SOUTH ASIA ENVIRONMENTAL EDUCATION AND TRAINING ACTION PLAN 2003 - 2007

Learning to Live in Harmony with Nature and Environment

July 2003
FOREWORD

In the last few decades the South Asian growth and improved standards of living fact that it has been obtained with huge costs of the environment undermines the survival which we would wish to leave for our children. To development, so as to not jeopardise the growing attention to the alternative path to events to which the South Asia Co-operative support.

A nation that is sensitised and capable of human activities is a desirable condition for training plays a vital role to amass such priority programme areas is to contribute building among the public and institutional Education and Training Action Plan was a collaborative effort with UNEP-ROAP at Ahmedabad, India. SACEP acknowledges Action Plan prepared through extensive experiences and the needs of the region.

The Action Plan proposes education and initiatives, planning and decision making communication and collaboration. The prior these strategies.

This Action Plan has been reviewed and countries.

The results of this endeavour will only make committed to implementing the recommendations with national and regional stakeholders to its advocacy for environmental education and sustainability development.

We hope that institutions involved will find sustainable development.

July 24, 2003

Colombo
FOREWORD

In the last few decades the South Asian region has been gaining ground in terms of economic growth and improved standards of living for its citizens. Yet, this achievement is marred by the fact that it has been obtained with huge costs to the environment. The depletion and degradation of the environment undermines the survival of future generations and this is not the legacy we would wish to leave for our children. The need to refocus and reshape our current ways of development, so as to not jeopardise the natural systems has picked up momentum with the growing attention to the alternative path of sustainable development. This is a positive turn of events to which the South Asia Cooperative Environment Programme (SACEP) extends its support.

A nation that is sensitised and capable of accepting and instituting environmental needs into all human activities is a desirable condition for achieving sustainability. Environmental education and training plays a vital role to amass such a society. In recognition of this fact, one of SACEP's priority programme areas is to contribute to increasing environmental awareness and capacity building among the public and institutions in the region. The South Asian Environmental Education and Training Action Plan was developed for this purpose. It was achieved through a collaborative effort with UNEP-ROAP and the Centre for Environmental Education (CEE) Ahemmedabad, India. SACEP acknowledges their commitment and contribution to this cause. This Action Plan prepared through extensive participatory processes, draws upon initiatives, experiences and the needs of the region.

The Action Plan proposes education and training strategies for curricular and co-curricular initiatives, planning and decision making, public awareness and participation, networking, communication and collaboration. The principles of sustainable development are implicit in all these strategies.

This Action Plan has been reviewed and endorsed by high-level officials of SACEP member countries.

The results of this endeavour will only materialise if governments and relevant institutions are committed to implementing the recommendations in this Action Plan. SACEP is willing to work with national and regional stakeholders to realise these objectives while continuing its advocacy for environmental education and training.

We hope that institutions involved will find this plan useful to guide the region onto the path of sustainable development.

July 24, 2003
Colombo

Mahboob Elahi
Director General
South Asia Co-operative Environment Programme
FOREWORD

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THE APPROACH EDUCATION AND TRAINING

The process of developing the 2003-2007 has been an extensive exchange of information and ideas. During the discussions held in February 2002, it was recognized that there is also a good understanding of the need to meet the challenges of environmental education. Recognize and build on these different solutions would involve identifying areas where member countries have expertise.

Some of the shared understandings are:

1. Considerable work has been done to focus on strengthening the commitment of the countries.
2. Ultimately all environmental education will be directed towards the development of the region.
3. Environmental education programs should focus on alleviation of current problems and the provision of solutions.
4. Environmental education should be seen as a tool for solving practical problems and for raising the level of awareness.
5. The objective of environmental education is to develop a commitment towards the environment.
6. Suggested initiatives might include training for under-privileged sections of the community.

This document understands that traditional education is a process concerned about the total environment. This includes knowledge, attitudes, commitment, and ability to solve current problems and to plan for the future.

While environmental education is seen as a process for solving practical problems, it is expected that all governments within the region on to the sustainable development of their countries.
THE APPROACH IN DEVELOPING ENVIRONMENTAL EDUCATION AND TRAINING ACTION PLAN FOR SOUTH ASIA

The process of developing the Environmental Education and Training Action Plan-South Asia 2003-2007 has been an extensive and participatory one. The draft plan and recommended actions were suggested, based on analysis of the information gathered from the member countries. During the discussion on the draft plan at Regional Meeting held at Kathmandu in February 2002, it was recognized that while many commonalities prevail among the SACEP countries, there is also a good amount of variety in terms of the approaches and initiatives to meet the challenges of environmental education in the member countries. The challenge is to recognize and build on these different initiatives and to solve our common problems. Some of the solutions would involve identification of synergies in this approach for appropriate use by the member countries.

Some of the shared understandings underlying in this plan are:

1. Considerable work has been done in the region in this field. Future efforts and actions should focus on 'strengthening' and 'consolidating' the efforts already made in the region and the countries.
2. Ultimately all environmental education and training must contribute to sustainable development of the region.
3. Environmental education and training need to be linked to income generation and poverty alleviation.
4. Environmental education is a process that aims at changing values.
5. Environmental education is an investigative, empowering, and a participatory process.
6. The objective of environmental awareness and education is to promote participatory action towards environmental conservation.
7. Suggested initiatives must pro-actively ensure the participation of and benefits to women and under-privileged sections.

This document understands the terms 'Environmental Education' and 'Training', as follows:

Environment Education is a process, aimed at developing a world population that is aware of and concerned about the total environment and its associated problems. It should also provide the knowledge, attitudes, commitments and skills to work individually and collectively towards the solution of current problems and prevention of new ones.

While environmental education enables the learner to become sensitive to environmental problems by raising the level of awareness, training leads to development and mastery of skills in solving practical problems and for specialized action (UNEP, 1986).

The purpose of preparing this Action Plan is to provide a common guide to the governments of South Asia to educate and train their people in the field of environmental management. It is expected that all governments will make use of this plan effectively and efficiently to guide the region on to the sustainable development path.
KEY ENVIRONMENTAL CHALLENGES OF ITS MANAGEMENT

1.1 The South Asian Region

South Asia is a realm of one of the oldest races and religions have co-existed, dispersed across Bangladesh, Bhutan, India, Maldives, Nepal and Pakistan. The region for the purpose of this report includes these countries in the South Asian region.

The region covers one twentieth of the earth's land area and more than 20 percent of the global population. The region has about 10,000 km long coastlines and the wetlands extend over about 15,600 km along the coastlines. More than 80% of the world's mangroves are found here. A vast number of natural sites of the world are found in South Asia, including 12 national parks, 15.6 and 12 percent of the world's flora and fauna, respectively.

The economies of this region have witnessed rapid growth. However, during last 3 - 4 decades, the gap between rich and poor has widened. The region also has the unique history of conservation and wise use of natural resources. Environmental education and care is key to the process of development and leave territories in natural conditions. Environmental education and care is key to the process of development and leave territories in natural conditions.

Harmony with the environment. Each group needs to know how to manage natural resources. Relations and harmony with the environment is key to the process of development, industrialization, urbanization, and the ability of the natural system to provide the livelihood of the local communities.

1.2 The Key Challenges

The challenges to sustainable development are many and complex. The region needs development that is aligned with the current paradigm, without losing the traditional way of life. The region needs development that is aligned with the traditional way of life. The region needs development that is aligned with the traditional way of life.

Environmental education and care is key to the process of development. However, there are no ready-made solutions from the failures of developed world.
CHAPTER 1
KEY ENVIRONMENTAL CHALLENGES AND EFFORTS OF ITS MANAGEMENT IN SOUTH ASIA

1.1 The South Asian Region

South Asia is a realm of one of the oldest civilizations in the world, where people from different races and religions have co-existed, displaying a multitude of cultures for centuries. The countries Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka constitute the South Asian region for the purpose of this report.

