

World Summit on Sustainable Development (WSSD)



ESCAP



Task Force for the Preparation of WSSD in Asia and the Pacific

**SOUTH ASIA SUB-REGIONAL REPORT FOR THE
WORLD SUMMIT ON SUSTAINABLE
DEVELOPMENT**

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EXECUTIVE SUMMARY

A decade back world leaders and other stakeholders met at Rio to evolve a consensus on the concept of sustainable development. Conventions on key environmental concerns like biodiversity conservation and climate change were signed. A compromise was also achieved through Agenda 21 to lay out a plan of action for the global community to address sustainable development issues in the 21st Century.

The global community is once again meeting at Johannesburg in September 2002 for the World Summit on Sustainable Development (WSSD). The event is expected to take stock of the processes over the last decade and evolve the future course of action.

This paper is a contribution from the South Asian sub-region towards this process. It has not been compiled nor is it intended to be a report on all that has happened in the sub-region, supplemented by detailed proposals for the future. On the contrary, it draws heavily upon the learnings and conclusions reached in similar documents prepared for the region including the State of the Environment in Asia and the Pacific 2000 prepared by Economic and Social Commission for Asia and the Pacific (ESCAP) and the Asian Development Bank (ADB), Global Environment Outlook (GEO) by United Nations Environment Programme (UNEP) and Asian Environment Outlook by Asian Development Bank (ADB). This is intended as a thought provoking paper to stimulate fundamental shifts in thinking and action.

This approach for the paper was suggested by individuals and institutions that have been associated with environment and development issues in the sub-region for decades. The Bangladesh Centre for Advanced Studies then prepared an outline for the paper. A group of 'wise persons' and representatives from the Asian Development Bank (ADB), South Asian Association for Regional Cooperation (SAARC), South Asian Cooperative Environmental Programme (SACEP) and United Nations Environment Programme (UNEP) met at Bangkok on 20th August 2001 to refine the outline and set the tone and focus for the paper. Development Alternatives then prepared a first draft of the paper. Based on comments and suggestions received from the Bangkok meeting participants, the paper was further revised and presented at the 27–28 September 2001 Colombo Consultations which included stakeholders from NGOs, academia, business, governments and the multilateral agencies. Based on the comments and suggestions received, the paper was revised and finalised.

In Section 1 the paper takes an overview of the road from Rio and where the sub-region stands at this juncture. On one hand there is enhanced awareness through a plethora of initiatives by governments, civil society, academia, and business corporations aimed at sustainable development. On the other hand there is an element of disheartenment that commitments for overseas development assistance and technology cooperation have not really materialised. As a consequence the dream and challenge of sustainable development globally has only increased a decade after Rio.

Section 2 focuses on the four thematic sub-regional priorities and action needed for eliminating poverty, managing population growth, conserving natural resources and building macro-economic stability all of which are interdependent. Finally Section 3 outlines the action and accountability required at the local, national, sub-regional and global levels.

While recognizing poverty and environmental degradation, the paper highlights the latent potential in the sub-region on all the three key inter-related components of sustainable development. On the social front are the unique diversity of traditional values, arts, crafts and cultural practices, besides modern industrial products, services and pool of contemporary brainpower. On the environment front the sub-region is endowed with approximately 15% of the known biological wealth of the world. Finally on the economic front, besides being the second fastest growing region in the world, the sub-region has also the largest consumer base. The initiatives required are fairly well known. The political will for cooperation supported by a robust operational mechanism can transform the sub-region into a strong and sustainable entity in the global community.

Recognising the socio-political differences the paper strongly advocates sub-regional cooperation as an essential means of achieving sustainable development. Some of the suggestions include:

- Joint action for poverty eradication and human security including creation of a South Asian Food Bank and disaster preparedness and management system.
- Arresting the population growth through direct incentives and indirect measures like income security and literacy.
- Assessing, mapping and documenting the biodiversity wealth of the sub-region and reviving indigenous knowledge and practices that promote conservation and local value addition.
- Building a systematic mechanism for technology development and sharing within the sub-region including creation of a South Asian Technology Bank.
- Liberalising the preferential trading regime within the sub-region through a variety of measures including MFN status among member countries and moving towards a single currency.
- Building the bargaining power of the sub-region in global trade and other negotiations through optimized valuation and packaging of its unique products and services.
- Consider the setting up of a South Asian Development Bank, on the lines of the ADB, with contribution from member countries multilateral, bilateral and other private agencies.
- Pursuing measures for sub-regional sharing and management of natural resources including energy and water whereby production and trading costs of goods and services from the region can be optimized.
- Exploring opportunities to formulate a South Asian Happiness Index based on the unique experience of Bhutan and other initiatives in the sub-region.

The paper also recommends that given the rich and diverse wealth of experiences developing regions including South Asia must play a much stronger role in determining and setting the agenda for global conferences and negotiations.

1.0 The Road from Rio: Where do we stand

The global community took nearly two decades from Stockholm to Rio de Janeiro to recognise environment and sustainable development as a key agenda for action. The negotiations and processes adopted for Rio were difficult yet path breaking. In the end there was a broad consensus on the concept of sustainable development. Conventions on key environmental concerns like biodiversity conservation and climate change were signed. A compromise was also achieved through Agenda 21 to lay out a plan of action for the global community to address sustainable development issues in the 21st Century. Though not legally binding, national governments, regional and global agencies were expected to adapt their strategies to Agenda 21.

The Earth Summit at Rio paved the way for South Asia, and indeed other developing nations, to finance environmental protection and ensure that the development process continued unhindered. Countries in South Asia, though plagued by poverty and population pressures and a rapidly degenerating natural resource base, addressed the challenge of fulfilling their Agenda 21 commitments.

Where do we stand a decade after Rio? What experience and insights do we have to share with the rest of the world at the World Summit on Sustainable Development (WSSD) to be held at Johannesburg in September 2002. Broadly the experience has been one of significantly enhanced awareness on environment and sustainable development issues due to a plethora of initiatives. At the same time, the sub-region like most other developing nations, looks on to the unfulfilled promises made by the industrialised nations. At the end of the day, sustainable development in the sub-region still remains a dream.

1.1 Enhanced Awareness and Initiatives

There has been considerable awareness enhanced at all levels on the concepts and challenges of sustainable development through the efforts of the Governments and Civil Society, especially NGOs and the media. A range of significant initiatives and trends are visible. The sample of case studies in Annex VIII testify this.

National governments in the sub-region have attempted several measures to integrate sustainable development concerns in their planning processes, programmes and projects. The process and outcome of the National Conservation Strategy in Pakistan stands out globally as one among the more rigorous efforts with content and commitment. Governments in the sub-region are attempting more holistic indices to assess their performance. The Gross National Happiness Index of Bhutan is a pioneering attempt towards integrating good governance, economic growth, environment protection and cultural promotion. Several progressive state governments in India have also adapted the concept of the Human Development Index.

Over the last decade, virtually all South Asian countries have made Environmental Impact Assessment (EIA) mandatory, especially for the larger projects. There have also been pioneering attempts at waste minimisation, clean technologies and initiatives, common effluent treatment and urban solid waste management. The need for conservation of biological diversity has been much more recognised and is visible in the several new initiatives including protection of National Parks and Sanctuaries.

Countries like Maldives and Sri Lanka have also taken the lead in demonstrating to the rest of the region that it is possible to achieve nearly 100 percent literacy and basic child immunization even with all the social, economic and other constraints. Sri Lanka has been particularly successful in arresting the population growth rate.

The need for people's participation in policy formulation, programmes and projects is increasingly being recognised by national and provincial governments. More than 70,000 people participated in the evolution of the National Environment Management Action Plan (NEMAP) of Bangladesh. Experience from the Community Forestry Programme in Nepal, the Joint Forest Management Programme in India, and the Bangladesh Flood Action Plan indicates that several hurdles, including capacity building and empowerment, are yet to be crossed before meaningful participation is possible. The 73rd and 74th Constitutional Amendments in India have been a bold step towards empowering local self-governments in the rural and urban areas. More recently Pakistan has also enacted legislation to empower local governments.

Civil society groups in the sub-region, well known for their unique and pioneering contributions from the 'Chipko' movement to micro-credit systems, continue a diverse range of activities aimed at capacity building and service delivery to poorer communities. However issues of social justice and equity are still not adequately addressed in the sub-region.

The larger and more global players among the corporate sector in the sub-region are recognising the need to be more explicit about their environmental and social responsibility. However, the vast majority is still driven by only the financial bottom line. They are yet to be influenced by environmental management measures that reduce waste and consumption, and the social norms, traditions and cultural values that cherish the natural resource base.

The globalisation process over the last decade has forced the academia in the sub-region to be less dependent on state funds¹ and generate earnings through research for corporates. This has taken its toll on rigorous academic research on environmental and social issues. On the other hand, the globalisation process has increased manifold opportunities and space in the media – especially television. A number of capsules and programmes generated indigenously and also adapted from global operations contribute immensely to generate awareness on sustainable development concerns.

Regional initiatives to address sustainable development concerns are also moving slowly, yet forward. The Male' Declaration on Control and Prevention of Air Pollution and its Likely Transboundary Effects for South Asia is a significant step in this direction. Other sub-regional Mechanisms like South Asian Association for Regional Cooperation (SAARC) and South Asian Preferential Trade Agreement (SAPTA) are also gradually beginning to focus on more concrete issues after going through the initial processes of confidence and institutional building.

Most initiatives have been very successful on a micro-scale. The challenge is to set up and sustain systems that facilitate these initiatives on a much wider scale.

1.2 Unfulfilled Promises

The enthusiasm of the civil society, considered efforts of the governments, dynamism of the media and cautious initiatives of the corporations in the sub-region have not been dampened by unfulfilled promises of the global community. Yet the unfulfilled promises are an important factor to be reckoned with in global deliberations on environment and sustainable development.

Decreasing Overseas Development Assistance (ODA)²

Two main vehicles were designed at Rio for financing environmental protection and ensuring that the development process continued unhindered. The first was increased ODA flows to developing nations. The United Nations Conference on Environment and Development (UNCED) Secretariat had estimated that US\$600 billion would be required each year between 1993 and 2000 to implement Agenda 21 in the low-income countries. Of this, US\$125 billion was supposed to come from international donations or concessions. Towards this end, the high-income countries reaffirmed their commitment at Rio to reach the UN target of providing 0.7 percent of their GNP as ODA.

The reality however has been that ODA flows have failed to reach the 1992 figure of US\$ 60 billion which is less than half the requirements. In fact the OECD records that ODA fell to its lowest of less than US\$ 48 billion in 1997.

The second vehicle was in the form of additional investment flows to the developing nations, through the Multi-lateral Environmental Agreements (MEAs) that were signed and agreed to during Rio. The only visible financial outcome of Rio is about \$5 billion worth of commitments, mostly for the Global Environment Facility. Of this only \$2 billion has been actually spent.

In addition, there have been increased private sector investments into the low-income countries. However these have been concentrated in countries like China and India. Most countries in the sub-region do not have the enabling conditions to attract large quantum of private sector investments.

On the other hand, despite financial constraints, countries in the sub-region have increased their domestic investments in social and environmental sectors by initiating measures like tax reforms, environmental taxes and reducing perverse subsidies. However their current reporting systems do not provide a clear picture of these investments.

Technology co-operation has been a non-starter

The Rio process deliberated considerably on the ways and means by which developing nations can have better access to technologies available with their industrialised counterparts. In the absence of firm commitments, there was a general understanding that various measures will be initiated to forge technology cooperation among the nations. The United Nations Commission of Sustainable Development (CSD) was mandated to lead the process globally while the United Nations Asian and Pacific Centre to Technology Transfer (APCTT) was to complement this effort in the region.

A review of the implementation of Chapter 34 of Agenda 21 which includes transfer of environmentally sound technologies (ESTs), cooperation and capacity building was undertaken by the Department of Social Affairs and Development (DESA) on behalf of CSD. It clearly indicates that a wide range of activities have been initiated by most of the UN agencies to facilitate technology transfer, cooperation and capacity building in the developing world especially over the last decade.

However, the fact remains, that a decade after Rio, all developing nations and regions including South Asia still continue with obsolete technologies even as the rhetoric of technology transfer and cooperation continues. There are no firm commitments from the industrialised nations and thereby no compliance mechanisms within the international system to forge meaningful North-South technology cooperation.

Probably, it may just be better for the developing nations and regions to pool in their resources for South–South cooperation in technologies. Technology cooperation with industrialized countries would be welcome on the basis of a clear understanding that they will be on mutually favourable terms and promote sustainability.

Inadequacy of Multilateral Monitoring Systems

Another distressing factor for developing regions like South Asia has been the inadequacy of multilateral coordination and monitoring systems. There has been very little responsibility and accountability towards global conventions and obligations like Agenda 21.

Follow–up mechanisms like the United Nations Commission on Sustainable Development (CSD) and other United Nations Agencies have little choice but to focus on softer issues of the agreements and commitments. As such they are not adequately empowered to ensure compliance and often are forced to be driven by concerns and changing policy directions of a handful of rich countries. While these agencies are pushed to the corner, developing nations quite helplessly watch and wait for the best. The marathon experiences at the Conference of Parties to the United Nations Framework Convention on Climate Change (UNFCCC) is adequate evidence.

