particular attention must be paid to connecting with both national governments because of their central coordinating role and resources and with civil society networks, because their grassroots connections can enable DESD messages to fan out and down to local levels. To facilitate these processes it will be useful to spell out the why and how of building partnerships, and to model these processes at international level in preparation for the Decade.

These partnership processes are designed to build participation, ownership and commitment to catalyze momentum for the DESD.

How can this be promoted? What mechanisms can be identified to structure the necessary communication and dialogue? This section makes several proposals in response to these questions, beginning with a focus on mechanisms which will give voice to the local level – a ‘bottom-up approach’.

Community-based processes

One indicator of the success of the DESD will be the extent to which ESD becomes part of the development dialogue at community level. Spaces for dialogue generally exist at community level – associations, school support groups, cooperatives, faith-based groupings, self-help groups, development committees, and many more.

Giving maximum voice to local community level raises two significant challenges:

- What kind of support is needed to stimulate and sustain the process?
- How can community voices be heard beyond the local level?

These questions concern the way in which different levels are, or can be, linked with each other. As earlier sections of this paper have indicated, these links will be most effective if they provide space for local action, a supportive and positive policy environment, opportunities for exchange, as well as capacity-building.

In other words, a fundamental approach of the DESD should be to foster cooperation at all levels with the aim of strengthening local-level effectiveness. This implies that any organisation involved in ESD will also be part of a larger cooperative effort at the relevant level. Table 2 illustrates examples and for this in terms of individual action and broader cooperation.

Table 2: Community-level cooperation

Community-based institutions and organisations such as:	Working individually to:	Cooperating in ad hoc or formal local groupings to:
<ul style="list-style-type: none"> • schools, school support groups, cultural associations, youth organisations, cooperatives, faith-based groupings, self-help groups, development committees 	<ul style="list-style-type: none"> • integrate ESD into regular learning activities and programmes • identify and implement learning strategies 	<ul style="list-style-type: none"> • identify local sustainable development challenges • integrate local knowledge and skills into ESD • exchange ESD experiences and learn lessons for better practice

National, provincial and local government processes

It is clear that input and leadership will be required to establish and initiate such processes. Input can be provided as governments and civil society networks distribute, in appropriately modified form for national circumstances, the guidance materials produced internationally – their principal emphasis will be how to generate local debate and identify locally relevant issues. Government departments at local level as well as civil society organisations could give leadership in forming ad hoc groupings.

Table 3 illustrates many ways in which such important input and leadership can be provided. However, the importance of locally relevant action in ESD means that no one pattern can or should be mandated.

Such activities can be catalyzed and coordinated by the establishment of an open ESD Task Force, constituted at national level, to provide a forum for all the actors to engage with each other. In addition, ESD should be an integral part of the agenda of national EFA forums, as must be as the UNLD.

Table 3: National-level cooperation

Actors at national level	Working individually to:	Working together as a national ESD task force to:
Education ministry and other relevant ministries	<ul style="list-style-type: none"> • provide a national policy framework for ESD • budget and mobilise resources • support sub-national departments • foster public awareness on ESD and SD 	<ul style="list-style-type: none"> • debate and recommend ESD policy options which reflect local-level experience and challenges • integrate ESD into EFA and UNLD planning in the context of the EFA forum
NGOs, NGO and civil society networks and alliances	<ul style="list-style-type: none"> • facilitate exchange and information sharing among their members about ESD practices and experiences 	<ul style="list-style-type: none"> • provide a forum for exchange of experience, positive and negative, in ESD • identify research issues in ESD and plan cooperative research projects
Media groups and agencies	<ul style="list-style-type: none"> • integrate ESD and SD awareness building into media strategies 	<ul style="list-style-type: none"> • identify capacity-building needs and the actor best placed to meet them
Private sector companies and trade associations	<ul style="list-style-type: none"> • provide a forum to identify SD challenges they face, and identify necessary learning needs 	<ul style="list-style-type: none"> • develop relevant monitoring indicators for ESD

Regional processes

Examples of regional processes are illustrated in Table 4.

Wider regional grouping for ESD will be useful coordinating bodies also. However, since EFA regional forums exist (or at least EFA regional meetings take place), it would be best to organise ESD regional groups in conjunction with them. Since ESD draws potentially on a wider range of actors/sectors, this would have the advantage of including such participants in the EFA meeting. (Indeed, cross-sectoral links are a key concern of EFA).