The region covers one twentieth of the earth's surface (approx. 42,916,000 km$^2$) and houses more than 20 percent of the global population (approx. 1.4 billion people). The entire coastline is about 10,000 km and the wetlands extend up to 134,161 km$^2$. Some of the most spectacular natural sites of the world are found in South Asia. The region is endowed with approximately 15.6 and 12 percent of the world's flora and fauna respectively.

The economies of this region have witnessed improved growth rates in the recent years. The region also has the unique history of traditions and practices, which is a strong basis of conservation and wise use of natural resources, etc. Yet the region is not free from poverty. However, during last 3 - 4 decades, much of development activities undertaken to alleviate poverty, which is the most burning issue in the region have become unsustainable. It is now well recognized that unsustainable development will lead to grave environmental damage that will halt the process of development and leave to future generations a seriously flawed environment.

Environmental education and care is not new to the region. Centuries of frugal and careful tending of the land on which communities have directly depended have resulted in living in harmony with the environment. Each generation has passed on its profound understanding of how to manage natural resources. Religious philosophy also has a bearing on the traditional relationships with the environment in many nations. However, the quickening pace of development, industrialization, urbanization and population growth is challenging the traditional practices and the ability of the natural systems to support the changes.

1.2 The Key Challenges

The challenges to sustainable development are staggering in terms of number, scale and complexity. The region needs development and modernization in less wasteful ways than the current paradigm, without losing the sound social and cultural values and practices, which underpin the traditional way of life. The region needs to find alternative paths to an alternative goal; a goal which ultimately is the true goal of development; - an environmentally sound and sustainable way of life, which is socially justifiable and equitable.

However, there are no ready-made solutions to these problems and concerns. We have to learn from the failures of developed world and achieve economic development with minimum
damage to the environment, for this alone can bring sustainable development. Even more important, the region has to look to its own traditions and practices to evolve new paradigms of sustainable development.

The major environmental and sustainable development issues of the region are:

1. Land Degradation
2. Deforestation
3. Loss of Biodiversity
4. Depletion of Water Quality and Quantity
5. Atmospheric Pollution
6. Degradation of Marine and Coastal Resources
7. Unplanned Urban and Industrial Development

1.2.1 Land Degradation

In most countries in the region, soils suffer from varying degrees of erosion and degradation mainly due to rapid rates of deforestation, poor irrigation and drainage practices, inadequate soil conservation, steep slopes, and overgrazing. Water erosion is extensive and severe in areas where precipitation is high.

The average population density for South Asia is 186 persons per square kilometer. Thirty nine percent of the total land area is considered to be arable. Population growth will continue to exert pressures on land resources. Increased dependence on intensive agriculture and irrigation may result in salinisation, alkalinization and water logging, particularly in irrigated lands that are not managed properly.

1.2.2 Deforestation

In the Asian region the lowest per capita forest cover is found in South Asia, at 0.08 hectares. Over harvesting of forests (for fuel wood, timber and fodder), habitat destruction due to industrialization, and expansion of agricultural and human settlements and rapid population growth are the major causes of deforestation in the region.

1.2.3 Loss of Biodiversity

The region encompasses a wide variety of biogeographic zones, and includes the world’s highest mountain system, biologically rich rainforests, and coral reefs. Almost all the countries of the region also depend heavily on direct harvesting of biological resources. The flora and fauna of the region are more threatened now than ever before. The drive for increased agricultural production has resulted in the loss of genetic diversity.

The underlying causes of losses of biological diversity in the region include international trade particularly in timber which results in forest habitat losses; population growth leading to accelerated rates of land use change; poverty in conjunction with demand leading to unsustainable consumptive use of “common access resources”; the introduction of non-native species leading to destruction of predator/prey equilibrium; and improper use of agrochemicals leading to loss of aquatic species.

Other major reasons for biodiversity loss include habitat loss, increased trafficking in wildlife, agriculture and the construction of infrastructure.

1.2.4 Depletion of Water Quality and Quantity

The region has arid and semi arid areas, some of the world’s largest rivers, and high capsa per water availability is low in many areas of the region with the population growing rapidly. Effluents, and runoff from activities such as agriculture. Pollution is quite severe in South Asia’s watercourses. In addition, discharge of pollutants into near-shore areas is a problem in some countries.

1.2.5 Atmospheric Pollution

One of the undesirable impact of economic growth is the increased demand for energy. Use of fossil fuels and the increased demand for energy. Unburned fuels, such as coal, wastes, and poor quality solid fuels, such as coal, wastes, and poor quality solid fuels, are prevalent in income urban households and in rural areas.

Transboundary air pollution is a problem in the region. Significant health threats arising from air pollution are respiratory and cardiovascular diseases. The effects of coal burning are felt across the region in the form of soot and smog. The effects of coal burning are felt across the region in the form of soot and smog. Transboundary air pollution is a problem in the region. Significant health threats arising from air pollution are respiratory and cardiovascular diseases. The effects of coal burning are felt across the region in the form of soot and smog. Transboundary air pollution is a problem in the region. Significant health threats arising from air pollution are respiratory and cardiovascular diseases. The effects of coal burning are felt across the region in the form of soot and smog. Transboundary air pollution is a problem in the region. Significant health threats arising from air pollution are respiratory and cardiovascular diseases. The effects of coal burning are felt across the region in the form of soot and smog.
Other major reasons for biodiversity loss include loss of keystone species, extensive deforestation and habitat loss, increased trafficking in animals and animal body parts, large-scale conversion of land for agriculture and the construction of large-scale dams and highways.

1.2.4 Depletion of Water Quality and Quantity

The region has arid and semi-arid areas as well as humid tropical areas with high precipitation. It has some of the world’s largest rivers, numerous small rivers and natural lakes. In spite of this, the per capita water availability is low in most of the countries. The demand for water will continue to rise in the region with the population growth. Water pollution is caused mainly by domestic sewage, industrial effluents, and run-off from activities such as agriculture and mining. The problem of pathogenic pollution is quite severe in South Asia due to the discharge of untreated domestic sewage into watercourses. In addition, discharge of mine tailings and development of industrial areas with direct discharge of pollutants into neighboring river systems has resulted in hot spots of heavy metal pollution in some countries.

1.2.5 Atmospheric Pollution

One of the undesirable impacts of economic growth in South Asia in the last three decades has been the increased demand for energy. Urban air pollution is a serious problem in many major cities of the region. Significant health threats also arise from indoor air pollution resulting from the use of low-quality solid fuels, such as coal, wood, crop residues, and dung for cooking and heating in lower-income urban households and in rural areas throughout the region.

Transboundary air pollution is a problem that has accompanied with economic growth and high energy consumption. The effects of coal burning tend to spread over a large area, resulting in acid deposition in vast areas near the coal plants as well as farther away. Particulate matter and other corrosive gases are also transported long distances across countries by wind.

1.2.6 Degradation of Marine and Coastal Resources

The marine resources of the region are economically important for many countries. Coastal and marine pollution is mainly due to discharge from rivers, surface runoff and drainage from port areas, domestic and industrial effluents, and various contaminants from ships. River waters are generally heavily contaminated by municipal sewage, industrial effluents, and sediments. The major sources of heavy metal contamination are industrial effluent and dumping of land-based solid waste into the sea. Loss of coastal habitats includes substantial loss of mangroves for the construction of shrimp ponds and for paddy cultivation, with negative impacts on commercial fisheries that rely on species using the mangroves as nursery areas. A major cause for concern throughout the region is over-fishing and the use of destructive fishing techniques, particularly in the highly diverse coral reef systems.

High concentrations of lead, cadmium and mercury have been recorded in some part of the region. Moreover, there is increasing evidence of these toxic substances getting into the food chain. The sources of marine pollution from sea-based activities include marine transportation of oil and offshore mineral exploration and production activities. Accidental oil spills have been frequently reported.
1.2.7 Unplanned Urban and Industrial Development

The environmental stress generated by urbanization in the region has been categorized as relating to poverty and arising from economic growth and affluence. The rise of cities has been accompanied by a proliferation of slums and squatter settlements without access to basic infrastructure, clean water, and sanitation, with associated health risks. It is expected that a large share of the world's urban poor will continue to live in South Asia.