1.3 Sustainable Development – Still a Dream ?

Sustainable development in the South Asian sub–region, and also globally, still remains a dream. Although countries like Sri Lanka and Maldives have reached a remarkable milestones in literacy, child immunisation and population control, poverty in the sub–region is chronic, population pressures are uncontrollable and the natural resource endowments are further being degraded and depleted. At the same time institutions and policies in the sub–region are not able to respond to emerging requirements.

Chronic Poverty³

- More than half a billion of its people living on less than a dollar a day
- More than half the sub–region's children are malnourished
- Almost half the people are illiterate (35 percent of men and 59 percent of women)
- Nearly one–third of the people are unemployed

At the same time, the consumption patterns of the rich minority in the sub–region are moving rapidly towards unsustainable trends⁴.

Uncontrollable population pressures³

- South Asia, with its highest density of population in the world, is unable to support its unskilled people in agrarian activities
- Rural to urban migration has led to almost half of every city and town turning into slums and shanties
- Physical infrastructure and social facilities in both urban and rural areas are thus over stressed and very often dysfunctional
- Basic health and well–being of a majority of the population is constantly under threat

Depleting and degrading natural resource endowments³

- Almost half the land area in the sub–region is degraded in one form or another
- Most part of the sub–region are highly vulnerable to natural calamities like floods, earthquakes, cyclones, landslides and droughts⁵
- With over–exploitation, the water resource base in the sub–region is under severe threat and nearly a fourth of the population do not have access to safe drinking water
- Reduction in the natural habitat, loss of species and depletion of genetic diversity characterise the plight of biodiversity in the sub–region

Policy and Institutional Shortcomings

South Asia has witnessed a steady worsening of governance standards, essentially because of mutual distrust and threats from internal and external sources. In fact, institutional and policy shortcomings, have been one of the major causes behind overall sustainable development failures. The sub-region has suffered from lack of continuous focused attention to environmental and resource management by the national governments.

At the national level, an encouraging trend in recent years has been that environment ministries and state agencies have been restructured and empowered with greater institutional strength to promote better vertical and horizontal co-ordination amongst different agencies. New legislations, including strengthening of existing laws has empowered executives and also enabled judicial institutions to oversee the effective enforcement of environmental measures.

The prominent trans-national arrangements for strengthening the sub-regional institutional framework for sustainable development are the South Asian Association for Regional Co-operation (SAARC), South Asian Co-operative Environmental Programme (SACEP) and South Asian Preferential Trading Arrangement (SAPTA).

In addition, there are regional (South East Asia, Asia Pacific) and global institutional arrangements, through various treaties and conventions that have significant impacts on the decision-making processes in the South Asian sub-region.

On the other hand, institutional shortcomings in South Asia include political instability, failure of command-and-control regimes and improper valuations that ignore costs to the environment.

It is true that the region has received only a small fraction of what was promised at Rio. Yet, this can be no reason to justify institutional shortcomings in setting up the appropriate financial engines to lead the region into a sustainable future.

Ten years after Rio, a majority of the countries of South Asia remain the poorest in the world. The SAARC countries – with one fifth of the world's population and one third of Asia's – contribute just one per cent of the world's and five per cent of Asia's Gross Domestic Product.

Agenda 21 was taken fairly seriously by the countries in South Asia who put in efforts consistent with their development priorities and fiscal constraints. However, the sub-region was unable to reverse degradation of natural resources but could slow down the rates of deterioration in some aspects. It also appears that the sub-region would have done better if some of the promises of aid flows mentioned in Agenda 21 had materialised. But, they are now confronted with new assessments in aid strategies with emphasis on private flows which are volatile. The countries of South Asia should continue their war against poverty to improve the environment on their own with only a modest expectation of external aid which often comes with conditionalities and doses of advice.

2.0 Sub-regional Priorities: Need for Action

Experience over the last few decades, including that after Rio, echoes a very clear message. Developing countries and regions need to identify their own priorities and initiate concerted action with maximum self-reliance and minimal external assistance to retard the poverty and environmental degradation.

The emerging sub-regional thematic priorities based on various regional and national assessments appear to be broadly as follows:

- Eliminating Poverty and Creating Human Security
- Managing Population Growth and its Impact
- Conserving the Natural Resource Endowments
- Securing the Economic Base

2.1 Eliminating Poverty and Creating Human Security

A variety of experiences at different levels in the sub-region aimed at poverty eradication indicate that food and income securities are the two essential priorities that need to be directly addressed. Simultaneously, local communities need to be protected from devastation caused by regular natural disasters. While government and civil society organisations traditionally played a pivotal role in this effort, the importance of more proactive action by the private sector is being recognised.

Some of the specific actions essential for creating human security in the sub-region are outlined below:

- Ensure food security through well-planned sustainable food production and distribution strategies:
 - Emphasize self-sufficiency in food grains as a means of poverty reduction and livelihood for the 70 percent people who live in the rural areas
 - Promote co-operative systems for aggregation of small land-holdings
 - Strengthen research, information, infrastructure and incentives especially for small farmers
 - Create a favourable and stable macro-economic environment for farmers
 - Ensure accessibility and affordability of food grains, besides its availability
- Income security is intricately linked to explosive growth rates of the population in the sub-region.
 - Promote income generating micro-enterprises as a means of livelihood and population control
 - Strengthen micro-financing mechanisms by creating stronger ties between the small-scale enterprises and the formal sector
 - Develop more effective marketing and distribution links with medium and large-scale industries
 - Enhance the role of private sector as the main engine for economic growth and employment opportunities
 - Facilitate the required reforms in the financial and capital markets to enable the effective functioning of the private sector.
- Ensure security from natural disasters
 - Prevent natural disasters through large-scale afforestation, rehabilitation of degraded lands, hazard resistant structures and other long term measures
 - Strengthen preparedness for disasters through risk assessment, mapping, monitoring and vigilance systems
 - Ensure that timely relief is available to disaster victims anywhere in the sub-region
 - Evolve policies and strategies that guarantee recovery and rehabilitation of victims affected by natural disasters

The World Bank Regional Environmental Strategy notes that between 1990 and 1998, the sub-region accounted for more than 60 percent of disaster related deaths worldwide⁸. These measures can ensure that the half a billion people in the sub-region vulnerable to regular natural calamities can be less prone and also have the security of long term rehabilitation.

2.2 Managing Population Growth and its Impacts

South Asia cannot afford the annual 1.8 per cent population growth rate. The impacts are already visible with pressures on land, water and other natural resources. Cities and towns are bulging through the seams, and the infrastructure and facilities are over stressed. Arresting population growth is a priority for the survival of all the countries in the sub-region. It is important to learn from the experiences of Sri Lanka and Maldives.

While population growth has to be directly addressed, experience shows that indirect measures are often more practically feasible and effective, though they may take a little longer to generate desired results. Some of the important measures that can be adopted are outlined below:

- Promote population control directly through large-scale awareness generation and small family incentives
- Reduce pressure on land by enabling rural communities to undertake non-farm income generating activities
- Provide livelihood security through food, water, energy, income and decentralised production systems
- Create sustainable cities by new management approaches that provide for the needs of the urban residents and at the same time protects the environment

- Strengthen infrastructure for health, education especially of women, drinking water, sanitation, transport, energy, and other public systems through conscious community participation and involvement
- Reformulate policies and strategies to encourage waste minimisation and pollution prevention by all stakeholders in society

2.3 Conserving the Natural Resource Endowments

South Asia is home to spectacular natural beauty and biological wealth. It harbours approximately 15 percent of the known global flora and fauna. Unfortunately the rich natural endowments, including the precious gene pool, are constantly under threat. On one end poachers and illegal traders exploit poor enforcement mechanisms. At the other end, inadequate environmental and social assistance of project like mining and dams cause enormous harm to environment and society. More recently, traditional knowledge and ownership rights of indigenous communities are also being threatened by global trade and patenting agreements. This is in spite of the ecological debt built up by industrialised economies over the years by systematically exploiting the natural endowments in developing regions.

The loss of sub-regional biodiversity adversely affects the people of South Asia and also the global community. The South Asian biodiversity may hold the cure for some widespread diseases like AIDS and cancer. The sub-region as a whole needs to set up systems to manage this wealth judiciously. Some of the key priorities for action by the sub-region are outlined below:

- Assess, map and document the biodiversity wealth of the sub-region
- Demarcate and protect fragile habitats at all costs
- Revive traditional knowledge, especially among local communities, indigenous people and women, that promotes conservation practices and integrate conservation efforts in all sectors
- Facilitate the manufacture of high value added products from the resource base by industry in the sub-region and curtail bio-piracy
- Use the rich biodiversity and products manufactured in the sub-region as a bargaining tool in the international market
- Formulate sub-regional policies and programmes, like the South Asian Regional Seas Programme and Biodiversity Action Plans, to address issues of biodiversity conservation and international trade

2.4 Securing Economic Base

Most countries in the sub-region are regularly confronted with poverty and survival issues. As a result, their financial and economic foundations are very fragile. The long-term sustainability of the South Asian sub-region is critically dependent on a firm and secure financial and economic base.

Each country in the sub-region has to strengthen its financial and economic systems. Considerable mutual support and assistance is possible through technology cooperation and sub-regional trade arrangements.

Promoting Technology Cooperation

Countries in the sub-region, like their counterparts in the developing world, have quite naturally looked towards the industrialised nations for state-of-the-art technologies. Experience clearly indicates that only second grade, or even obsolete, technology is often passed on. Countries in the sub-region need to focus seriously on indigenous technology development and sharing. Developing regions and sub-regions need to clearly demonstrate the potential and strength of South-South technology cooperation.

Some of the vital steps in this process are:

- Identify the value addition and technology needs of the sub-region
- Initiate research and development through mutual support
- Create a South Asian Technology Bank
- Formulate agreements for technology sharing

For example, Bangladesh, India and Pakistan have common interests in textiles and leather. It is only logical to cooperate in research and development for value added products. The opportunities become immense to compete in the global market.

The sub-region needs to build up its capacity to negotiate with the industrialised world for specific technologies where it is critically required. The North-South technology cooperation should continue where it confers tangible and sustainable benefits to both the parties.

Building a Sub-regional Trading Bloc

With acute poverty at one end, South Asia is also rated as the second fastest growing economic zone in the world (over 5% per annum), next only to the East Asian tigers. Unfortunately countries in the sub-region have not fully recognised and taken advantage of this latent potential. South Asia, with a consumer base of over 4257 million people in the middle class bracket – larger than any other economic bloc of the world – can contribute a great deal to the ever evolving global economy. Hence considerable rationalisation is required within the sub-region to tap this potential.

The countries in the sub-region need a much more liberalised trading regime among themselves. The South Asian Preferential Trade Agreement (SAPTA) and the proposed South Asian Free Trade Area (SAFTA) are important steps in this direction. However, these need to be strengthened and accelerated aggressively with several associated initiatives. For example, countries in the sub-region can accord "Most Favoured Nation (MFN)" status to each other to boost trade and their economies. Similarly, a single currency for the sub-region may soon become inevitable.

Countries in the sub-region also need to pursue measures that reduce production and trading costs through sharing of basic resources. For example, Pakistan has surplus power while Bhutan and Nepal have not harnessed their energy potential. On the other hand India and Bangladesh are power deficient. Sub-regional sharing of energy, besides rationalising peaks, can reduce costs and demand for power. Similarly, sharing of water and other natural resources may be considered for the mutual benefit of collaborating nations.

While strengthening preferential trade within the sub-region, South Asia also needs to build up its bargaining power as an economic bloc in the global trade negotiations. The sub-region has several unique products and services to be offered to the rest of the world. These include its rich traditional knowledge, practices, relatively pristine tourism destinations, biological diversity, arts and crafts, besides 'modern' industrial products and services and pool of contemporary brain power. The sub-region needs to carefully value these products and services as a bloc and negotiate with other regions from a position of strength.

Dependence on Minimal External Assistance

In all international deliberations, developing countries are seen to be negotiating for more development assistance, besides technology. It is clear that overseas development assistance has been decreasing over the years and the likelihood of its increasing substantively is remote. In fact, many a developing country has been gradually dragged into the debt trap.

Countries in South Asia need to consciously look at developing themselves with minimal overseas development assistance. With technology and trade cooperation, the economies in the sub-region can be bootstrapped. The sub-region also needs to seriously consider setting up a South Asian Development Bank (observing the commendable role played by the Asian Development Bank in building up infrastructure), with equity contribution from the member countries and other multilateral, bilateral and private institutions.

3.0 The Way Forward : Action and Accountability

There is growing recognition in the South Asian sub-region that the priorities of eliminating poverty, managing population growth, conserving natural resources and building macro-economic stability can only be

addressed if the development process is fundamentally reoriented so as to focus on them directly. It is also widely recognized that this can only be achieved if there is a clear understanding among all stakeholders of the issues that underlie sustainable development and of the types of policies and actions that are needed to bring it about. Some of this recognition comes from direct observation of the negative impacts of development policies followed by countries of the sub-region over the past fifty years. It is reinforced by the widespread awareness created by the dozens of global conferences and extensive international negotiations that started with the United Nations Conference on the Human Environment held at Stockholm in 1972 and included the Earth Summit at Rio de Janeiro in 1992.