In the Timeline (Section III), a series of special regional or sub-regional workshops are suggested for 2004 as part of preparation for the DESD. Attended by governmental and non-governmental representatives of the region, these will focus on how countries can structure a process of consultation and awareness raising at the local level. The aim is to follow these meetings with in-country local-level consultations over the first year of the Decade, thus providing input into provincial and national ESD planning for following years. It is important to start

the Decade with an emphasis on contextualised planning and to emphasise local voices in that process.

Table 4: Regional cooperation

Actors at regional level	Working individually to:	Working together as a regional ESD group to:
National government representatives	(see national level)	<ul style="list-style-type: none"> • conduct regional consultations on priorities for DESD
Regional intergovernmental organisations	<ul style="list-style-type: none"> • support national-level policy-making • foster exchange of experience and information 	<ul style="list-style-type: none"> • share policies, practices, knowledge and progress • identify common challenges
Regional civil society and NGO networks, coalitions and alliances	<ul style="list-style-type: none"> • foster exchange and learning among member networks and organisations 	<ul style="list-style-type: none"> • learn from diverse strategies • forge consensus on regional challenges and action
Regional media groupings	<ul style="list-style-type: none"> • share media strategies for SD and ESD 	<ul style="list-style-type: none"> • organise cross-national training and capacity-building
Regional private sector associations	<ul style="list-style-type: none"> • promote cooperation of private sector with other actors in ESD 	
Regional representatives of international agencies	<ul style="list-style-type: none"> • learn and communicate common lessons from cross-national experience • facilitate cross-national exchange on ESD 	
Regional representatives of bilateral cooperation	<ul style="list-style-type: none"> • assess ways to support national and regional ESD initiatives 	

International processes

There are already several fora where ESD issues can and should be prominently and regularly on the agenda: the Commission for Sustainable Development (CSD) relevant conferences of all UN agencies, programmes and organisations; NGO networks, and various EFA and UNLD meetings. These are depicted in Table 5. Many additional suggestions will be made and included in the development of the draft international implementation scheme for the Decade.

Table 5: International cooperation

Actors at international level	Working individually to:	Working together in various fora to:
International Ad hoc Working Group	<ul style="list-style-type: none"> gather information on developments in ESD and emerging priorities promoting DESD 	<ul style="list-style-type: none"> advise UNESCO on developments and emerging priorities in ESD assist UNESCO in forming partnerships and developing projects in support of DESD
Intergovernmental agencies (UN and others)	<ul style="list-style-type: none"> contribute to Inter-Agency Task Force integrate ESD planning into relevant workplans and initiatives participate in international and regional fora 	<ul style="list-style-type: none"> keep ESD high on the CSD agenda mobilise political will and strengthen mutual commitment, through CSD, or an Inter-Agency Task Force integrate ESD into EFA agendas (Monitoring Report, High-Level and Working Groups) foster global exchange of practice, policy and progress organise international, regional and sub-regional capacity building workshops, and conferences to advance DESD and ESD
UNESCO (DESD Lead Agency)	<ul style="list-style-type: none"> promotion and capacity building for ESD and DESD within and across UNESCO sectors advocacy and communication with international community building partnerships and collective momentum 	
Civil society and NGO networks	<ul style="list-style-type: none"> promote inter-regional exchange and learning inform members of ESD developments 	
Bilateral and multi-lateral development agencies	<ul style="list-style-type: none"> integrate ESD into programmes and budgets promote research in ESD 	

Monitoring

On-going monitoring is a prerequisite for a purposeful and well-organised Decade. This can be accomplished by integrating the monitoring of ESD into EFA and UNLD monitoring mechanisms at all levels. However, it may be useful to consider an inter-agency task force to meet, for instance, once a year to provide a place to monitor how far ESD issues continue to be firmly and visibly on the agenda of the international agencies, and to harmonise initiatives and avoid overlap.

Communication and advocacy

UNESCO will develop a detailed communication and marketing plan to cover at least the next 18 months before the start of the Decade. This will include as a minimum:

- internal capacity building and staff training within UNESCO so that the organization as a whole is mobilized to fulfil its role as Lead Agency
- preparation and dissemination of sample sections of text (of several lengths, e.g 1,3,5 and 10 paragraphs) on the DESD to all UNESCO staff so that they can include appropriate reference to and discussion of the DESD in papers and presentations that they make in international fora.
- a website – updating the current UNESCO Education Sector ESD site.
- formation of a UNESCO Advisory Committee for DESD
- print and web materials which present:
 - the vision of ESD and aims of DESD
 - the links between ESD, EFA and UNLD
 - the guidance as suggested in this paper
 - an ongoing inventory/database of DESD initiatives
 - links to UNESCO’s own examples of innovations and good practice in ESD (e.g Teaching and Learning for a Sustainable Future)
 - links to external websites of examples of innovations and good practice in ESD
- a programme of media releases on both the substance and process of DESD
- development of information packages to support partnerships for DESD, national launches of DESD, and guidelines for developing national DESD programs
- awareness-raising at international events and conferences
- proposals for linking the DESD with International Literacy Day and the Global EFA Week, and with the wide range of celebratory days in the United Nations calendar.