Environmental concerns resulting from the economic growth and affluence of urban areas include congestion, increasing air and water pollution; loss of productive agricultural land; loss of coastal habitats to conversion and land reclamation; over abstraction of ground water resources resulting in land degradation; and deforestation as a consequence of increased demand for construction timber.

With growing economic activities and consumerism, the quantity of solid wastes generated is growing rapidly. Furthermore, large quantities of industrial and hazardous wastes resulting from the expansion of industries that use chemicals in the region have exacerbated the waste management problem. The problem of solid waste management is increasing. The key issues regarding solid waste management are environmental health implications due to inadequate coverage of waste collection; improper storage prior to collection; and poor standards of disposal.

1.3 Efforts in Environmental Management

A recent trend in all the countries of South Asia has been the strengthening of governance structures for environmental protection. A large number of environmental institutions have been established in the public sector, including ministries and agencies. These organizations need to be strengthened if they are to fulfill their intended roles. Legislation, regulatory standards, and environmental planning procedures related to public works, particularly environmental impact assessments, are the most common instruments of environmental management. Serious efforts are also being made by industries and research institutes to develop and incorporate environmentally friendly technologies into production processes.

The active presence of a large number of non-governmental and community-based organizations has contributed to shaping policy and thinking with regard to environmental issues not only at the national level but also at regional and global levels. Several policies, programmes and projects have been implemented to combat land degradation in the region. These include watershed management, soil and water conservation, sand dune stabilization, reclamation of waterlogged and saline land, forest and range management, and replenishment of soil fertility in croplands.

Integrated watershed management programmes in many of the countries have been instrumental in rehabilitating eroded land and preventing further degradation. In some places, rehabilitation of desertified lands through plantations and stabilizing of sand dunes have been successful. To tackle the problem of deforestation, national governments have taken steps to protect forest areas by establishing forest parks and wildlife conservation areas, and special schemes of afforestation and reforestation. Governments in the region have also responded actively to the issue of biodiversity conservation by taking measures to protect biologically rich areas, such as by designating protected areas and implementing national biodiversity action plans.
Different measures are being taken by many countries to meet the growing demands for safe and clean water. These measures are being promoted using various regulatory and development approaches such as reuse/recycling, seawater desalination, legislation, establishment and enforcement of water and effluent standards, protection of wetlands, use of economic incentives and providing private sector participation in water development schemes.

Numerous efforts are being made in the region, to bring air pollution problems under control. Vehicular emissions are a significant problem in all major cities. Programmes on setting emissions standards for vehicles, as well as requiring manufacturers to meet strict standards for all new vehicles are being implemented.

It is manifestly clear that the ability of a country to achieve sustainable development will be determined firstly by the capacity of its people and secondly by the capacity of its institutions. Chapter 36 of Agenda 21 on Education Awareness and Training states that education including public awareness and training should be recognized as a process, by which human beings and societies can reach their fullest potential. Consequently, Environmental Education and Training (EE&T) is a sine qua non for achieving any or all the goal of sustainability.

The target groups for EE&T are diverse, ranging from children, youth and women to community leaders and decision makers. Currently, South Asian countries are in the process of formulating and implementing many plans, programmes and projects aimed at environmental conservation, management and sustainable development. Most of them are directed towards improving legislation, institutional building, technology transfers, promoting participatory management, and use of indigenous knowledge.

In the implementation of these programmes Education, Awareness and Training are critical factors. In this context, development of human resources for integration of EE&T into formal and non-formal educational streams, greater institutional co-ordination, co-operation and networking and systematic sharing of knowledge, experience and resource materials are very important.
THE ROLE OF ENVIRONMENTAL EDUCATION AND TRAINING IN DEVELOPMENT

2.1 Need for Environmental Education and Training

Environment and is an all-encompassing concept that sooner or later, affect the people, environment and development concepts. For better quality of life, satisfaction of the biosphere and concern for the need to be effective, it needs the involvement of interested in its success only when interested in its success only when

This requires an understanding on the part of development. This is the role that

Environmental education is a process of recognising as an important crosscutting subject. It stipulates that EE&T helps people understand the problems, forecast the future, increasing capacities to solve them and will to work together to solve their community problems.

The need for environmental education in the region, and in many cases, policy makers. Training for better environment awareness among the population is being undertaken through training institutions, education programmes and community initiatives.

Many countries in the region have created systems and strategies for sustainable development. Training for better environmental awareness among the people is being undertaken through training institutions, education programmes and community initiatives.

2.2 Recent Trends and Challenges

Recent trends in EE&T in the region are giving rise to expansion. Poverty and rapid industrialisation are leading to environmental degradation throughout the region.
CHAPTER 2
THE ROLE OF ENVIRONMENTAL EDUCATION
AND TRAINING IN SUSTAINABLE DEVELOPMENT

2.1 Need for Environment Education

Environment and is an all-encompassing subject. Any decision which affects the environment will, sooner or later, affect the people, the development patterns, the policies, and vice versa. When environment and development concerns are merged, a better set of goals evolves. This includes a better quality of life, satisfaction of basic human needs, sustainability of development, respect for the biosphere and concern for the needs of future generations. For any sustainable development effort to be effective, it needs the involvement and approval of various sectors of the society. People will be interested in its success only when they are convinced that such efforts would be beneficial to them. This requires an understanding on their part about environmental issues and concerns and their links to development. This is the role that environmental education has to play in sustainable development.

Environmental education is a process by which human beings and societies can reach their fullest potential to develop the economies by living in harmony with the environment. This has been recognised as an important crosscutting area of the objectives of Agenda 21 due to be realised. It stipulates that EE&T helps people not only to become aware of the consequences of their actions, but also provide information necessary for solving environmental problems. It is equally useful in understanding the problems, forecasting its impacts, preventing such problems to emerge in the future, increasing capacities to solve these problems, bringing changes in the attitudes of people and a will to work together to solve their common problems.

The need for environmental education has been duly recognised by the countries of the South Asian region, and in many cases, policy directives exist for the incorporation of EE&T into mainstream education.

Many countries in the region have already initiated the process of re-orienting formal education to meet the needs of a sustainable future. They have also recognised the need for creating widespread environmental awareness among the general public, as well as sensitising key groups of decision-makers. Training for better environmental management is another area, which the countries of the region are now focusing on. Many governments, NGOs, and regional and international agencies in the region are creating systems and structures for training key professionals in a range of environmental skills, tools and techniques for sustainable development.

2.2 Recent Trends and Concerns

Recent trends in EE&T in the region reflect the concerns of people and societies in transition. The countries of the region are going through rapid, though uneven, development and economic expansion. Poverty and rapid industrialization and an expanding urban population have led to severe environmental degradation throughout the region.
Countries in the region are recognising the enormity of the challenges they are facing, and of the vital role that environmental education can play in helping to meet the challenges of sustainable development. The need to start from children of school going age, and reach out to a wide variety of age groups is also accepted. A range of innovative programmes for various levels is being developed and implemented in the region. They are also recognising the role of NGOs and the need for community participation in education and awareness activities.

At the formal level, all the countries have incorporated environmental components in the school curriculum, generally as an area of study at the lower levels, and through the infusion approach at the primary, upper or middle school levels. Considerable efforts in the field of teacher training have also been made. In general, many countries in the region are now at a stage of reviewing the EE&T efforts in schools and identifying and developing fresh approaches. At the higher education level, environmental education efforts are gathering momentum, with more and more universities introducing environment-related courses.

The need for community participation in education and awareness activities is also accepted. A range of innovative programmes for various levels is being developed and implemented in the region. The countries have also recognised the need for sustainable management of resources and the need for an effective education and awareness to achieve this. A common learning from the wide array of experiences is that where people are aware and involved in solving environmental problems, solutions emerge.