It is particularly important to note that the primary stakeholders – the people of the sub-region – have begun to appreciate the opportunities and limits offered by a more sustainable pattern of development. The secondary stakeholders – their leaders and decision-makers – are beginning to define clearer priorities for making such development happen. A great deal, however, remains to be done before the economies of South Asia become genuinely sustainable.

Although the global concern for making development processes more sustainable originated with the Stockholm Conference and centered largely on questions of environmental degradation, it has subsequently evolved to encompass a much broader range of issues. Perhaps more than in any other region of the world, experience over the past thirty years has helped South Asian societies to appreciate the importance of striking an effective balance among the three major components of sustainability:

- Social
- Environmental
- Economic

Intellectual discourse, media coverage and occasional political statements testify to a widening appreciation of the need to pre-empt conflict among these different societal imperatives by designing development strategies that simultaneously try to optimize the combination of all three. Agenda 21, adopted at Rio, was the tangible confirmation of this need at the global level. This appreciation has, however, yet to be translated into policies and action that deal comprehensively with the problem. Within the global context, it is somewhat ironic that the debate appears to be coming back full circle to focus once again primarily on environmental issues. This factor is intensified by the low level of interest or involvement in the WSSD process thus far by the ministries of finance at the country level or by some of the main international development actors.

In the final analysis, sustainable development is simply a matter of achieving sustainable consumption patterns and sustainable production systems. Unfortunately, these goals are more easily stated than pursued, and few societies have in recent times come close to attaining them. Nevertheless, the cultures of South Asia, with their long histories and traditions of living in harmony with nature, rooted as much in the spirit as in matter, do have a head start and could provide a model of sustainable development that is applicable more widely.

Any successful effort to bring about sustainable development will necessarily require countries of the sub-region to establish mechanisms for formulating policy and implementing it at the relevant levels:

- Local
- National
- Regional
- Global

At each level, it is now necessary to build capacity for understanding the basis of action for sustainable development, formulate policies and programmes to encourage such action, establish responsibilities, set up mechanisms for monitoring progress towards agreed goals and create mechanisms for accountability.

The results of past international negotiations, including the slow and inadequate implementation of international conventions such as those on climate change, biodiversity conservation and desertification, indicate the importance of accountability mechanisms. From a South Asian perspective, the primary function of the WSSD at Johannesburg, has to be to set up international regimes under which building such capacity is facilitated and to design systems of accountability that ensure the desired results.

Unquestionably, implementing Agenda 21 and introducing policies, technologies and action that can make development more sustainable needs more money than is currently available for development programmes. This was clearly recognized at Rio but the international community has failed rather miserably on this front. Concessional funding flows to the South Asian sub-region have been totally inadequate. In fact its share had declined from 17% in 1989 to 14% in 1996. But there is also a growing recognition that more money alone cannot solve the problems faced by nations in their efforts to modernize their economies. Fundamental changes are also needed in the global economy, as well as in the domestic economies of nations, if the benefits of increasing prosperity are to reach everyone, now and in the future.

If WSSD and future conferences at the global level are genuinely to address developing country issues, these countries must play a stronger role in setting the agenda of these conferences. Thirty years after the Club of Rome's "Limits to Growth" fueled global concerns on environmental degradation, it is now necessary to establish the "Limits to Poverty" to overcome the next constraint on sustainability of the present economic systems. Poverty eradication needs to be seen as part of the solution not just recognised as a problem. On these issues, South Asia has useful insights to contribute but these will only become visible when the developing world as a whole learns to set the agenda for international dialogue.

3.1 Local Capacity Building and Empowerment

One major solution to all four priorities mentioned above – eradication of poverty, arresting population growth, regeneration of the natural resource base and improved productivity of the economy – lies in the widespread creation of sustainable livelihoods. Sustainable livelihoods are jobs that require minimal capital investment; create incomes, meaning and dignity; and place least pressure on the environment. They produce goods and services that cater to the basic needs of the local people and simultaneously help them generate purchasing power to acquire these goods and services.

The creation of sustainable livelihoods requires fundamental changes in the choice of technology, financing systems and the functioning of the marketplace. It also needs strengthening of the institutions of local governance, which must now be designed to create a sense of ownership by local people over the resources on which they depend for their livelihoods, and the decisions systems that guide their lives.

There is widespread consensus in South Asia, both at the official level and among civil society organizations that Social Mobilisation is the most effective instrument for creating both the supply of sustainable livelihoods and the demand for them. This is where the traditionally marginalised and vulnerable groups like women, indigenous people, youth and others play a critical role. The countries of South Asia have experimented with a broad range of social mobilisation options and are becoming increasingly familiar with the kinds of intervention needed.

Successful social mobilization must be based on active participation by the stakeholders, transparency and access to information, technology, credit and markets. Certain institutional factors can accelerate the process of social mobilization. The most widely accepted ones include local self-government, clearly defined entry points and effective support systems.

Extensive field experience shows that local self-governance is one of the most effective catalysts for social mobilization. Unless communities have a sense of ownership over their resources, they tend to neglect them. Acquiring a sense of ownership is best made possible by real ownership, such as the right to tax and the right to decide how to use the resources. These issues are of profound implication for sustainable management of natural and other resources, but they must be resolved within the context of each country's constitutional framework and legal system.

Effective social mobilization programmes often start with an **entry point** that is a priority for the local community, as identified by the people themselves: job creation, food security, literacy and primary education, health, shelter, credit or productive infrastructure.

To get started and to keep going, social mobilization programmes also need **support mechanisms** that can supply essential inputs and services at the community level. Experience suggests that community based

organisations, micro credit facilities and social welfare agencies can best play this role. It is essential, however, that they carry out their specialized tasks within a broader understanding of the complexity of village life and help connect the community to other services that bring about education, enterprise and empowerment. In this manner, communities can build their capacity to make endogenous choices – their own decisions, reflecting their own realities, their aspirations and their knowledge of their resource endowment.

3.2 National Governance

The primary responsibility of national governments in the sustainable development process is to empower and facilitate the functioning of local governance institutions. They need to ensure that governments at all levels are democratic, participative, transparent and accountable.

Civil society, including community based organizations and non-governmental agencies are now growing rapidly in terms of their influence on people's lives. Such institutions need to be encouraged and nurtured, based on their track record particularly because they are usually better capable of delivering social mobilization services, and usually at a fraction of the cost. Because of their high levels of motivation and willingness to work within severely constrained circumstances, they are also effective innovators from whom many new solutions can be adopted on a larger scale.

The corporate sector is also beginning to realize the opportunities offered by the rural market in South Asian countries and can be a major potential partner in introducing sustainable development services to the poor. While corporate sector participation in the development process needs to be encouraged, governments and regulatory systems must ensure that profit motives do not deteriorate cultural values and traditional conservation practices. To encourage the corporate sector, infrastructure and other support services must be provided by government or it has to create an enabling environment for corporate sector to build the required infrastructure in rural areas on build – own – transfer (BOT) basis.

Perhaps the most important responsibility that governments have is to set an example of efficient operations for agencies in the other sectors to follow. Some of the specific actions for better governance are outlined below :

- Facilitate meaningful involvement in policy formulation and implementation by representatives of the private sector, local authorities, NGOs, trade unions and other major groups.
- Respect indigenous peoples' intellectual and cultural property rights while recognising cultural diversity and ethnic plurality.
- Balance short-term economic benefits with medium and long term objectives, particularly in the social and environmental spheres
- Incorporate sustainable development principles in national Constitutions or legislation to accelerate the adoption of better development strategies
- Plan development activity on the basis of active public consultation as demonstrated by Bangladesh in evolving National Environment Management Action Plan
- Focus on design of legal and regulatory regimes that improve political and civil service accountability within the context of decentralized government.

3.3 Enhanced South Asian Cooperation

Enhanced cooperation among South Asian countries will contribute significantly to addressing their common sustainable development priorities.

Joint action on Poverty Eradication and Human Security

Food security in the sub-region can be considerably enhanced by strengthening the SAARC Food Security Board (SFSB) established in 1988 to advise governments on the food situation and prospects in the sub-region including factors such as production, consumption, trade, prices, quality and stocks of food grains. With stronger research capability, the SFSB can play its full role in advising on the international trade issues to protect the social and economic rights of poor/marginal farmers. The SFSB may also consider the setting

up of a South Asian Food Bank. Decentralised centres can be designated in different parts the sub-region to ensure that any deficits is a particular location, at any given time can be balanced with supplies from other centres.

Co-operation for disaster preparedness, protection against vulnerability and the management of disasters needs to be strengthened in the sub-region. These can be achieved through joint observation and monitoring, research and information sharing programmes for seismicity, storm surges, cyclones and weather prediction. Rapid action mechanisms can also be set up in the sub-region to respond as soon as disasters occur.

Sub-regional Trade and Economic Policies

Countries in South Asia need to pursue much more aggressively the potential and opportunities that unfold through strengthened sub-regional cooperation in trade and economic policies. Whatever be their political differences, countries need to recognise that their individual and collective macro-economic stability and bargaining power in the global market hinges on building a strong economic bloc.

Some of the critical measures for technology cooperation and building a sub-regional trading bloc with minimal external assistance as already described in section 2.4 include :

- Building a systematic mechanism for technology development and sharing within the sub-region including creation of a South Asian Technology Bank.
- Optimising the large consumer base within the region, including the high potential middle class economy.
- Liberalising the preferential trading regime within the sub-region through a variety of measures including MFN status among member countries and moving towards a single currency.
- Building the bargaining power of the sub-region in global trade and other negotiations through optimized valuation and packaging of its unique products and services.
- Consider the setting up of a South Asian Development Bank, on the lines of the ADB, with contribution from member countries multilateral, bilateral and other private agencies.

Sub-regional Sharing and Management of Natural Resources

A broad range of opportunities exist for cooperation in energy aimed at environmental and supply security (please refer Section 2.4). Both renewable and fossil fuel based energy use can be substantially rationalised once the national policies are geared to the imperatives of sub-regional cooperation.

Similarly the sub-region needs to develop a variety of cooperative mechanisms for sharing of water resources, data collection and analysis, and emergency response measures.

Towards a South Asian Happiness Index

As evident from the experiences after Rio (described in Section 1.1), South Asia is home to a diverse range of sustainable development initiatives at various levels. The more successful ones need to be scaled up and adopted by the sub-regional mechanisms like the Integrated Program for Action (IPA).

Bhutan, has officially adopted the concept of Gross National Happiness as the index of the nation's progress. The important components of the index, beyond the usual economic constituents of GNP, include additional factors such as good governance, environmental quality and cultural promotion. Taking the cue from this pioneering policy initiative, it would be opportune for countries of the sub-region to explore setting up a composite South Asian Happiness Index. Such an index would provide a much-needed counterweight to the purely economic indices of progress that currently define and underlie economic and social development policies.

3.4 Responsible Global Systems

Commitments were made at Rio, but much more concerted efforts are required by the global community to fulfill them. More action and accountability is needed to promote sustainable consumption and production

systems, strengthen global cooperation, and ensure fulfillment of government obligations and corporate social responsibility.

Promote Sustainable Production and Consumption Patterns

As mentioned earlier, sustainable development requires sustainable consumption patterns and sustainable production systems.

Most industrial production systems today are not sustainable. They are too capital intensive, resource consuming, heavily subsidised⁶ (first by nature and then by a distorted economy) and too wasteful. Yet, virtually every country today wishes to "become competitive in the global economy" by emulating the same technological strategies. This means that transforming production systems to meet the imperatives of sustainability will not be easy.

Sustainable consumption is an even more ambitious objective, which aims at transforming the ways in which goods and services are used and disposed of so that the needs of all people are met and the environment is conserved.

Most of the action needed to make the lifestyles of people sustainable can take place only at the local or national levels. Nevertheless, the international community can influence the local and national decision making systems quite deeply, as for example in changing technologies for refrigeration as a result of the Montreal Protocol, or of changing energy policies as a result of the Kyoto Protocol. The instruments available to the global community range from international treaties to taxation and pricing systems.

Consumption patterns and lifestyles are contentious issues at the international level: political leaderships find it difficult to commit the people of their nations to reducing their use of natural resources such as energy or water. Nevertheless, given the high level of disparity in the consumption of resources in different societies, and the limits set by certain environmental constraints such as the emission of greenhouse gases into the atmosphere, some degree of adjustment will have to take place.

Governments must now take some responsibility to help guide the driving forces that influence consumption patterns in any society. This means addressing issues such as market pressures (e.g. pricing, advertising, credit), the policy framework (e.g. perverse incentives), cultural expectations, technological innovation, infrastructure and land use as well as individuals purchasing decisions. This, in turn, entails tackling the institutionalised inertia in today's markets, policy and society, which currently prevents widespread action. Just as commercial advertising can deeply influence consumption patterns, new publicly funded methods must be evolved that communicate the advantages of more sustainable consumption.