In view of the links between the DESD and the UNLD, inter-sectoral consensus-building processes have already begun. Efforts will be made also to

more fully integrate all UNESCO sectors into this collaborative work so that the strengths and experiences of all sectors are mobilized to support the DESD by a whole-of-UNESCO initiative.

UNESCO will also work with countries and international partners to plan launches of the Decade at the start of 2005, with the emphasis being on launches at national level.

Section III: Initiating the DESD

The proposed activities are recommended actions for UNESCO in its role as Lead Agency to initiate and catalyse the DESD among other UN and international agencies and organisations, countries and civil society. They are grouped into around the two roles of:

1. Communication and advocacy and
2. Building momentum and support

The recommended activities cover the period from July 2003 to December 2005 and includes tasks, meetings and events proposed in this paper, as well as some international events already programmed, eg EFA events. Timings and durations are indicative and are divided into three-month segments for convenience.

Proposed timeline: July 2003 – December 2005

2003	2003	2004	2004	2004	2004	2005	2005	2005	2005
July – Sept	Oct – Dec	Jan– March	April – June	July – Sept	Oct – Dec	Jan– March	April – June	July – Sept	Oct – Dec
<p>Promotion and capacity building for ESD and DESD within and across all UNESCO sectors, field offices and centres, including:</p> <ul style="list-style-type: none"> • internal capacity building within UNESCO so that the organization as a whole is mobilized to fulfil its role as Lead Agency • dissemination of information on the DESD to all UNESCO staff so that they can include appropriate reference to and discussion of the DESD in papers and presentations that they make in international fora. 									
<p>Extensive consultation on framework of implementation scheme</p>	<p>Formation of International Ad hoc Working Group</p>	<p>Meeting of International Ad hoc working Group</p>	<p>Develop and distribute the statement of DESD vision</p>	<p>Develop and distribute guidelines and multi-media package to support national planning and launches of DESD</p>	<p>International and national DESD launches</p>	<p>SD theme in Global EFA Week</p>	<p>International Experts' Consultation Meeting on ESD (30 years after Belgrade, to prepare for Intergovernmental Conference in 2007 (30 years after Tbilisi)</p>		
	<p>Design Communication and Advocacy strategy</p>	<p>Presentation of the Framework to the General Conference</p>	<p>DESD website launch</p>	<p>Acceptance of international implementation scheme by international partners</p>					
<p>Design UNESCO DESD website</p>	<p>Presentation of report to UN General Assembly</p>		<p>Develop, maintain and disseminate a calendar of international, regional, sub-regional and national DESD activities</p>	<p>Develop and maintain website as major international vehicle for news and networking on DESD activities and discussion</p>					

2003 July – Sept	2003 Oct – Dec	2004 Jan– March	2004 April – June	2004 July – Sept	2004 Oct – Dec	2005 Jan– March	2005 April – June	2005 July – Sept	2005 Oct – Dec
<p>Consultation on and development of the framework of the draft implementation scheme with:</p> <ul style="list-style-type: none"> • EFA Working Group • Meeting of the Heads of UN Agencies • Member States • International NGOs and specialist ESD community 	<p>Presentation of a proposal for a framework of a draft international implementation scheme to:</p> <ul style="list-style-type: none"> • UNESCO • General Conference • EFA High-Level Group (Nov) 	<p>UNESCO leads regional/sub-regional workshops to build awareness of DESD and build region and country level commitment to planning of activities for DESD</p>	<p>CSD 12</p>	<p>EFA Working Group Inter-agency ESD Task Force</p>	<p>EFA High-Level Group</p>	<p>Governments host sub-national/local stakeholder consultations</p>	<p>CSD 13</p>	<p>EFA Working Group</p>	<p>EFA High-Level Group</p>
Building momentum and participation									
<p>UNESCO facilitates consultations with regional/sub-regional organisations and national governments, where appropriate, to build awareness of DESD and build regional and country level commitment to planning of activities for the DESD</p>									
<p>UNESCO develops and disseminates guidelines and multi-DESD programmes and activities</p>									
<p>Meetings of national DESD working groups</p>									
<p>Planning of support structures and strategies for managing DESD by: governments, international agencies, regional organisations, civil society organisations and professional bodies</p>									