Local governments, communities, businesses and other interest groups also need to set agenda for human development. They should be full partners with governments in decisions making on policies, programmes and projects that directly affect them, their environments and the resources on which they depend... Information about proposed actions... must be provided... Full participation is essential... All community members need to play a role in decisions that affect their livelihoods, and particularly decisions on the use and management of common resources... Women must be able to participate... (Caring for Earth: A Strategy for Sustainable Living; IUCN, UNEP, WWF; Switzerland, 1991). Efforts to facilitate these processes are being made. The urgent need to reach out to and sensitise decision-makers in various sectors are being recognized.

Shortage of resources, of trained personnel to plan, manage and implement EE&T programmes; of resource materials which are relevant to the local context, are some of the common areas of concern. Some of the other issues are how EE&T can counter rapidly changing lifestyles, which are sweeping across the region and putting an enormous pressure on resources. There is also a concern as to how there could be a move away from a 'product orientated approach' to EE&T (i.e., production of posters or organization of a rally), to a more strategic 'process-oriented effort', which is part of an overall plan to achieve the goals of sustainable development.

Another concern of environmental educators is that there is not much experience in evaluating the outcomes and effectiveness of EE&T. Without evaluation, educators are not able to prove that EE&T can make a difference.

2.3 Regional Co-operation

Agenda 21 states “Countries should co-operate with each other to produce educational tools that include regional environment and development issues and initiatives, using learning materials and resources suited to the needs of EE&T. Co-operation is crucial, international co-operation is essential, and sub-regional and national co-operation is also necessary. Existing mechanisms between the South Asian nations exist to support regional integration, the communications region, the environment region, and the environment region of the United Nations in South Asia (UNESCAP) are examples of the co-operation that exists between the South Asian nations. The need for community participation in education and awareness activities is also recognized. The countries have also recognized the need for an effective education and awareness to achieve this. A common learning from the wide array of experiences is that where people are aware and involved in solving environmental problems, solutions emerge.

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It also recognises that no single nation can achieve balanced and sustainable development on its own. While national plans and strategies are crucial, international co-operation must support and supplement these efforts. Regional and sub-regional organisations are also called upon to contribute. In fact the potential for co-operation between the South Asian nations is enormous; in particular co-operation towards greater economic integration, the communications revolution, technology transfer and sharing, sustainable growth patterns, and education and training.

The benefits of such a co-operation are immense, the foremost being through sharing of experiences, learning and programmes, which can help replicate these experiences, thereby saving resources, time, man power and finances.

Since the Earth Summit in 1992, there has been great emphasis on regional environmental co-operation. Every five years, a State of the Environment Report for Asia and the Pacific is prepared by ESCAP, with assistance from members of the Interagency Committee on Environment and Sustainable Development.

Member states of the South Asia Co-operative Environment Programme (SACEP), namely Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka have been implementing an Action Plan called SACEP’s Strategy and Programme I & II, since 1992. EE&T is agenda one of the SACEP’s Priority Subject Areas. SACEP has facilitated the development of education material, and also has worked to develop a plan for co-operation in environmental training with financial and technical assistance from ADB, NORAD and others.

Likewise, UNEP’s Network for Environmental Training at Tertiary Level in Asia and the Pacific (NETTLAP) has made a significant contribution to the enhancement of environmental expertise of decision makers, policy formulators and tertiary level educators and trainers in the region through the establishment of a self sustaining network of trained educators, trainers and experts at the higher education level.

Similarly, IUCN-The World Conservation Union in Partnership with the Centre for Environment Education in India (CEE) has launched the South and South East Asian Network for Environmental Education (SASEANEE). It is a useful database of environmental educators in South Asia.

Given the commonality of concerns and conditions in the region there is considerable scope for regional co-operation and collaboration. A Clearing House Mechanism, regard to the EE&T requirements, resources and transfer could lead to greater sharing of knowledge, experience and expertise in the region. UNEP, ESCAP, UNESCO and UNDP could facilitate this process by providing finances and technical assistance.
3.1 Curricular Initiatives

Status

The importance of EE&T is recognised in the region. Countries have incorporated environmental education and technology as a separate subject at all levels. Topics such as environmental content are included in various curricula. In many countries, the separate subject at all levels is ongoing.

It is also recognised that the content is provided at different levels. Availability for EE&T in schools is felt to be a barrier.

Environmental Education is included at pre-service and in-service level. Various workshops conducted to build their capacities. Textbooks for various grades in environmental content. Some resources and NGOs have developed some contribution in developing innovative approaches. However, these have generally been widespread.

Capacities and Capabilities

In most cases, in-service teachers have been trained. However, these have generally been

Textbooks for various grades in environmental content. Some resources and NGOs have developed some contribution in developing innovative approaches. However, these have generally been widespread.
CHAPTER 3
REVIEW CURRENT CONTEXT OF ENVIRONMENTAL EDUCATION AND TRAINING

3.1 Curricular Initiatives

Status

The importance of EE&T is recognised at all levels in all the countries of the sub region. Most of the countries in the region have incorporated environmental considerations into the school curricula. This is being done as a separate content area at the lower level, and through infusion at the higher levels. Topics such as environment, conservation, pollution, health, hygiene etc., are included in the curriculum. In many countries, the debate as to whether environment should be introduced as a separate subject at all levels is ongoing.

It is also recognised that the content has to be transacted through activity based and child centered approaches. Where it is not incorporated into school curricula, supplementary reading is sometimes provided at different levels. Availability and access to relevant and appropriate resource materials for EE&T in schools is felt to be a barrier in many cases.

Environmental Education is included in the teacher education curriculum through programmes at pre-service and in-service level. Workshops for teacher trainers and on-site educators are also conducted to build their capacities as efficient trainers. However, EE&T is still not uniformly available in many teacher-training programmes.

At the college level, while there are courses in environmental science and management in most countries, they are still emerging disciplines. Environmental education for students of various disciplines either through a separate course or through infusion into various subjects is not yet widespread.

Capacities and Capabilities

In most cases, in-service teachers have received some orientation in EE&T content and methods. However, these have generally been through short, once and for all training interventions.

Textbooks for various grades in schools have been rewritten in many cases to include environmental content. Some resource materials have been developed. Government institutions and NGOs have developed some capacity to generate such material. In many cases, NGOs contribution in developing innovative co-curricular materials and programmes such as for eco-clubs have been outstanding.
Problems and Constraints

The generally centralised systems of curriculum development and textbook preparation make it difficult to make EE&T locale specific. Curriculum change is a long process, and because of this, it is often not possible for textbooks to reflect current and emerging environmental concerns. The syllabus load and examination driven education systems in the countries is a barrier to activity-oriented, experiential approaches. Lack of resources is a barrier to providing environmental education experiences uniformly across the countries. Teacher training and motivation are also not provided for at desired levels.

Another concern in regard to EE&T in the formal system, and all awareness efforts in general, is that environmental educators are not really sure how to evaluate the impact of their efforts. This becomes a major obstacle to the educator’s own efforts, and also in proving the efficacy of environmental education efforts to policy makers and funding agencies. This may be one of the reasons that EE&T continues to receive low priority in South Asia.

Requirements

While the systemic issues in the formal education system would need to be addressed within each country, at a regional level, it would be of use to share the EE&T approaches and experiences of the respective countries. It has been recognised that curriculum and textbook preparation should be based on updated scientific developments, that they should be locale specific, and should integrate indigenous and traditional knowledge. The challenge is how to achieve this in practical terms.

This sharing would be particularly useful as some of the countries are in the process of introducing environment as a separate subject at the middle school level, in addition to the infusion approach. In addition, some mechanisms to share and adapt resource materials is crucial so as not to waste time and resources in developing materials on similar concerns and issues.

3.2 Co-curricular Initiatives

Status

Eco-clubs, Nature Camps, Environmental Brigades etc. are gaining popularity in all the countries. They have made an impact as extremely effective catalysts in imparting awareness, knowledge, attitudes and skills among children and youth. Often the governments offer support to such programmes. In some cases, they take the lead in facilitating or even organising such efforts.

Capacities and Capabilities

Several NGOs in all the countries of the region have developed innovative co-curricular and extra-curricular non-formal programmes. They have established linkages with schools in making these available to students. Some amount of resource materials have been developed and teachers’ skills built up to handle these programmes.