UNCED called on the industrialised countries to take the lead in sustainable consumption and a number of governments, businesses and citizen organisations have now responded. Ironically, this has produced an agenda overly dominated by industrialised country concerns and solutions. This has also generated the false assumption that it is only an issue for the developed world, with only a single valid approach that is applicable to all countries and situations, and that developing countries have little to offer in terms of lifestyles for sustainability. In this context, the words of the ECO-Asia initiative launched by the Government of Japan provide a salutary reminder of the value of cultural diversity: it called on countries in the region to "rediscover those elements in their traditional way of life suited to conserving the environment".

Making consumption sustainable is a long-term task, which will require structural change in economies and lifestyles, tackling often entrenched expectations and vested interests. These issues cannot be addressed by policy alone, but will require political vision and determination to take tough choices where these are necessary, supported by a broad public movement for change.

Strengthen Global Cooperation

Bringing about fundamental changes will need concerted effort on the part of international agencies, governments, corporations and civil society. They will need to establish innovative partnerships to support

research and action globally and particularly in developing countries, on sustainable development and integration of economic, environmental and social issues:

- to eradicate global poverty
- to conserve the environmental resource base
- to ensure that the benefits of globalisation processes reach the poor and conserve the environment
- to ensure market access of the poor countries in the global market and global trade
- to create a financial institutional framework that ensures access to micro-credit and mini-credit.
- to ensure support for micro and mini enterprises and financial institutional capacity at local and community levels, particularly in poor countries
- to strengthen the capacity of developing countries to negotiate, access technology and ensure implementation of global conventions
- to develop global governance code of ethics on corruption and agree to eliminate corruption at all levels of public life

Ensure Implementation of the Rio Accords

The Earth Summit at Rio de Janeiro concluded with the signing of two conventions – on Climate Change and Biodiversity – and the adoption of Agenda 21. An integral part of Agenda 21 was the cost associated with implementing it, which was estimated at the time to be over \$ 600 billion per year for ten years. Of this \$125 billion was to be contributed by the international donor community and rest by recipient governments. The developed economies have failed to honor their commitments at Rio.

Though many international organisations are moving towards "poverty alleviation", one is hard pressed to see how their programmes have in any way changed to respond to this changed priority. Poverty now needs to be eradicated and the means for doing so exist. The Independent South Asia Poverty Commission strongly advocates that poverty eradication must be considered as the part of the solution and not just recognised as a problem. But the international system needs to put in extraordinary efforts and commitments to achieve this goal.

Climate change and biodiversity loss are problems of grave importance to the countries of South Asia and the global community. These are the countries that will pay the highest costs resulting from these global catastrophes. It is the island and coastal nations in the tropics that are going to disappear under rising sea levels and floods. It is their agriculture that is going to need the genetic material of cultivars to stay ahead of pests and declining yields.

Judging from the performance of past Conferences, it would appear that the agreements made at UN Conferences such as the Earth Summit are not implemented in all its seriousness. The South Asian view is that a system should be put in place that ensures accountability and parties to agreements can be held responsible for implementing them.

It is therefore of paramount importance to plan for enhancing the accountability with regard to international agreements made. Any international agreement must be accompanied by relevant and explicit mechanisms for ensuring compliance and accountability.

To accelerate the process of sustainable development on a global scale, the international community should also:

- Seek new financial mechanisms to support sustainable development objectives, e.g. tradeable permits, taxes on financial transactions (Tobin tax), and taxes on fuel used in all international aviation, including military.
- Eliminate duplication of programs and activities among international secretariats for sustainable development global accords.
- Expand and strengthen the role of UNEP to promote the coherent implementation and monitoring of the environmental dimension of sustainable development within the UN system and reassess the roles of UNEP and UNDP in environmental technology and capacity building.

- Expand the mandates of UN financial institutions and others to support indigenous programs/projects on sustainable development, indigenous rights, spiritual knowledge, lands and resources.
- Strengthen implementation, monitoring and reporting of global conventions
- Support research in developing countries on sustainable development and integration of economic, environmental and social factors

Ensure corporate responsibility towards sustainable development

The corporate sector responded positively to the processes at Rio. Subsequently several initiatives were taken either by corporates themselves or in conjunction with governments or international development agencies. As a consequence large corporations have started to act and report on their environmental and social activities. However a vast majority of the small and medium enterprises do not still find it viable to act on environmental and social concerns. The global community needs to focus on mechanisms that make it meaningful for corporations to act and report on the triple bottom line – financial, environmental and social.

In this context the efforts like the Global Reporting Initiative (GRI) need to be encouraged. Attempts are being made to evolve more comprehensive reporting and monitoring mechanisms with the participation of a broader set of stakeholders. The Global Compact initiated by the United Nations Secretary General also aims to involve the corporate sector much more in sustainable development efforts.

Conclusion

South Asia today stands at a crossroad. A decade after Rio, it is still ridden with poverty and natural resources degradation. On the other hand, immense latent potential exists within the member countries. There is a broad consensus on the thematic priorities of poverty eradication, managing population growth, conserving natural resources and building macro-economic stability. However, the challenge is for more action and accountability at various levels.

Besides housekeeping within the countries, the sustainable development processes initiated at the local and national levels need to be multiplied exponentially. This is possible only through much stronger Sub-regional cooperation, keeping aside socio-political differences. South Asia today has immense potential in all the three key inter-related components of sustainable development.

On the social front are the unique diversity of traditional values, arts, crafts and cultural practices, besides modern industrial products, services and pool of contemporary brainpower. On the environment front the sub-region is endowed with approximately 15% of the known biological wealth of the world. Finally on the economic front, besides being the second fastest growing region in the world, the sub-region also has the largest consumer base. The initiatives required are fairly well known. The political will for cooperation supported by a robust operational mechanism can transform the sub-region into a strong and sustainable entity within the global community.

The sub-region also needs to take a leadership role in making global systems more responsive and accountable to regional and local needs. An important step in this direction needs to be taken at Johannesburg by strongly advocating the concerns and approaches based on the experiences of the developing world.

Full report with annexes is available at www.rrcap.unep.org/wssd/documents/

APPENDIXES
for

SOUTH ASIA SUB-REGION REPORT
FOR THE
WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT

SEPTEMBER 2001

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APPENDIX1.1: References Notes

1. The Human Development Report 2001 (*Pp. 172, Table 9*) indicates that
 - a) Public expenditure on higher education has fallen by more than 15% for the South Asian countries, between 1985 – 1997 with the exception of Iran, where it rose substantially.
 - b) Overall, the share of education as a share of total GNP has remained largely constant for all the South Asian countries.
2.
 - a) Source: Global Environment Outlook 2000 (*pp. 210; Financing Environmental Action*)
 - b) The Global Environmental Facility disburses roughly around \$100 Mn per year on biodiversity. ‘Yet the total economic value of the global biodiversity benefits – much of which are generated in developing countries – is roughly estimated to be of the order of a few billion dollars per year’. Source: *Blueprint for A Sustainable Economy, D.W. Pearce et al, 1999 (pp. 186)*
3. State of the Environment Report for South Asia (DRAFT)
4. For every country in the South Asian region, the richest 20% of the population enjoy anywhere between 40% to 50% of the total income of the country. Invariably, the richest decile enjoys 25% to 30% ownership of resources. Source: *Human development Report 2001, pp. 183, Table 12.*
5. The State of the World 2001, (pp. 124 – 127) indicates that
 - a) Asia has a 45% share of the total economic losses from disasters (1985 – 1999). The total economic losses were \$918 billion, Asia’s share: \$ 414 bn.
 - b) In the same period, Asia suffered 77% of all deaths (561,000) and 90% of all homelessness due to disasters.
 - c) 2 billion people globally were vulnerable to disasters over the last decade: Asia’s share could be 75% (1.5 billion) and South Asia may well be half of it.
6. The *Estimated Rate of Subsidy* on energy in Iran is more than 80%, and approximately 15% for India.
Source: *World Energy Outlook: Looking at Energy Subsidies: Getting The Prices Right (1999)*
7. www.cgtd.com/global/sarc-prs.html
8. World Bank Environment Strategy 2000

APPENDIX1.2: Bibliography

1. Agenda 21, UNCED Rio-de Janeiro,1992
2. State of the Environment in Asia and the Pacific 2000, UNESCAP and ADB
3. Global Environmental Outlook 2000, UNEP and EARTHSCAN
4. Sustainable Development in Asia, Douglas V. Smith Kazi F. Jalal, Asian Development Bank
5. Down to Earth, February 29, 2000, CSE, New Delhi
6. State of Environment, South Asia 2000 (draft), Development Alternatives, New Delhi
7. World Development Indicators 2000, World Bank
8. Human Development Report 2001, UNDP
9. Global Development Finance, 1999, World Bank
10. Agenda 21 and the Asia Pacific Regional Perspective on the achievements, a paper by R. Rajamani, Regional Policy Advisor, LTNEP-EAP/AP
11. State of the World 2001, The World Watch Institute, Lester R. Brown et al
12. World Resources 2000-2001, WRI
13. Blue Print for Sustainable Economy, D. Pearce & E.D. Barbier, 2000, EARTHSCAN, London
14. World Energy Outlook, 1999 Insights, International Energy Agency, Paris

**APPENDIX2.1: List of Participants at Wisepersons Meeting
Bangkok 20th August 2001**

S.No.	Name	Organization	Country
1	Mr. Edy Brotoisworo	Asian Development Bank (ADB)	
2	Mr. Joseph Weinstock	Asian Development Bank (ADB)	
3	Mr. Frank Janer	Asian Development Bank (ADB)	
4	Dr. Atiq Rahman	Bangladesh Centre for Advanced Studies (BCAS) House 23, Road 10 A Dhammondi, R/A, Dhaka-1209, Bangladesh Tel: 880-2-8115829, 911-3682, 811-3977 Fax:880-2-8111-344 Email: bcas@bdonline.com, atiq.r@bdcom.com	Bangladesh
5	Dr. Ashok Khosla	Development Alternatives (DA) B-32, TARA Crescent, Qutab Institutional Area, New Delhi-110016, India Tel:91-11-696-79.8, 685-1158, 656-5370 Fax: 91-11-6966031 tara@sdalt.ernet.in	India
6	Dr K. Vijaya Lakshmi	Development Alternatives (DA) B-32, TARA Crescent, Qutab Institutional Area, New Delhi-110016, India Tel:91-11-696-79.8, 685-1158, 656-5370 Fax: 91-11-6966031 koneruvl@yahoo.com, kvl@sdalt.ernet.in	India
7	Mr. R. Rajamani, IAS	MoEF 8-2-585/A/1, Road No.9, Banjara Hills, Hyderabad-500034, India, Tel:91-40-335-8320 Fax:91-40-335-5480 Email: rraja@universe.uohya.ernet.in	India
8	Mr. Mehboob Elahi	South Asia Co-operative Environment Programme (SACEP), #10 Anderson Road, Colombo 5, Sri Lanka Tel: 94-1-589376 Fax:94-1-589-369 E-mail:aj_sacep@eureka.lk	Sri Lanka
9.	Dr Govind R. Bhatta	Former Secretary, Ministry of Population & Environment Singh Durbar, Kathmandu, Nepal Fax: 977-1-242 138 Tel: 977-1-241586 Email: mailto:drgrbsms@hotmail.com	Nepal
10.	Mr Shahrugh Rafi Khan	Executive Director Sustainable Development Policy Institute (SDPI) P. O. Box 2342, Islamabad, Pakistan	Pakistan

		Tel: 92-51-227-8134/6-231 (Ex), 227-0674/6 Fax: 92-51-218135 Email: shahrukh@sdpi.org	
11	Mr Nihal Rodrigo	Secretary General SAARC Post Box No. 4222, Kathmandu, Nepal Tel: 2-21785, Fax: 2-27033, 223991 Email:	Nepal
12	Mr. Choudhury R.C. Mohanty	UNEP Regional Resource Centre for Asia and the Pacific (UNEP RRC.AP) Asian Institute of Technology (AIT) P.O. Box 4, Klong Luang Pathumthani 12120 Tel : 66-2-524-6240 Fax : 66-2-516-2125 Email: mohyng@ait.ac.th	Bangkok
13	Dr. Subrato Sinha	UNEP Regional Resource Centre for Asia and the Pacific (UNEP RRC.AP) Asian Institute of Technology (AIT) P.O. Box 4, Klong Luang Pathumthani 12120 Tel : 66-2-524-6496 Fax : 66-2-516-2125 Email: subrato@ait.ac.th	Bangkok
14	Mr. Surendra Shrestha	UNEP Regional Resource Centre for Asia and the Pacific (UNEP RRC.AP) Asian Institute of Technology (AIT) P.O. Box 4, Klong Luang Pathumthani 12120 Tel : 66-2-524-5365 Fax : 66-2-516-2125 Email: surendra@ait.ac.th	Bangkok

APPENDIX2.2: Contents of the Sub-regional Report (Suggested at Wisepersons Meetings)

Part I: Agenda 21 reporting

- Positive fallouts: Raising environmental awareness, success stories (at least one per country)
- Process: Local Agenda 21, thinking globally acting locally, regional co-operation/ agreements; Policy & institutional failure
- Promises: ODAs going down; failure of CSD in follows up of Agenda21
- Setting the stage: Poverty; Consumption; Population; Natural resource Management
- Sustainable Development issues

Part II: Regional priority

- A. Poverty and human security: Results; Land degradation; Vulnerability; Natural disasters
- B. Rural-Urban: Access to safe drinking water; Sanitation; Growth of slums; Shift of rural people to urban areas; Impact of population
- B. Natural resources: Indigenous knowledge; Forest; Biodiversity/ecosystem productivity; Mountain; wetland; desserts; coastal/ marine
- C. Institutional policy: Shifting governance; Local people participation; Internalizing/externalizing cost of environmental negligence
- D. Financial mechanism: Conformity to environment standards (fiscal incentives), consumption patters, impact of globalisation

Part III: Way Forward

- Vision: To meet the IDG goals by 2015
- Action: By government, NGOs, Civil society
- Shifting of governance to more and more local actions
- Access to information
- Moderating consumption
- Financial accountability measures: ODA enhancement, new and additional funding;
- Micro credit, meso credit, mini credit, financing of infrastructure
- Institutional reform within UN system : Address SD issues
- South Asian Cooperation: Water shed management, Transboundary air pollution, free trade agreements, energy, transportation, cleaner production and clean technology (south-south cooperation), joint research programmes on sustainable development, poverty elevation, coastal and marine development, vulnerable ecosystem: supporting/strengthening mechanism (Hindukush region).