Problems and Constraint

As of now, these programmes, though in terms of finances, resource materials etc. felt that the reach and popularity of these programmes is better off areas.

While generally such activities are effective, the reality is that within the school systems in the respective countries much activity is needed in order to scale up these programmes is important to the schools and sustain innovative programmes. This is particularly true if we collectively look for more innovative programmes.

3.3 Planning and Decision Making

Status

With regard to training on environmental education in the region, there is a limited number of opportunities offered through bilateral linkages with universities and NGOs. In most cases, the opportunity to carry out interesting and innovative environmental education programmes in schools is limited. In-service training of all levels of government officials working in environment related departments is also limited. While there are efforts made by various agencies in South Asia to scale up these programmes is important to the schools and sustain innovative programmes. This is particularly true if we collectively look for more innovative environmental education programmes.

Capacities and Capabilities

A good amount of capacity has been developed in the region that cater to the needs of the education sector through various training programmes.
Problems and Constraints

As of now, these programmes, though successful, are extremely limited in their reach. Resources, in terms of finances, resource materials, and training are quoted as barriers to scaling up. It is also felt that the reach and popularity of these programmes may be more in the urban and economically better off areas.

While generally such activities are recognised as being important by the educational system, the reality is that within the school system, there are constraints of time and pressures of the syllabus, which make it difficult to devote the required time to such activities.

Requirements

The need for appropriate, locale-specific material, in the local languages, which will help educators carry out interesting and innovative programmes, has been widely recognised. Finding ways to scale up these programmes is important. Capacity building of NGOs and teachers to plan, organise and sustain innovative programmes is required. There is also a need to share experiences and collectively look for more innovative ideas for programmes for such co-curricular clubs, etc.

3.3 Planning and Decision Making

Status

With regard to training on environmental issues, most of the countries in the region take advantage of opportunities offered through bilateral, multi-lateral and regional agencies for training of various levels of personnel. In most cases, the pre-service training of bureaucrats now incorporates environment and sustainable development issues. However, there are only a few opportunities for in-service training of all levels of government personnel, or for sensitising personnel who are not working in environment related departments, though their work may have major impacts on the environment. While there are efforts to reach out to and sensitise decision-makers in the private sector, these are occasional, one-shot efforts.

All the countries, in fulfilment of their obligations under International Conventions and Treaties, are undertaking EE&T with regard to these specific issues. However, these may be often done quite separately and distinctly from the ongoing efforts and activities of the concerned governmental agencies.

With regard to training of environmental educators, there are opportunities for capacity building in this region. The awareness about and support for the countries to participate in such trainings are however, limited.

Capacities and Capabilities

A good amount of capacity has been built up through experiences and international exposures in the departments and agencies that are concerned with the environment. There are also institutions in the region that cater to the needs with regard to some of the issues.
Problems and Constraints

Sustainable development requires the involvement of several stakeholders, both from within the government and outside. However, there are no adequate opportunities for all the stakeholders to increase their capacities with regard to these issues. This is especially true of the non-environment related government departments, which have major impacts on the environment.

Some of the practical problems with regard to training and capacity building of personnel is that there is not much incentives to undergo such training. Also, trained personnel may often be transferred to positions where they may not be able to use their training.

As far as environmental education is concerned, there are few forums where decision-makers from various sectors involved in planning and implementing EE&T, can meet or work to build capacities and capabilities. Decision-makers feel that while they would like to know about experiences, resources, training opportunities from other similar situations, they do not easily have access to such information. There is not enough support to enable key personnel to attend relevant training programmes.

While EE&T has policy support in all the countries of the region, often, priorities, strategies and action plans have not been worked out. Also, EE&T may not always be fully integrated into the policies and programmes of the ministries and departments.

Requirements

Opportunities for decision-makers to become aware of and to discuss experiences and new developments in EE&T from the other countries of the region would be useful. These could be both through electronic means, as well as through training programmes, workshops, seminars, etc. Within a country, mechanisms for those involved in EE&T to meet, to share experiences, evolve a common vision and to build up synergies would be desirable.

3.4 Public Awareness and People’s Participation

Status

Government Organizations and Non Government Organizations are active in developing and implementing innovative non-formal EE&T programmes. Often they work together on such programmes. Media is sensitive and has been playing an important role in focusing attention on environmental issues. Several NGOs are involved in creating mass awareness through community programmes, development of resource materials, developing and screening audio-video materials on environment related themes.

In almost all the countries, NGOs work closely with communities to raise awareness on several issues: conservation of biodiversity; sustainable resource management; sustainable use of wetlands and their management; water pollution; sustainable livelihoods, etc. In many cases, public participation is explicitly recognized in government policy as integral to sustainable resource management. Some of their efforts are also supported by the governments.
Capacities and Capabilities

NGOs in all the countries have developed the capacities to formulate and implement innovative public awareness programmes and also to work closely with communities.

Problems and Constraints

In many cases, the major constraint to reach out effectively to the large mass of the people is financial and other resources. While institutions and NGOs have gathered useful experience in working with communities, there is not always a systematic and strategic approach to EE&T planning and implementation. The need for appropriate capacity building of environmental educators is essential in this regard.

There is a wealth of experiences in each of the countries. However, these experiences are not adequately documented and as a result the instances to benefit and learn from the successes and failures are generally limited.

While several kinds of innovative public awareness programmes are taking place, certain opportunities have not been taken advantage of. One of these is the opportunity to reach out to visitors to zoos and heritage sites (including protected areas and monuments). Another area is that of information technology. While the information technology revolution has taken the region by storm, the use of these advances for furthering EE&T and awareness is not being exploited.

There is an urgent need to address adult community so as to reduce and eventually eliminate environmental illiteracy. In doing so, there is a need to expand the reach out of environmental education by utilising electronic, print and the popular mass communication media, like TV, radio, etc. Given its strength, non-formal education should specially focus on masses in both rural and urban areas.

Non-formal education is a weak link in South Asia. There is no coordinated effort to address the environmental learning needs of the adult community. Raising awareness and eliminating illiteracy are two essential prerequisites.

Requirements

Capacity building of environmental educators to systematically plan and implement EE&T programmes, and to manage them is the key to effective and resource-efficient development of EE&T in the region.

There is need to create forums and opportunities for environmental educators to get together to share, analyze and evaluate experiences and learning. Training programmes in key areas where there is a low level of activity (e.g., use of IT, use of heritage sites) could be a way of giving a thrust to these activities.
Mission

The overall mission of the Action is to embark on a steady course of sustainable ecological conservation and societal development, building on Asian ethical, cultural and civic values and partnerships.

Purpose

The primary purpose of the Action is to promote the involvement of key sectors and sections of society in the struggle against degradation of ecosystems, deforestation, air pollution and haphazard urban development.

Also, it is aimed at sensitising people to the dangers of degradation such as poverty, pollution, greed and underdevelopment.

Above all, it attempts to focus on the societal awareness, protection and conservation approach paradigm.

Goals

- To promote the integration of indigenous knowledge systems in South Asian ecosystems, and link them to economical considerations, regional and global challenges.

- To assist South Asian planners, decision-makers and policy-makers, especially in relation to policy and implementation.

- To promote the advancement of sustainable lifestyles in all communities and support the development of participatory and acceptable lifestyles.
CHAPTER 4
THE ACTION PLAN

Mission

The overall mission of the Action Plan is to strengthen the capacity of the South Asian people to embark on a steady course of social and economic development in harmony with the imperatives of ecological conservation and sound environmental protection and management based on South Asian ethical, cultural and civic values and in close co-operation and collaboration with all players and partners.

Purpose

The primary purpose of the Action Plan is to present the overall regional framework to educate and train key sectors and sections of the society to deal with major environmental problems such as degradation of ecosystems, depletion of natural resources, loss of biodiversity, soil, water and air pollution and haphazard urbanisation and industrialisation.

Also, it is aimed at sensitising people on the need to eliminate the root causes of environmental degradation such as poverty, population pressure, overpopulation, wasteful production, human greed and underdevelopment.

Above all, it attempts to focus on the need to move forward from the traditional environmental protection and conservation approaches to an integrated and holistic sustainable development paradigm.

Goals

- To promote the incorporation of EE&T into the formal and non-formal education systems in South Asian countries with view to integrating ecological, social and economical considerations into the development process, with due regard to indigenous knowledge and cultural characteristics and the need to target local, regional and global environmental issues.

- To assist South Asian countries to build capacities in EE&T with a view to sensitising the planners, decision markers and community leaders on development processes, especially in relation to policy planning, institutional development, project formulation and implementation.

- To promote the advancement of knowledge, skills, attitudes and behavioral patterns in all communities, groups, organisations and institutions conducive to the acceptance and application of environmentally sound and sustainable policies such as participatory management, equitable distribution and environment friendly lifestyles.


To promote and foster the dissemination and exchange of information, data, expertise and resources supportive of EE&T through formal and informal networks, forms and mass communication systems at local, national, regional and global levels.

4.1 Target Areas

To achieve the goal of the Action Plan the following target areas have been identified:

- Target Area 1: Curricular and Co-curricular Initiatives
- Target Area 2: Planning and Decision Making
- Target Area 3: Public Awareness and People's Participation
- Target Area 4: Information, Networking, Communication and Collaboration

4.1.1 Curricular and Co-Curricular Initiatives

Goal

To promote the incorporation of EE&T into the formal and non-formal education system in South Asian countries with a view to integrating ecological, social and economic considerations into the development process, with due regard to indigenous knowledge and cultural characteristics and the need to target local, regional and global environmental issues.

a. Curricular Initiatives

Needs and Objectives

Relevant environmental content exists in textbooks of all countries in the region. There is a need to develop model textbooks, and to update curricula and other educational resource material through a systematic, participatory process of needs analysis, defining learning objectives and outcomes, and to pilot tests and validate such model programmes. In doing so, the guiding principle should be to incorporate environmental education into the entire spectrum of the formal education system with a view to integrating environment and development drawing on socio-cultural traditions and indigenous knowledge and targeting critical local, regional and global environmental and sustainable development issues.

Action and Outputs

i. To find innovative ways for 'greening the curriculum' in a manner so as to avoid overburdening and pressurizing the school system, teachers, and the students. To facilitate integration of environmental concepts into curricula, teaching materials and teaching aids with a view to integrating natural resource conservation, sound environmental management and sustainable development concepts into all levels of formal education from primary to senior secondary level. Stress should be on practical, field-oriented, community-based action projects.

ii. To draw upon the lessons learnt towards developing programmes to infuse the concept of EE&T in formal systems.

iii. To assist selected Regional Centres of Excellence to develop and disseminate training programmes for educators at various levels, including diploma and degree programmes to infuse environmental and sustainable development concepts into formal systems.

iv. To set-up a Regional Centre of Excellence at a national level for coordination and training both by distance education and through short duration courses.

b. Co-Curricular Initiatives

Needs and Objectives

The need to develop extra-curricular activities and research-oriented activities addressed in all the target areas should be incorporated into the curriculum and co-operation should exist among educational institutions.

Action and Outputs

To organise more regular seminars, workshops, and conferences to train the cadre of environmentalists and researchers as well as non-governmental organisations for the protection of biodiversity, and the use of traditional knowledge and the development of educational resource material through the use of communication and information technology.

Needs and Objectives

Co-curricular initiatives, research-oriented activities and training programmes are a final aim of environmental education in the region and to share experiences through co-collaboration activities.

Action and Outputs

i. To create a regional network of students and environmentalists to carry out action projects.
ii. To draw upon the learning and experiences from within and outside the region towards developing model curricula, textbooks, as well as teacher training programmes to infuse environmental concerns in the formal teaching-learning process.

iii. To assist selected Regional Centres of Excellence to offer specialised certificate, diploma and degree courses in EE&T for formal educators through distance education utilising various opportunities, e.g., the Open University system, mass communication and information technology.

iv. To set-up a Regional Clearing House Mechanism for the collation, development and dissemination of EE&T resource materials for use in formal and non-formal education and training both by way of adoption and translation and commissioning and development of educational material on selected themes which are applicable across national boundaries.

b. Co-Curricular Initiatives

**Needs and Objectives 1**

The need to develop a cadre of professionals in EE&T has not been uniformly addressed in all the countries. Most of the training programmes draw upon experiences and expertise from within the country, and there is need for regional co-operation.

**Action and Outputs**

To organise more region focused training programmes towards development of a cadre of environmental educators and master trainers from government agencies as well as non-governmental organisations in the region with emphasis on biodiversity conservation, sustainable management of natural resources, use of information technology for EE&T and in the field of project evaluation.

**Needs and Objectives 2**

Co-curricular initiatives provide an opportunity to develop and support action-based and research-oriented programmes. Since positive action for environment is the final aim of environmental education, there is a pressing need to work together in the region and to share and develop innovative ideas for facilitating and promoting co-curricular activities like eco-clubs.

**Action and Outputs**

i. To create a regional forum to share experiences in implementing environmental action projects.
ii. The effort must be to work together to share and develop innovative ideas for eco-clubs and other co-curricular activities.

4.1.2 Planning and Decision Making

Goal

To assist South Asian countries to build capacities and capabilities in EE&T with a view to sensitising the planners, decision makers and community leaders on sustainable development, especially in relation to policy planning, institutional development, project formulation, implementation and evaluation.

Needs and Objectives 1

Training and orientation of decision makers, planners and community leaders is key to achieving sustainable development. While there is support for EE&T activities in all South Asian countries, they do not have clearly articulated and comprehensive EE&T strategies and action plans, which will enable this training to happen in a systematic and comprehensive fashion. There is thus a need to assist national governments by developing a common framework and methodology for the formulation of national EE&T strategies and Action Plans with participation of stakeholders including governments, NGOs, private sector, planners, decision makers and community leaders. It is also required to reach out to political leaders, judiciary as well as the scientific and technical staff of the various governments.

Action and Outputs

i. To organise a regional workshop towards developing a framework model and methodology for national EE&T strategies and action plans formulation. The model plan should incorporate policy, planning, decision making, institutional framework and implementation arrangements including stakeholder participation in planning, implementation and monitoring. National workshops could follow the regional workshop.

ii. To help member countries develop documents/material on their schemes related to environment related programmes and projects, which can be utilised by other government agencies, NGOs, institutions, etc.

Needs and Objectives 2

There is a need to sensitise persons with governments, political leaders, communities, NGOs and private sector on the overarching and lasting benefits that will accrue from pursuing environmentally sound an sustainable policies, strategies, programmes and projects at all levels and by fulfilling various commitments and objectives under international environmental Conventions and Treaties.

Action and Outputs

i. Conduct a regional workshop towards sensitising the planners, decision makers and community leaders on sustainable development, especially in relation to policy planning, institutional development, project formulation, implementation and evaluation.

Needs and Objectives 3

In order to achieve sustainable development and co-ordinate actions for EE&T, it is needed to develop mechanisms for co-ordination among governments. In the context of Environment and Education in development of the societies.

Action and Outputs

To develop model projects to introduce different models—MOU, co-ordinated projects, etc.

Needs and Objectives 4

To sensitise key Ministries, institutions and departments and levels of government to streamline legislation and practice.

Action and Outputs

i. To develop model programmes in Education and to sensitise other sectors.

ii. To organise a series of thematics workshops to bring together and promote
Action and Outputs

i. Conduct a regional workshop to develop the framework and methodology for sensitising policy makers, decision makers, community leaders, etc, on integration of environment into development; sustainable production, consumption and distribution practices, people's participation in development and implementation of Treaties and Conventions.

ii. To launch a regional project to develop the framework and methodology for raising environmental awareness, popularising environmentally sound and sustainable development concepts, streamlining legislation and enforcement and promote use of economic instruments among policy makers, decision makers and community leaders.