APPENDIX3.1: Minutes of Colombo Consultations – 27th and 28th September

MINUTES OF SOUTH ASIA WSSD PREPARATORY MEETING - STAKEHOLDERS COLOMBO, SRI LANKA – 27 SEPTEMBER 2001 (Draft Summary)

1. The stakeholders' meeting for South Asia in Preparation for the World Summit on Sustainable Development was held in Colombo, Sri Lanka on 27 September 2001. The meeting was attended by 45 representatives of major groups from seven South Asian countries and Iran, besides 26 observes representing multilateral and bilateral agencies.
2. Participants were cordially welcomed by the Govt. of Sri Lanka, South Asia Cooperative Environment Programme (SACEP), South Asian Association Regional Cooperation (SAARC), and Task Force members from ADB, ESCAP, UNDP and UNEP.
3. Mr. R. Rajamani, Former Secretary, Environment and Forests, Govt. of India was unanimously elected as Chairperson for the meeting. A presentation was made by Dr George Varughese of Development Alternatives on the draft strategy paper for South Asia. Prof. Emil Salim gave the participants an overview of the WSSD process and the nature of the issues that should come up for discussion. The Chair ensured all participants in the meeting made their contribution in the consultation.
4. A diversity of views had been expressed on the draft strategy paper presented by Development Alternatives. A few opinions were expressed in favour of widening the process consultation, involving large section of the stakeholders. Most of the participants broadly agreed with the draft and gave certain suggestions for the inclusion of the report.
5. In the light of those suggestions, the meeting identified several priority issues and problems that need to be incorporated in the report including :
 - a. Poverty eradication should be treated as a solution leading to sustainable development, not a problem;
 - b. An annexure should be added to include positive examples and case studies of good practices on development, in reversing environmental degradation, population control, education, health measures, and conservation in the sub-region listing priorities mentioned in the SoEs, GEO3, and other documents;
 - c. The annexure should cover in detail matters like action on Convention on Desertification and conservation of different ecosystems;
 - d. The major issues for the sub-regional cooperation like environmental security, water, transboundary conservation of biodiversity, energy security should be clearly brought out. The problem arising in planning these due to conflicts and tensions should be brought out;
 - e. The importance of education in awareness building especially among school children should be stressed;
 - f. In the section on technology, cleaner production and energy security including promotion of renewable sources of energy based on North-South and South-South cooperation should be delineated;
 - g. Effects of globalization and liberalization on natural resources and human development should be mentioned cautioning about the need for correction;

- h. The concept of 'ecological debt' should be used as a tool for North South negotiation in the WSSD process;
 - i. Strengthening of local governance through greater financial and decision-making power was considered a key element for sustainable development.
 - j. Empowering women and youth providing various opportunities should be forcefully brought out;
 - k. The adverse consumption patterns, which affect both North and South, should be countered by devices like taxation, incentives, and other means;
 - l. The indigenous people in the region should be consulted and the need to conserve their cultures and traditions and ethno knowledge should be stressed; and
 - m. The discussion between matter and spirit observed in South Asia by the large majority of people who observed simple life styles based on basic human needs should not be brushed aside and traditional ways of life suited to conserving the environment should be made fashionable following a modern idiom.
6. The stakeholders Meeting for South Asia in Preparation for the World Summit on Sustainable Development would like to thank the Government of Sri Lanka for hosting the meeting, and also the Task Force of ADB, ESCAP, UNDP and UNEP, for convening and organizing the meeting.

**MINUTES OF
SOUTH ASIA WSSD PREPARATORY MEETING – INTERGOVERNMENTAL**

COLOMBO, SRI LANKA – 28 SEPTEMBER 2001

(Draft Summary)

1. The Intergovernmental meeting for South Asia in Preparation for the World Summit on Sustainable Development was held in Colombo, Sri Lanka on 28 September 2001. The meeting was organized by the Task Force comprising of ADB, ESCAP, UNDP and UNEP in collaboration with the Govt. of Sri Lanka, SACEP and SAARC, and hosted by the Govt. of Sri Lanka.
2. The Meeting was attended by 24 representatives from governments of Bangladesh, Bhutan, Maldives, Nepal, Pakistan, Iran, India, and Sri Lanka. It was also attended by 24 representatives from ESCAP, ADB, UNEP, UNDP, SACEP, SAARC, UNCCD, US Embassy, besides 18 representatives stakeholders.
3. Participants were cordially welcomed by the Hon. Minister of Transport and Environment, Govt. of Sri Lanka, South Asia Cooperative Environment Programme (SACEP), and South Asian Association Regional Cooperation (SAARC). Mr. S. Khakakhel, Assistant Secretary General of United Nations and Deputy Executive Director of UNEP AND Prof. Emil Salim were also extended welcomed. Task Force members from ADB, ESCAP, UNDP and UNEP also welcomed the participants.
4. Prof. Emil Salim expressed views on the issues including: integration of economic, social and environmental for sustainable development; eradication of poverty and sustainable consumption; translate the global goals into regional and sub-regional developmental goals; thrust on renewable resources; multistakeholders approach combining government, business and civil society; and integrity of ecosystem.
5. Mr. S. Khakakhel broadly covers issues including: preparatory process and milestones to Johannesburg; human being at the centre of development; impressive socioeconomic developments in South Asia; concerns for population, poverty and environmental degradations in South Asia; potential of human and biological resources; and partnership for sub-regional cooperation.
6. Mr. Khan of ESCAP said that the inputs from the meeting and the strategy paper would be part of the regional paper to be presented at Phnom Penh on 27-28 November. He also suggested an initiative for sub-regional cooperation could be thought off.
7. Mr. M. Susiriwardane, Secretary, Ministry of Transport and Environment, Govt. of Sri Lanka took the Chair in the absence of the Minister. A presentation was made by Dr. George C Varughese of Development Alternatives on the draft strategy paper for South Asia.
8. Summary of the stakeholders meeting held on 27 September was presented by the chairperson of that meeting, Mr. R. Rajamani. Issues and problems discussed and suggestions provided for inclusion in the report were briefly mentioned. The points made by country delegations covered the progress in their countries on items in Agenda 21 and in Sustainable Development. They also made comments on the strategy paper.
9. Progress on Agenda 21

Iran :

Reported on their National Action Plan for Environment; establishing National Commission on Sustainable Development; policy and strategy for sustainable development; and preparatory stage of socioeconomic development plan.

Bhutan :

Reported on National Environmental Strategy; National Environmental Action Plans before summit; Committee on Sustainable Development including all the stakeholders; environmental legislations; and Environment Assessment Process.

India :

National Action Plan; Environmental legislations; Commission on Population Control; and assessment report on Agenda 21 in progress.

Pakistan :

National Environmental Strategy following consultative process; progress on Agenda 21; National Environmental Action Plan; and assessment report for WSSD 2002 in progress.

Nepal :

Assessment report on Agenda 21 in progress; progress on establishing National Commission on Sustainable Development; and National Mountain Development Action Plan.

Sri Lanka :

National Conservation Strategy; National Forest Policy; and Committee on Environmental Policy Management, Coastal 2000; and Environmental Impact Assessment.

Bangladesh :

National Environment Management Plan; Environment Legislations and assessment report on Agenda 21 in progress.

10. Comments on the Strategy Paper**Sri Lanka :**

Include case studies from Sri Lanka; disaster communication system for disaster management; action plan and implementation. Subject to this, the paper was endorsed.

Pakistan :

Disaster management pool for regional cooperation. Draft strategy paper was endorsed.

Iran :

Sustainable peace and tranquility as fourth pillar of sustainable development; more focus on education spiritual dimension; challenges for accountable action and accessibility. Draft strategy paper was accepted with these suggestions.

India :

A Thrust on implementation mechanism was suggested. The draft paper was accepted with suggestions for verbal correction and moderation.

Bangladesh :

Security from natural disaster; need for National Disaster Management; regional institute for disaster management; continuous monitoring and reviewing to improving strategy; appropriate institute for research. Subject to inclusion of some of these points the draft paper was endorsed.

Bhutan :

SAARC to be strengthen; regional cooperation on energy, water; Gross National Happiness. Draft strategy paper was endorsed.

Maldives :

Draft strategy paper was endorsed.

Nepal :

Endorsed the draft strategy paper.

11. Thus the meeting endorsed the report prepared for South Asia and recommended set of issues that are to be incorporation in the report.
12. The Intergovernmental Meeting for South Asia in Preparation for the World Summit on Sustainable Development would like to thank the Government of Sri Lanka for hosting the meeting, and also the Task Force of ADB, ESCAP, UNDP and UNEP, for convening and organizing the meeting in collaboration with SACEP, SAARC and the Govt. of Sri Lanka.

**APPENDIX3.2: List of Participants at Colombo Consultation –
27th and 28th September 2001**

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APPENDIX4.1: Key Environmental Issues and Causes in South Asia

Country	Key Issues	Key Causes
Afghanistan	Soil degradation; overgrazing; deforestation; desertification; loss of biodiversity; food security risks; natural disasters such as earthquakes and droughts.	Population growth; increased demand for bio-fuels, building materials, and agricultural lands.
Bangladesh	Marginalized populations forced to live on and cultivate flood-prone land; loss of biodiversity; limited access to potable water; water-borne diseases prevalent; water pollution, especially of fishing areas; arsenic pollution of drinking water; urban air pollution; soil degradation; deforestation; severe overpopulation; natural disasters (especially floods and cyclones which kill thousands of people and causes heavy economic losses every year); food security risks; industrial pollution; import of hazardous waste.	High population density and urban primacy; reliance on private transport; urbanization and deficits in urban infrastructure (including one of the world's 30 largest cities – Dhaka); increases in unmanaged marine-based tourism; green revolution / agrochemical and run-off; high demand for bio-fuels; lack of controls on industrial effluent; over exploitation and / or pollution of groundwater.
Bhutan	Soil erosion; limited access to potable water.	High rates of urbanization.
India	Deforestation; soil erosion; overgrazing; desertification; loss of biodiversity; air pollution; water pollution; huge population base and large growth rate is overstraining natural resources; natural disasters such as floods, cyclones and landslides are common; high death rates and ailments associated with indoor air pollution.	High rates of urbanization and deficits in urban infrastructure (including in four of world's 30 largest cities); reliance on private transport; industrial effluents and vehicle emissions; increase in unmanaged marine-based tourism; green revolution / agrochemicals and run-off; reliance on bio-fuels.
Islamic Republic of Iran	Air pollution, especially in urban areas; deforestation; overgrazing; desertification; oil pollution in the Persian Gulf; inadequate supplies of potable water; food security risks; natural disasters such as floods, earthquake, and landslides are common.	Excessive pressure on forests and rangelands; high rates of urbanization and deficits in urban infrastructure (including one of world's 30 largest cities – Tehran); inefficient public and private transport; vehicle emissions, refinery operations, and industrial effluents.

Country	Key Issues	Key Causes
Maldives	Climate change; beach erosion; depletion of freshwater aquifers; degradation of marine habitats.	High population densities; increases in marine-based tourism; sea level rise.
Nepal	Deforestation; soil erosion and degradation; loss of biodiversity; water pollution; natural	High rates of urbanization; reliance on private transport; increased demands for

	disasters such as floods and landslides in rural areas; food security risks.	timber; increased population density and cultivation of marginal lands.
Pakistan	Water pollution; seasonal limitations on the availability of natural freshwater resources; majority of the population lacks access to potable water; deforestation; soil erosion; coastal habitat loss and degradation of marine environment; desertification; loss of biodiversity; natural disasters, mainly due to floods.	High rates of urbanization and deficits in urban infrastructure; industrial wastes; population increases in coastal areas and rise in tourism; depletion of mangroves for aquaculture; overfishing; increased demands for timber / bio-fuels; hunting / poaching; green revolution / agrochemicals and run-off.
Sri Lanka	Deforestation; soil erosion; pollution by municipal and domestic waste; loss of biodiversity; coastal degradation; limited access to potable water; water-borne diseases prevalent.	Excessive pressure on forests; increases in marine-based tourism; poaching; sea level rise; deficits in urban infrastructure; water pollution by municipal and industrial waste, and agricultural run-off; extensive mining activities.