Needs and Objectives 3

In order to achieve sustainable development, co-ordination and co-operation among the various departments and levels of the government are necessary. The need to strengthen such co-ordination has been expressed. At the same time, it is also necessary to utilise the existing mechanisms for co-ordination within the government system in a country and among the member countries. In the context of EE&T, the need to strengthen co-ordination between Ministries of Environment and Education is especially important. There is a need to involve Ministry of Education in development of EE&T policies.

Action and Outputs

To develop model projects to bring together Ministry of Environment and Ministry of Education, different models—MOU, co-ordination committees at central level, etc., need to be tried.

Needs and Objectives 4

To sensitise key Ministries, like Agriculture, Commerce, Industry, etc. by highlighting the linkages that exist between environment and their respective focus areas.

Action and Outputs

i. To develop model programmes to bring together Ministries of Environment and Ministries of Education and to sensitise other relevant Ministries like Agriculture, Industry, Commerce, Finance, etc.

ii. To organise a series of theme based regional workshops on environmental education with a view to bring together and promote cooperation and coordination among the various key partners.
4.1.3 Public Awareness and People’s Participation

Goal
To enable South Asian nations to increase public awareness about environment and nature conservation and to help governments involve people and seek their participation and cooperation towards processes leading to wise use and management of natural resources.

Needs and Objectives 1
There exists a need to promote the advancement of knowledge, skills, attitudes and behavioral patterns in all communities, groups and organisations, with a view to improving their capacities and capabilities to conserve, protect and manage the environment and its resources, and to develop in an environmentally sound and sustainable manner, through greater public awareness and optimum people’s participation.

Action and Outputs
i. To develop a regional framework and methodology for conducting training courses at national level for environmental educators, master trainers, media persons, opinion leaders and environmental activists especially involving youth and women; on communication skills, facilitation methods, motivation and effective use of educational and resource materials.

ii. To help member countries develop educational programmes that would inform general public about their environmental rights and responsibilities.

Needs and Objectives 2
There is a need for increased public awareness of environmental issues geared to motivating communities to organise themselves to better manage the sustainable use of natural resources. While people’s participation is the key to sound environmental management, such participation can be obtained only through the introduction of ways and means of equitable sharing of resources, profits and benefits of conservation and development.

Action and Outputs
i. To develop a regional programme for the formulation and implementation of pilot projects at national level in participatory management of coastal fisheries, forests, eco-tourism, recycling of agricultural waste, garbage management, etc., with a view to developing replicable training modules in environmentally sound and sustainable management practices and sustainable livelihoods.

ii. To establish a regional project to capacity build community leaders, local officials, and NGO representatives on environmental management by consultation and with the participation of the community with emphasis on poverty reduction, early feedback from such developed.

iii. To help governments for better environmental inclusion of environmental messages to a larger infrastructure and interest.

Action and Outputs
Most countries in the region are involved in the to include and integrate.

4.1.4 Information, Network, and EE&T

Goal
To promote and foster the introduction of expertise and resource communication systems.

Needs and Objectives
It is necessary to encourage collaboration with citizens groups, business, regional and international.

Action and Outputs
To initiate a regional information, network, EE&T, more particularly, success stories, building...
poverty reduction, equity, social justice and sharing at local level. Based on the feedback from such a regional programme, national programmes would be developed.

iii. To help governments of member countries promote and facilitate citizen initiatives for better environment.

**Needs and Objectives 3**

Governments of most member countries as well as a large number of NGOs in the region are involved in a number of initiatives focusing on education. Infusion and inclusion of environmental education into such programmes would help reach the messages to a large number of people, using already established channels, infrastructure and institutions.

**Action and Outputs**

Most countries in the region today have national literacy programmes. It is important to include and integrate environmental education into adult literacy programmes.

**4.1.4 Information, Networking, Communication and Collaboration**

**Goal**

To promote and foster the dissemination and exchange of information, data, expertise and resources through formal and informal networks, forums and mass communication systems at local, national, regional and global levels.

**Needs and Objectives 1**

It is necessary to strengthen the recognition of the importance of information dissemination, sharing and networking as critical factors in effective environmental protection, sustainable resource management and change over to environment friendly lifestyles. Also, considering the magnitude of the task, it is necessary to encourage collaborative and co-operative action among governments, NGO’s, citizens groups, business communities, professional groups and such other national, regional and international organisations and institutions especially mass media.

**Action and Outputs**

To initiate a regional training programme on effective utilization and management of information, networking, communication and collaboration in all relevant fields of EE&T, more particularly information technology, sharing of experiences and success stories, building synergies use of a mass media and distance education.
Needs and Objectives 2

Given that the South Asian sub-region is in the forefront of the information technology revolution, the need is to take advantage of these tools and technologies to establish a forum for information sharing, networking and collaboration among policy and decision makers, environment educators and trainers, NGO's and business leaders of the region.

There is a need for a sub-regional cyber forum for EE&T. At the same time, it is important to use existing networks and forums, such as that of UNESCO, UNEP, SACEP, etc.

Action and Outputs

i. To create a cyber forum by way of a website for decision makers, educators, trainers and professionals to share information on successful on-going and upcoming programmes, resource materials, new experiences and discuss learning in relation to the integration of environment education and training into the sustainable development process. The website will provide a comprehensive database on EE&T materials available in South Asia; latest state of the environment reports, EE&T policies, strategies and action plans of the region and record of EE&T initiatives undertaken by SACEP member states in fulfillment of their obligations under various environmental Conventions and Treaties.

ii. To utilise the existing forum and facilities—regional networks, like SACEP, UNESCO, UNEP-ROAP, SASEANEE, and their programmes, events, and websites towards information servicing. To facilitate activities of existing institutions, enable them network with each other. Identify regional resource agencies for relevant themes in environmental education and establish regional clearinghouse mechanisms.

Needs and Objectives 3

To promote gathering and dissemination of information on EE&T requirements, opportunities and gaps in the region with a view to facilitating training of trainers and specialists.

Action and Outputs

i. The South Asian EE&T website should include a directory of EE&T requirements, opportunities and gaps in the region. This website should be updated on a regular basis. The directory should contain information on organizations, institutions, agencies and private sector sponsors involved in furthering the cause of EE&T for sustainable development in South Asia.

ii. To identify and strengthen the capacity of existing national institutions, to act as national clearing houses, etc.
national clearing houses, and to create a network of these, with a regional resource agency to take the lead in this networking process.

**Needs and Objectives 4**

Given the current phase of transition—from print to electronic mode of information servicing—in the region there is a need to explore and stress 'non-high tech' ways of networking.

**Action and Outputs**

Besides making use of information technology, regional events, like workshops, film festivals, newsletters, exhibitions, and other competitions and curricula fair, etc. should be organised on an annual basis.
## CHAPTER 5
### IMPLEMENTATION STRATEGY

**Target Area 1- Curricular and Co-Curricular Education**

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<tr>
<th>OBJECTIVE</th>
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<tr>
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<td>2003 - 2005</td>
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CHAPTER 5
IMPLEMENTATION STRATEGY

Target Area 1- Curricular and Co-Curricular Education

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<td>SACEP, National Governments, UNESCO and NGOs</td>
<td>2003 - 2005</td>
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<td></td>
<td>(b) To assist Regional Centres of Excellence, like selected Universities and Higher Education Institutions to conduct advanced courses using Open University mass communication and Information Technology</td>
<td>SACEP/UNEP/NETLAP, National Governments and Education Institutes</td>
<td>2004 – 2006</td>
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<td></td>
<td>(c) To activate a Regional Clearing House Mechanism for collation, development and dissemination of EE&amp;T resource materials across national boundaries</td>
<td>SACEP/UNESCO, National Governments, Educational Institutes, Research Institutes an NGOs</td>
<td>2004 – 2005</td>
</tr>
<tr>
<td>1.2 To strengthen regional Co-operation for Capacity Building in EE&amp;T in professional and specialised fields and disciplines</td>
<td>(a) To assist national governments to develop a cadre of environmental educators and master trainers in EE&amp;T for sustainable development of South Asia</td>
<td>SACEP and National Governments</td>
<td>2003 – 2006</td>
</tr>
</tbody>
</table>
### Target Area 2- Planning and Decision Making

<table>
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<td>2.1</td>
<td>To sensitise policy makers and decision makers towards incorporating environment and development concerns in the policies</td>
<td>(a) Organize a Regional Workshop to develop the framework and methodology to formulate EE&amp;T policies, strategies, programmes projects and action plans at national level</td>
<td>SACEP/UNEP/ESCAP National Governments NGOs and Professional Bodies</td>
</tr>
</tbody>
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**South Asia Co-operative Environment Programme (SACEP)**

- **(b) Assist national governments to establish and EE&T Resource Centre at national level specialising in integrating EE&T, into co-curricular training curricula, incorporating indigenous knowledge and culture and sustainable development into EE&T programmes**
  
  SACEP/UNESCO National Governments, Community Organisations and NGOs  
  2004 – 2006

- **1.3 To develop and support action-based and research-oriented co-curricular programmes for schools**
  
  **(a) To create a regional forum to share experiences in implementing innovative environmental action projects**
  
  SACEP/UNEP/National Governments and relevant Regional Agencies  
  2003 – 2004

  **(b) Facilitate similar activities at national levels**
  
  National Governments/ NGOs/SACEP/ UNEP  
  2004 – 2006
### Target Area 2- Planning and Decision Making

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<td>2.2 To promote the formulation and implementation of EE&amp;T policies, strategies, programmes and projects at national level to support the sustainable development process</td>
<td>(a) Develop and implement a Regional Project for developing framework for policy makers, decision makers and community leaders on environmental awareness, policy planning, legislation, use of economic instruments and information technology</td>
<td>National Governments/ SACEP/NGOs</td>
<td>2004 – 2007</td>
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<td></td>
<td>(b) Follow this up with national level projects</td>
<td>SACEP/UNEP and National Governments</td>
<td>2005 – 2007</td>
</tr>
<tr>
<td>2.3 To sensitise, political leaders, community leaders, NGOs and private sector on the overarching and lasting benefits that will accrue from the integration of environmental considerations into the development process and by enlisting peoples participation in development</td>
<td>(a) Conduct a Regional Workshop to develop the framework and methodology for sensitising political leaders, community leaders, NGOs and private sector on harmonising environment and development, participatory management and adopting sustainable lifestyle</td>
<td>SACEP/UNEP/ESCAP National Governments, Environment and Educational Centres and Institutions, NGOs and Private Sector</td>
<td>2003 – 2004</td>
</tr>
<tr>
<td></td>
<td>(b) National Workshops to follow regional workshop</td>
<td>National Governments/ NGOs/SACEP/Private sector</td>
<td>2004 – 2006</td>
</tr>
</tbody>
</table>
South Asia Co-operative Environment Programme (SACEP)

2.4 To develop a model programme to bring together Ministry of Environment and Ministry of Education

(a) To develop model programmes to bring together Ministries of Environment and Ministries of Education

(b) To implement a project at regional as well as national levels towards sensitising other relevant Ministries like Agriculture, Industry, Commerce, Finance, etc., towards the need for integrating environmental considerations and clauses in relevant policies of their Ministries

(c) To organize a series of theme-based regional workshops on environmental education to bring together and promote cooperation and coordination among the various key partners

<table>
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<tr>
<td>3.1 To build capacities and capabilities in all communities, sectors, groups and organisations with view to creating optimum peoples participation for environmentally sound and sustainable</td>
<td>(a) Develop the regional framework and methodology for conducting training courses for environmental educators, trainers, opinion leaders, etc. on communication, facilitation motivation and use of resource materials</td>
<td>SACEP/UNEP/ESCAP and National Governments</td>
<td>2003 – 2005</td>
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### Target Area 3 - Public Awareness and People's Participation

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<tr>
<td>3.1 To build capacities and capabilities in all communities, sectors, groups and organisations, with a view to fostering participatory and sustainable development.</td>
<td>(a) Develop the regional framework and methodology for conducting training courses for environmental educators, trainers, opinion leaders, etc. on communication, facilitation, motivation and use of resource materials</td>
<td>2003 - 2005</td>
<td>SACEP/UNEP/ESCAP and National Governments</td>
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<td></td>
<td>(b) Organize workshops at national level according to the framework developed at the regional workshop</td>
<td>2005 - 2006</td>
<td>National Governments</td>
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<td></td>
<td>(c) To help member countries develop educational programmes that would inform the general public about their environmental rights and responsibilities</td>
<td>2003 - 2005</td>
<td>SACEP/UNEP/ESCAP and National Governments</td>
</tr>
<tr>
<td></td>
<td>(a) Develop and implement National Pilot Project in participatory management of coastal fisheries, forests, ecotourism, recycling of agricultural waste, etc. With a view to develop replicable training modules</td>
<td>2004 - 2005</td>
<td>NETLAP/SACEP, National Governments</td>
</tr>
<tr>
<td>3.2 To educate and motivate communities to better manage natural resources through equitable sharing of resources, profits and benefits of conversation and development.</td>
<td></td>
<td></td>
<td>National Governments</td>
</tr>
</tbody>
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**Note:**
- NETLAP: Network for Environmental Economics and Trade
- SACEP: South Asia Centre for Environmental Policy
- UNEP: United Nations Environment Programme
- ESCAP: Economic and Social Commission for Asia and the Pacific
- UNDP: United Nations Development Programme
- NGOs: Non-Governmental Organizations
- Private Sector

**Time Frame:**
- 2003 - 2005
- 2004 - 2005
- 2005 - 2006
3.3 To infuse and include environmental education into existing programmes of the governments

(a) Establish a Regional Project to train environmental activists, community leaders, local officials and NGO representatives in participatory natural resource management and on the interrelationships between sound and sustainable environmental management and socio-economic and cultural dimensions such as equity, social justice, poverty reduction and power sharing at local level.

To help governments in including environmental concerns and messages in their existing programmes like the national literacy programmes, etc.

Target Area 4 – Information, Networking, Communication and Collaboration

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<tr>
<td>4.1 To bring to focus the importance of information dissemination, sharing and networking as critical factor in effective environmental protection and sustainable resource management through co-operative action among all sectors, groups and communities</td>
<td>(a) Develop and implement a Regional Project on effective management of information, networking, communication, collaboration and mass media in all relevant fields of EE&amp;T. Simultaneously national projects to be launched</td>
<td>SACEP/UNEP, National Governments, NGOs and Private Sector</td>
<td>2003 - 2008</td>
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Target Area 4 – Information, Networking, Communication and Collaboration

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<td>SACEP/UNEP, National Governments, NGOs and Private Sector</td>
<td>2003 – 2006</td>
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<td>4.2 To establish forum for information sharing, networking and collaboration among policy and decision makers, environmental educators and trainers, business leaders and NGOs</td>
<td>(e) To create a SACEP EE&amp;T Website for environmental decision makers, educators, trainers, activists and professionals to share information on successful programme, resource materials, new experiences and discuss learning in relation to the integration of EE&amp;T into the sustainable development process</td>
<td>SACEP/UNEP/UNESCO and National Governments</td>
<td>2003 – 2005</td>
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<td></td>
<td>(c) To utilize existing environmental education websites and provide necessary links to these towards information servicing on not just environmental education but also on the five year EE&amp;T Plan and its activities in particular</td>
<td>SACEP/UNEP/Regional Agencies, National Governments and Institutions</td>
<td>2003 – 2006</td>
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<td></td>
<td>(c) To strengthen the capacity of existing national institutions to act as National Clearing Houses and to create a network of these</td>
<td>SACEP/UNEP</td>
<td>2004 – 2006</td>
</tr>
</tbody>
</table>
South Asia Co-operative Environment Programme (SACEP)

| 4.3 To explore ‘Non-high tech’ ways of networking | (a) To organize regional workshops, film festivals/environment exhibitions, etc | SACEP/UNEP | 2003 – 2008 |