Source : State of the Environment Asia and the Pacific 2000

APPENDIX4.2: Environment and Development Trends in South Asia

	South Asia	
	1995-2000	2000-2005
Socio-economic trends		
GDP growth	↑	↑
Population growth rate	↓	↓
Incidence of poverty	↓	↓
Urban growth	↑	↑
Slums and squatters	↑	↑
Life expectancy	↑	↑
Infant mortality	↓	↓
Traditional diseases	↓	↓
Modern diseases	↑	↑
Child under nourishment	↓	↓
Nutrition	↑	↑
Natural disaster losses	↑	↑
Environmental trends		
<i>Resources</i>		
Arable land per capita	↓	↓
Land degradation	↑	↑
Desertification	↑	↑
Deforestation	↑	↑
Tree plantation	↑	↑
Loss of habitat and species	↑	↑
Water consumption	↑	↑
Marine resources loss	↑	↑
Commercial use of energy	↑	↑
Food security	↓	↓
Resource use by industry	↑	↑
Environmental degradation by tourism	↑	↑
Pollution		
Freshwater pollution	↑	↑
Coastal pollution	↑	↑
Air pollution	↑	↑
Greenhouse gases	↑	↑
Solid waste generation	↑	↑
Agro-chemical use	↑	↑
Pollution by energy generation	↑	↑
Vehicular pollution	↑	↑
Industrial pollution	↑	↑
Environmental policies/actions		
Public authorities action	↑	↑
Business sector's response	↑	↑
Env. monitoring & research	↑	↑
Env. education & awareness	↑	↑
Activities of major groups	↑	↑
Int'l Conventions (participation)	↑	↑
Subregional cooperation	↑	↑

Note : ↑ Increase ↑ Slight increase ↓ Decrease ? ↓ Slight decrease

Red color shows deteriorating trend, Green color shows improving trend, GDP and urban growth have not been indicated by red or green color because their impact could be good or bad, **Source : State of Environment in Asia and the Pacific 2000**

APPENDIX5: List of Major Agreements and Co-operations in South Asia

I South Asian Association for Regional Cooperation

Much has been achieved since the formation of SAARC, even though much more remains to be done. Lack of information on SAARC and associated regional matters is a major problem. When even the embassies of member countries lack the address of the SAARC Secretariat, there is little hope for members of the public, and many opportunities for regional cooperation are missed.

Integrated Program of Action (IPA)

The IPA is the key component of the SAARC's functions. It now includes 11 areas of cooperation. They are as follows: Agriculture, Communications, Education, Culture and Sports, Environment and Meteorology, Health and Population Activities, Prevention of Drug Trafficking and Drug Abuse, Rural Development, Science and Technology, Tourism, Transport, Women in Development. A Technical Committee manages each of the above-mentioned areas.

Trade and Economic Cooperation (Agreement on SAPTA)

Agreement on **SAPTA** (South Asian Preferential Trading Arrangement) signed during the Seventh SAARC Summit in Dhaka. SAPTA entered into force on 7 December 1995 when all Member States met the necessary conditions. Under this agreement, the gradual reduction and eventual elimination of tariffs within SAARC is envisaged.

SAPTA is considered to be a step on the road to creating a **SAFTA** (South Asian Free Trade Area), which is still at the discussion stage.

Initiatives taken towards promoting trade cooperation within SAARC include:

- Cooperation in the fields of Handicrafts and Cottage Industries.
- Study on Transport Infrastructure and Transit Facilities.

Member countries have also implemented bilateral and multilateral initiatives to promote economic cooperation.

Poverty Eradication

1991 :

Sixth SAARC Summit (Colombo) decided to establish an Independent South Asian Commission on Poverty Alleviation (ISACPA).

1993 :

Seventh SAARC Summit (Dhaka) adopted consensus on poverty eradication. Poverty remains a defining feature of the SAARC region. However, the establishment of SAARC has at least helped to get governments talking on plans to alleviate and eradicate poverty.

Promoting People-to-People Contact

1986 :

Second SAARC Summit (Bangalore) laid special emphasis on promoting people-to people contact in the region and approved the following five initiatives

- SAARC Audio-Visual Exchange (SAVE) Program.
- SAARC Documentation Center (SDC).
- SAARC Scheme for Promotion of Organizing Tourism.
- SAARC Chairs, Fellowships and Scholarships Scheme.
- SAARC Youth Volunteers Program (SYVOP).

Other initiatives include :

- SAARC Visa Exemption Scheme (initiated in 1988)
- South Asian Festivals (9-24 October 1992, India)
- Non-Governmental Organizations (NGOs)
- Association of SAARC Speakers and Parliamentarians.
- SAARC Chamber of Commerce and Industries (SCCI)
- SAARCLAW

The easing of travel and business restrictions within the SAARC region is a visible and enduring achievement of SAARC. This has directly and indirectly resulted in increased economic and social benefits to people in all member countries.

SAARC Regional Institutions

- SAARC Agricultural Information Center (SIAC), Dhaka/Bangladesh
- SAARC Tuberculosis Center (STC), Baktapur/Nepal
- SAARC Meteorological Research Center (SMRC) , Dhaka/Bangladesh
- SAARC Documentation Center (SDC), New Delhi/India

Regional Conventions/Agreements

- Agreement on Establishing the SAARC Food Security Reserve (SFSR) - Third SAARC Summit (Katmandu, 1987).
- SAARC Regional Convention on Suppression of Terrorism - Third SAARC Summit (Katmandu, 1987).
- SAARC Convention on Narcotic Drugs and Psychotropic Substances - Fifth SAARC Summit (Male', 1990).
- Agreement on SAARC Preferential Trading Arrangement (SAPTA) - Seventh SAARC Summit (Dhaka, 1993) has been ratified by all Member States.

SAARC Funds

- SAARC Fund for Regional Projects (SFRP) - established in 1991.
- SAARC - Japan Special Fund - established on 27 September 1993, Katmandu.
- South Asian Development Fund (SADF) - approved by the Fifteenth Session of the Council of Ministers (New Delhi, 1995).

Designated SAARC Years

- 1989 - SAARC Year of Combating Drug Abuse and Drug Trafficking.
- 1990 - SAARC Year of the Girl-Child.
- 1991 - SAARC Year of Shelter.
- 1992 - SAARC Year of Environment.
- 1993 - SAARC Year of Disabled Persons.
- 1994 - SAARC Year of the Youth.
- 1995 - SAARC Year of Poverty Eradication.
- 1996 - SAARC Year of Literacy.
- 1997 - To be announced
- In addition, 1991-2000 AD has been designated as the "SAARC Decade of the Girl-Child".

II South Asia Co-operative Environment Programme (SACEP)

Since its establishment in 1982, SACEP has initiated a number of projects that are building up national capacity in a variety of environmental issues. The overall focus of SACEP's activities includes capacity building and institutional strengthening, conservation and sustainable use of bio-diversity, ecosystem conservation and management, environmental information and management and education and awareness raising.

SACEP addresses these issues through the following programmes:

- a) SACEP South Asia regional seas programme
- b) Improvement of legal and institutional framework,
- c) Private and public co-operation initiatives

III Developments in South Asia Sub-regional Cooperation

It is important to extend assistance for sub-regional cooperation in South Asia, where there is a growing momentum of such cooperation. Following are developments that has taken place in the field of sub-regional economic cooperation:

- *Chukha Hydel Project* for power delivery from Bhutan to India
- Signing of the *Mahakali Treaty* between India and Nepal
- *Enhancement of the transit facility* from Nepal to Bangladesh through the eastern corridor in India
- Signing of the *Ganges Water-Sharing Agreement* between India and Bangladesh
- Signing of the *India-Sri Lanka Free Trade Agreement*
- Activities initiated under the *Bangladesh, India, Myanmar, Sri Lanka, Thailand Economic Cooperation (BIMSTEC)* initiative
- Formation of the *South Asia Growth Quadrangle (SAGQ)*

APPENDIX6: Road from Rio to Johannesburg

1. UNCSD First 5 year programme formulated, 1993
2. Rio +5 review by UN General assembly in a special session in 1997
3. UNCSD Second 5 year programme formulated, 1998-2001
4. (Theme: Poverty eradication, Sustainable Production and consumption)
5. The 55th session of UN General assembly decided that CSD would serve as the central organizing body for WSSD 2002, Dec. 2000
6. CSD 10 Global prep comm 1 for the WSSD 2002 held in May 2001
7. (Organizational issues, defining modalities of processes and Summit itself)
8. National, sub-regional, regional preparatory meetings
9. Global prep Comm 2 (Feb,2002) – Substantive review & major group inputs
10. Global prep Comm 3 (April, 2002) – Final review & major group inputs
11. Global prep Comm 4 (June, 2002) – Identification of Priority Issues & major group inputs
12. WSSD (Rio Earth Summit +10, Johannesburg, S Africa, 2-11 September, 2002

APPENDIX7: International Development Goals : 2015

- Poverty : Half between 1990 and 2015
- Primary school enrolment : 100%
- Gender disparities in education : complete elimination
- Infant mortality : 2/3 reduction from 1990 to 2015
- Maternal mortality : Reduction by 3 quarters
- Health service : Access to all
- National sustainable strategy : Implementation by 2005
- Loss of environmental resources : Reversal by 2015

APPENDIX8: Sustainable Development Practices – Case Studies

S.No.	Country	Issue	Title
1.	Bangladesh	Micro Finance	Fighting Poverty – The Grameen Bank in Bangladesh
2.	Bangladesh	Water	Community-managed Water Points in Dhaka, Bangladesh
3.	Bhutan	Micro-enterprise	COTTAGE INDUSTRY DEVELOPMENT PROJECT IN BHUTAN
4.	Bhutan	Rural development	Model Village In Bhumtang Bhutan
5.	India	Desertification	A Project Addressing Desertification through Local Solutions – the “Barefoot Approach” in Rajasthan, India
6.	India	Water conservation	Rainwater Harvesting Alwar, Rajasthan, India
7.	India	Women	Social and Financial Empowerment of Poor Women in India
8.	India, B'desh	Water	Ganges Water Sharing Treaty
9.	Iran	Climate Change	Phasing out of Ozone Depleting Substances in Iran
10.	Maldives	Environmental Awareness	A Million Tree Programme
11.	Nepal	Energy	Credit Guarantee: Nepal Household Biogas
12.	Nepal	NRM	Community Forestry Program in Nepal
13.	Pakistan	Sanitation	Community-based Underground Sanitation System in Orangi, Pakistan
14.	Pakistan	Waste Management	Private Sector Initiative towards Urban Waste Management in Pakistan
15.	Pakistan	Women	Women’s Organizations for Rural Development in Northern Pakistan
16.	Sri Lanka	Biodiversity	Sri Lanka and its Biodiversity
17.	Sri Lanka	Eco-tourism	The Kandalama Hotel: An Eco Experience
18.	Sri Lanka	Environmental Management Practices	Metropolitan Environmental Improvement Programme (MEIP), Colombo - Sri Lanka

FIGHTING POVERTY – THE GRAMEEN BANK IN BANGLADESH

The Grameen Bank of Bangladesh is one of the world's leading programmes for poverty alleviation. It was initiated in 1977 and is based on the understanding that the lack of access to credit is the main hurdle in the progress of the rural poor.

The major objective of the bank is to provide institutional credit to landless people for remunerative self-employment. With its specially designed credit programme, it extends loans to women and men living in absolute poverty who cannot otherwise offer collateral for bank loans. Membership to Grameen Bank groups is open to like-minded people having the same social status and whose families own less than 0.5 acre of cultivable land or the value of a family's total assets does not exceed the market price of one acre of average quality land in the locality.

In 1983 Grameen Bank was reconstituted as a specialized financial institution. The operational objectives include: extending banking facilities to the poor especially women; elimination of exploitation of the poor by money lenders; creation of self-employment opportunities for the unutilized manpower; organization of people to strengthen themselves in socio-political and economic aspects through mutual support: reversing the vicious cycle of poverty – low income, low savings, low investment to 'more income, more credit, more investment'; encouragement of self-reliance among the groups; ensuring better health, nutritional, housing and education facilities for its members.

The total number of borrowers to date far exceeds 2 million, out of which 94 per cent are female borrowers. Grameen Bank's services reach about 40 000 villages. It has extended small credit amounting to US\$1 810 million. The small savings of poor villagers to date are over 4 900 million takas (US\$130 million). Women are considered more banable and more trustworthy (this trust has been amply rewarded through a recovery rate of ninety eight per cent on all loans advance to women).

The main reasons for the successes of Grameen Bank are as under:

- Loans are small (average of US\$100 each) and carry no interest subsidy
- Loans are given at a much higher interest rate than bank loans in the market, reflecting the extra-administration cost of small loans
- The poor are required to put aside some saving – at least one taka (US2.5 cents) a week, thus encouraging the habit of self-reliance among the poor
- The bank went to the poor, rather than waiting for the poor to come to the bank.

Grameen Bank has also introduced housing loans for the poor. A Grameen Bank member can borrow up to US\$640 for constructing a simple tin roof house. It has disbursed housing loans for construction of over 310,000 houses. The GB members are also encouraged to pay attention to their social situations and health conditions. These issues have been documented as the 'sixteen decisions' which are strictly followed by staff and each member. The sixteen decisions certify a change in the attitudes of its clients.

The Grameen Bank is now experiencing with other initiatives, including the creation of a \$100 million People's Fund to finance replication of this experiment in other developing countries. Grameen Bank is also working towards reducing environmental degradation. This aspect has also been incorporated in the sixteen decisions. Grameen Bank's approach is total development. The sixteen decisions and the credit are an effective mix to approach alleviation of poverty. This approach has proved that the poor have the capacity to improve their lives. Grameen Bank experiences have been replicated in 40 countries of the world.

Source : State of Environment Asia and the Pacific – 2000, Pg. 212, UNESCAP and ADB

COMMUNITY- MANAGED WATER POINTS IN DHAKA, BANGLADESH

Approximately 70 percent of Dhaka's 2 million squatter dwellers are deprived of safe drinking water because they lack titles to the land they occupy. In very poor areas, the solution had been the provision of free street hydrants, yet it did not allow cost recovery.

With the support of local NGOS and international donor assistance, communities are being allowed to manage water points. The community bears the cost of installation and pays a security deposit for water points on city property. The community is tasked to provide access roads and do excavation while the water authority lays pipes, installs the water points, and supplies water. This has resulted in access to permanent and legal water sources at half the price. Although prices are low, cost recovery has been possible. Currently, 33 water points serve 250 to 400 users each. Upon recovery of capital cost and improvement of management capacities, assistance will be phased out and the community will be fully responsible for management, operations, and maintenance of the water point.

The success of the water points in providing water to poor settlements has been largely due to the participation of the community. Village leaders of poor settlements are assisted to organize the community. The community then chooses the water point site, formulates rules for water access, sets rates for water use, and defines arrangements for management, accounting, operations, and maintenance. The sustainability of this effort is largely based on the community's initiative.

Source : Sustainable Development in Asia, ADB, Pg. 117

COTTAGE INDUSTRY DEVELOPMENT PROJECT IN BHUTAN

The problem

Cottage industry and handicraft in Bhutan represent an old tradition of skilled artisans, social relationships, religious customs, cultural activities and they are a source of barter trade.

Traditionally, several of the crafts were associated with the monastic and religious life and they were carried out by men and women for their own domestic use or for exchange either within their own community or for trade in other parts of Bhutan, Tibet or India.

Though the sector has a skilled work force, today's imports and other development priorities have taken away the importance of cottage industry as a source of employment and income. The international market is seen as fiercely competitive and people in the local market prefer to buy cheap imports rather than costly traditional handmade items. Even tourists passing through Bhutan find its traditional handmade items uncompetitive in quality, price and product variety in comparison with other countries.

Cottage Industry Development Project

Despite the above situation, it was felt that it is not too late to rejuvenate the industry. Master craft people are still alive and capable, raw materials are still available within the country and the demand for quality ethnic products still exists.

With these factors in mind, the Cottage Industry Development Project (CIDP), under the Ministry of Trade and Industry, was established in August 1994, to develop marketable products and undertake a sustainable marketing programme in collaboration with private and public-sector programmes involved in cottage industry, particularly the thirteen crafts (*Zoring Chusum*). The project is the responsibility of Entrepreneurship Promotion Centre of the Ministry of Trade and Industry, but it is implemented by IDEAS Aid International.

The Approach

The project is supposed to be self-sustainable in the long run and not be dependent on open-ended external funding and this. Requires the development of marketable products and a sustainable marketing programme. This is achieved through:

- the development of local management and technical capabilities.
- the establishment of on-going market links between Bhutan's producers and the regional and international markets through a market support programme.
- the establishment of a point of reference for buyers coming into the country who are looking for producers able to develop products for international markets.
- the implementation of a product development programme that addresses the needs of each sector of the cottage industry and handicrafts in order to create greater market relevance for these products.
- the display of quality products in the local market as a stimulus to producers and retailers to develop high-quality products and make professional presentations of Bhutanese products.

The Impact

Since its operations started, the project has made significant progress in two areas. First, it has been able to organize a showroom to display the products. The showroom provides an outlet to the producers and encourages them to produce better products. It has set minimum quality standards and accepts only those products which meets these standards. This has resulted in greater quality awareness amongst the local producers. To produce better and marketable products, the CIDP has decided to work backwards from the market to the producers and this enables them to modify the products to suit the customers while maintaining the core traditional aspects.

Second, the excellent response to the tailoring training programme has enabled the CIDP to train qualified tailors who in the longer run will be able replace foreign labourers thereby achieving the national goal of sustainability. The training has also proven that people are willing to engage in some form of crafts provided there are some monetary gains. The CIDP plans to gradually create opportunities in other crafts in a similar manner.

Besides the development of cottage industries and crafts, the programme promotes the preservation of local traditions, it is environment friendly and creates jobs without gender biases, and it helps people remain in the rural areas. The Cottage Industry Development Project promotes partnerships between the promotional institutions and the CIDP trainees as well as other entrepreneurs like weavers, potters and painters. The trained tailors are now not only producing for the showroom, but also for other institutions like the Handicrafts Development Corporation and private handicrafts shops. Entrepreneurs are now more aware of the needs of each sector in the cottage industry and handicrafts and are proceeding according to the market relevance to these product areas.

Source : <http://www.hsd.ait.ac.th/bestprac/hand.htm>

MODEL VILLAGE IN BHUMTANG BHUTAN

The challenge

In order to ensure equity in the improvement of the living conditions in the rural areas of Bhutan, it is necessary to encourage a balanced development in the provision of essential basic services such as safe drinking water, electricity, roads, telecommunications, marketing facilities and social services.

The Model Village

The Model Village is one such balanced strategy which is used to ensure village-based developments. While checking shifts, it also fosters a development which is environment-friendly and promotes socio-economic and cultural development. A model village is a demonstration village where the environment and sanitary conditions are improved through community participation with the overall objective to improve the health status of the village population.

The Model Village approach was initiated in the district of Bhumtang as one of the main components of the Primary Health Care Intensification Programme. The district started with the ten Model Villages following the decision of the Programme. Intensification workshops were attended by community leaders, women, religious and traditional practitioners, village health workers and sectorial heads from the district administration. Following are a few of the practices applied in the Model Village approach :

- construction and use of latrines and refuse disposal pits;
- separation of animal sheds from the house as well as control of stray animals in the village;
- regular cleaning of the village surroundings and maintenance of the drinking water supply through organized support systems;
- provision of soiling and stepping stones for village footpaths;
- promotion of personal hygiene;
- promotion of kitchen gardens and the cultivation of a variety of vegetables;
- planting of trees and protection of community forests.

The Approach

Model, in this context, signifies initiatives for replication and emulation by the villages based upon their local situations. The actions making up the Model Village can be summarized as: it is indigenous concept and approach whereby health is used as an entry point;

- the sustenance of the Model Village is ensured through active community participation and use of local resources;
- it improves the local habitat within the existing culture and traditions;
- there is government support for recognition and granting approvals;
- a social welfare development fund is established to help the handicapped and the aged and to ensure the maintenance of drinking water supply systems; the fund is developed through community kitchen gardens and interest charged on the loan taken by the community members.

The Model Village approach is dynamic and flexible to enable continued development over time with progress in socio-economic development. Because of local ownership, participation and affordability, the long-term sustainability is ensured. The local needs and the problems are identified by the community itself. The solutions and technologies are based on local priorities, conditions and resources. Consensus is sought on decisions taken and community ownership is ensured which influences peoples participation and sustenance.

New and simple technologies are adapted to the local needs and conditions. Such technologies include squatting slabs for deep pit-latrines, rural drinking water supply systems, smokeless stoves, etc. Such new technologies have also helped to promote environment-friendly customs while improving community health.

The community and development agents work as partners on equal terms, the latter acting as facilitators and helping with technical know-how and other needed resources. The community takes the lead role in decision-making and implementation of development activities.

The Impact

One of the major achievements of the Model Village Programme is the positive changes in the behaviour of the population as a result of increased public awareness and perceptions about health in particular, and community development in general. Reduction in morbidity and mortality is achieved through improved personal hygiene and sanitary behaviour of the population. An improvement in the nutritional status of children was found due to availability and consumption of various kinds of vegetables through the promotion of kitchen gardens and improved dietary habits.

Because the Model Village programme was successful in the Bhumtang district, the Government of Bhutan recognized the role that the Model Village can play in mobilizing community participation for the promotion of health and other community development activities. As a consequence, the Government approved the replication of this concept and approach in other districts.

The Model Village is an example of an activity which contributes towards the development of a habitat in harmony with the environment and technological advances. However, additional development such as lighting facilities, road and telecommunications, marketing and social services are equally important components to ensure equitable development between the urban and rural areas.

Source : <http://www.hsd.ait.ac.th/bestprac/bplist.htm>

**A PROJECT ADDRESSING DESERTIFICATION THROUGH LOCAL SOLUTIONS –
THE “BAREFOOT APPROACH” IN RAJASTHAN, INDIA**

The Social Work and Research Centre (SWRC) started work in the Indian province of Rajasthan 27 years ago. It serves an area that has seen two spells of severe drought and famine (each lasting up to five years) over the past 25 years. While working on the provision of safe drinking water, education, health, and awareness raising, the most interesting work of the NGO and the College is on the rehabilitation of the environment, in such a way that the activities also support poverty alleviation. The activities include, the rehabilitation of 600 acres of wasteland by planting traditional fuel and fodder species, awareness raising, reinforcing old environment-friendly practices and substituting harmful practices with other alternatives. The greatest achievement of SWRC is the Barefoot College at Tilonia that was started in 1986. Uneducated youth, normally dubbed as unemployable, have been trained in the College to repair and maintain hand pumps in a way that they maintain their recharge rates and do not run dry. 530 “barefoot mechanics” maintain 15000 hand pumps that serve 3.7 million people. Another 115 “barefoot solar engineers” have installed, and now repair and maintain 75.5 kws of solar panels. The College itself is fully solar powered. The College has also produced “barefoot doctors, chemists, midwives, teachers and civil engineers”.

The NGO has a novel approach to managing and recycling waste, and then feeding it into its other programmes, creating employment along the way. For example, waste paper is reused in making glove puppets, which are then used in the 900 plus puppet theatre performances each year. These puppet theatres highlight environmental issues in villages. Kitchen and biological wastes are used in biogas plants that produce fuel for lighting and for supporting laboratories that run medical tests. Agricultural wastes are used for making handicrafts which brings earnings of about US \$15/month for each woman involved in the production. Rubber from tires and other waste products are made into educational aides for the 84 night schools run for dropout children, which have annual enrollment of over 1 600 boys and 1 100 girls (children who tend goats and cattle during the day, and cannot attend regular government schools).

Monsoon rains, when they come, are collected in tanks. In areas of extreme scarcity of wood, geodesic domes have been fabricated out of scrap metal to reduce pressure on desert vegetation (this work provides employment for village blacksmiths). The people construct rainwater harvesting structures. They plant trees that are indigenous. They respect the desert, and do not fight it artificially. They know how to use the sun, the air and the wind and the plants and animals. They have converted the area into an ecosystem that is pulsating with vitality, where others see only sand and waste. The success of the project in Rajasthan has already led to expansion of training and capacity building efforts of SWRC all over Indian deserts. The work of SWRC in Rajasthan demonstrate that living in harmony with the environment can improve community's well being. Its barefoot approach also shows that in many cases, problems of poor can be solved by simple technical means adopted to local environment and may not require sophisticated technical training.

Source : State of Environment Asia and the Pacific – 2000, Pg. 203, UNESCAP and ADB

RAINWATER HARVESTING ALWAR, RAJASTHAN, INDIA

In the mid-1980s, Tarun Bharat Sangh (TBS), a local voluntary agency, assisted villagers of Gopalpura, Alwar, in building three small earthen rainwater harvesting structures (*johad*). These small check-dams store monsoon rains, irrigate fields, and increase percolation on the ground to recharge wells. Due to massive deforestation, groundwater in the area was not recharged, and virtually all wells were dry. By the next monsoon, the wells of the poor, drought-stricken village had water. The idea is founded on building checkdams to catch water, protecting and regenerating forests to stop soil erosion, and assuring consensus within the community on works to be taken up.

The success of these initial efforts has resulted in increased check-dam construction and rehabilitation. There are now 3,000 waterharvesting structures in 650 villages. The villagers and TBS regenerated 6,500 m² of land. The areas covered now have more groundwater and surface water. Groundwater tables have increased by 6 m on average. Forest cover has also increased by 33 percent. Five formerly seasonally dry rivers now flow perennially as a result of the 20 percent additional groundwater recharge. All of these benefits come from the use of only 3 percent of total rainwater.

The availability of water allows agriculture to be productive and self-sustaining once more. The economic gains from the efforts of TBS and the villagers are phenomenal. Average annual per capita income increased by \$19.78. For every dollar invested in checkdams, economic production in villages increases by \$4.20. The negative social impacts associated with environmental degradation have also been reversed, with reduced migration, increased attendance in schools, reduced crime rates, and increased participation of women in village decisions.

The efforts of TBS and the villagers have been called the largest mobilization of people for environmental regeneration. Effective village-level institutions have allowed the massive network to be managed entirely by as many people as possible. Each family in a village is represented in a central institution that looks after all water conservation activities of the village. Villagers actively participate in all aspects of water conservation, including bearing the costs of their activities. As of 1997-1998, water conservation structures cost \$3.5 million, of which \$2.6 million was contributed by villagers in cash or kind. Although TBS has had numerous problems with the bureaucracy, it is the villagers themselves who refuse to stop the activities, leading to changes in the legal system.

Sources : Sustainable Development in Asia, ADB, Pg. 52

SOCIAL AND FINANCIAL EMPOWERMENT OF POOR WOMEN IN INDIA

Chennai (formerly Madras) is the capital of the Indian state of Tamil Nadu. A coastal metropolis, Chennai has a population of 4.2 million people (sex ratio of 951 females to 1,000 males) and an area 174 square kilometres. In 1977, floods and other natural disasters had terrible effects on the poorest of the Chennai, especially women. The Working Women Forum (WWF) an NGO was founded in 1978 to respond to needs of heavily indebted women, whose labour was cheap and disposable as they were not organized. Low cost and accessible credit was identified for effective relief from poverty, hunger, indebtedness and strengthening their productive role.

Initially, WWF acted as an intermediary between national banks and its members to facilitate their access to credit. Frustrated with the formal banking system which did not address their needs, 2500 members of WWF, with the help of external donors, created the Working Women's Cooperative Society (WWCS) in 1981. The most important challenge was to identify and train a cadre of catalysts within each neighbourhood. It was also difficult to convince men that the program should focus only on women. By 1982-83, however, group leaders managed to take control and the program rapidly grew into a mass socio-economic movement. As it evolved into an emancipation movement for poor women with various partners joining the initiative including the Government of India and UNFPA. Out of an initial seed capital of Rs. 50,000, WWF has grown into the largest credit cooperative network with a recovery rate of 97% and a cumulative disbursement of 396 million Rupees. (Equivalent of US\$ 8.8 million).

Many members have moved from trading and vending occupations to skilled and manufacturing business. 76 percent have been relieved from their indebtedness, 92 per cent are now able to afford two meals a day while 80 per cent have improved their housing. By raising awareness on health issues WWF has also created a voice and a demand for improved delivery of health services. WWF/ICNW (Credit institution of WWF) is 80% operationally self-sufficient and 75% financially self-sufficient.

Source : <http://bestpractices.org/bpbriefs/women.html#india>

GANGES WATER SHARING TREATY

The Farakka transboundary water dispute between India and Bangladesh has come to an end with the signing of the long-awaited Ganges Water Treaty Between India and Bangladesh. The treaty has recently been signed by the Prime Ministers of the two countries in New Delhi. Putting aside the legal parlance of the treaty, the agreement in general has enkindled a hope that the problems and sufferings that ensued from the upstream withdrawal will end soon.

The treaty provides a formula for sharing of the Ganges water from January 1 to May 31 in 10-day periods. According to the formula, when the flow is more than 75 000 cu sec (CFS), India's share will stand at 40 000 cu sec, Bangladesh receiving the rest. When the flow is between 70 000 and 75 000 cu sec, Bangladesh will receive 35 000 cu sec and India will receive the rest. When the water available at Farakka is 70 000 cu sec or less, India and Bangladesh will share equally. If the water availability at Farakka falls below 5 000 cu sec, the two countries will meet immediately to decide the shares. The sharing is based on the recorded average water availability in these 10-day periods from 1949-1988. The focal point of this treaty is to ensure 35 000 cu sec of water for Bangladesh in alternate 10-day periods during the least water available period (March 1 to May 10). However, the "guarantee clause" of the previous 1977 agreement in Bangladesh's favour has not been included in the treaty.

The Ganges water-sharing treaty has finally broken the deadlock in the water sharing negotiations between the two countries and created a favourable atmosphere for agreement on sharing of the water of 53 other common rivers. The treaty is a manifestation that cooperation for mutual benefit can be attained through negotiation and strong political will of the involved parties.

Source : State of Environment Asia and the Pacific – 2000, Pg. 94, UNESCAP and ADB

PHASING OUT OF OZONE DEPLETING SUBSTANCES IN IRAN

Iran is not a producer of ODS but it imports and consumes considerable amount of ODS. The objective of the project is to identify consuming sectors and assist the industry to phase out use of ODS by year 2010. The technological and partial financial assistance is provided by the Multilateral Fund for the Implementation of Montreal Protocol (MLF) which provides such assistance to developing countries through requiring industrial countries to contribute money.

The starting point for ODS phase-out is ratification of Montreal Protocol which was done by the government of Iran in 1990 followed by establishment of an Ozone Layer Protection Unit by the government and funding of MLF. OLPU employs a number of national consultants appointed by the National Project Director. The first task of OLPU was to draw up a Country Programme spelling out the strategy for the phase-out effort as well as identifying the ODS consuming sectors/sub-sectors. This was done in 1993 and funding was approved by MLF in the same year.

To date 6 projects covering 25 enterprises have been approved for funding by MLF and a number of others have been identified which will phase out ODS in future years. So far over US\$25.00 m of funding has been approved for Iran projects by MLF and it is estimated that about the same amount would be allotted for future projects. Apart from financial and technical assistance of MLF, the enterprises themselves have also invested and will be investing in the process of ODS phase-out, at times amounting to as much as 50% of the grant provided by MLF.

It is hoped that by year 2010, or earlier, Iran with the financial and technical assistance of MLF will have been able to phase out its average consumption of about 6,500 tonnes of ODS and meet its international obligation in protecting the Ozone Layer. Moreover, the concerned enterprises will have upgraded their technology through provision of more advanced equipment and necessary training which are funded by MLF.

Facts :

- Montreal Protocol ratified in Iran in 1990
- Ozone Layer Protection Unit established in the Government in 1993
- US\$25 million attracted as multilateral assistance by 1999

Achievements :

- 11 of the enterprises have been converted to use non-ODS materials
- production technology upgraded at the enterprises
- 1250 tonnes of ODS phased out and environmental goods produced

Source : <http://www.undp.org/rbap/IRAN.htm>

A MILLION TREE PROGRAMME

Location :

Throughout the Maldives.

Responsible organization :

Ministry of Fisheries and Agriculture

Description :

Considering the large number of trees that are being cut down for timber, firewood and other purposes, tree populations on some atolls have declined alarmingly. In certain regions of the country some trees have become very rare indeed. This has given cause for concern given the importance of trees for everyday life in the Maldives. Trees also have a very important environmental role in providing protection and stability to islands. In order to meet these aims the Government of the Republic of Maldives started a programme in early 1996 to plant one million trees during the course of the next three years. This programme has been initiated by the President, Maunoon Abdul Gayoom.

Issues addressed :

To safeguard the local germplasm of plant by regenerating endemic plant species. To protect the environment, especially beaches threatened by erosion.

Objectives :

To plant a million trees throughout the Maldives within a three-year period.

Results achieved :

By the end of September 1996, 500,000 plants have been grown throughout the Maldives.

Lessons learned :

- Establishing nurseries at different regions of the country for the purpose of the distribution of seedlings.
- Raise awareness among school children as well as in the rural areas on the important of planting trees.
- Participation of voluntary organizations and individual people at different activities of the programme.

Financing :

Locally from private and public sources.

Source : <http://www.un.org/esa/earthsummit/maldi.htm>

CREDIT GUARANTEE: NEPAL HOUSEHOLD BIOGAS

The Nepal Government with support from the Dutch development agency is implementing a successful Biogas Support Program (BSP) that has greatly increased the penetration of household biogas plants such that there are now over 50,000 in the country. Important parts of the program have been strict quality controls, equipment warranties, an explicit biogas capital cost subsidy, and utilization of an existing and implicitly subsidized loan program. One outcome has been the emergence of a growing biogas supplier industry, although the full competitiveness of the market place has yet to be established. Despite its ongoing success, even greater and equitable penetration of the biogas program is constrained by the need for loan collateral of the type acceptable to the banks (e.g., titled land, jewelry). Many households do not have such collateral even though they have the animal and dung resources, water access, and loan payment ability needed to invest in biogas plants under the program. As part of a study for ADB, deLucia and Associates Inc. (1998) and its local colleagues developed a credit-conditioning innovation to mitigate this constraint. A pilot loan guarantee option was set up and organized to provide the needed collateral and to undertake the required financial, social/organizational, and technical inter-mediation.

A guarantee fund under the auspices of a local activist NGO was set up at a local bank and used as collateral by the bank for making loans for biogas plants to households organized by the NGO. The pilot site was selected based on the identification and interest of the following players:

- a community where there is (i) a significant number of households that would be biogas investors or users if the collateral problem were overcome and (ii) accessible water supplies so that the biogas water requirements are not a heavy burden, especially on women and children;
- an activist NGO or other entity, preferably working in the area, for cost-effectiveness, with ongoing assistance activities that encompass (i) biogas or related activities, (ii) training, and (iii) community or group savings or lending activities, including financial, organizational, and technical intermediation;
- one or preferably more BSP-certified biogas plant suppliers, preferably those that will give sales commissions to the activist NGO that provides biogas customers and that will provide technical training and technical intermediation; and
- an accessible branch office of a bank (with a willing headquarters) providing BSP loans and financial intermediation.

After much discussion, households exhibited a willingness to pay the much higher cost for the loan collateralized by the guarantee fund than for a loan directly available from the bank if they had collateral on their own. The higher loan terms were partly based on prevailing informal sector interest rates. This higher cost was to cover the bank loan payments, a guarantee fee (covering cost of tied-up money and defaults), NGO intermediation costs, and guarantee fund expansion (in order to meet equity goals, which are especially important since the scheme enables access to other subsidized programs).

Keys to the replicability and sustainability of the scheme are the goals of being self-financing and of increasing biogas access. Full cost recovery includes (i) the activist NGOs' costs of financial and organization intermediation, (ii) the guarantee fee, (iii) sales commission from the biogas company, and (iv) a loan origination fees indirectly from the bank. The fees enable the NGOs to recover their costs, thereby providing an incentive to continue and expand the guarantee pilot.

Source : Sustainable Development in Asia, ADB, Pg. 135

COMMUNITY FORESTRY PROGRAM IN NEPAL

Forest regulations in Nepal now allow particular forest areas to be handed over to forest-users' groups—households that live near the forest and have a historical affiliation to it. Forest-users' groups protect, manage, and use the forest area, share all benefits among users, and possess exclusive rights to the forest's income. Regulations concerning forest users' groups—which were formed in 1974—reflect the recognition of effective indigenous forest protection and management practices, and the rights of local people to manage forest resources. Of the country's total forestry sector investment, 47 percent is earmarked for community forestry (1988-2008). Ten years later, the first 4 forest-users' groups, which covered 411 ha, have grown to 6,062, managing 403,688 ha involving 645,518 households.

Protection activities by forest-users' groups have led to increased productivity and biomass, stabilization of erodible slopes, and improvement in the water regime, all of which have helped reduce rural-urban migration. Local communities now have access to forest products and crop income. Forest-users' group funds are used for community development activities such as running schools, school repair and construction, improvement of foot trails, and upgrading drinking water facilities and irrigation canals. Success has led to donor support. Although the program has had some negative consequences—for example, low representation of disadvantaged groups, losses to those relying on the open-access nature of the forest, and conflict within and between forest-users' groups—the positive benefits far outweigh them.

Nepal's experience with the community forestry program has led to the recognition of some essential components:

- empowering legislation that ensures users' rights over resources;
- committed officials;
- simple and clear procedures and guidelines;
- continuous support, including training, to user groups; and
- regular reflection and improvement in policy and implementation.

The benefits from community forestry go beyond environmental improvement. Community forestry is an important vehicle for developing social equity and building a democratic process. Nepal's program is considered to be one of the most progressive exercises in participatory development—no small feat considering caste and gender barriers. Empowering local people has also led to changes in attitudes. For example, local communities have become more cooperative in dealing with forestry officials. A change in attitude is essential in assuring sustainability. The community now collectively protects and manages the forests and sees trees as living capital assets whose value increases over time.

Source : Sustainable Development in Asia, ADB, Pg. 99

Community- Based Underground Sanitation System in Orangi, Pakistan

It is now difficult to find a lane in Orangi that does not have an underground sanitation system. Of the 94,122 houses in the Karachi slum of 900,000 residents, 85,000 had sanitary latrines as of 1996; 5,610 lanes out of 6,857 had an underground sewerage line; and 398 secondary drains collected and carried the effluent to the open nullahs (drains). The people of Orangi invested almost Rs70 million (\$1.73 million) in the effort.

The Orangi Pilot Project has become a famous example of people empowerment. With the help of an innovative community organizer, Akhtar Hameed Khan, the project has built up local organizations able to plan and finance their own latrines and house drains and also to pressure the Karachi municipality to provide funds for secondary and primary sewers.

Initially, the project focused on developing low-cost ways of granting the people's strongly expressed wish to rid their environment of excreta and wastewater. With the help of committed project architects and engineers, and the residents' own labor, the communities installed in-house sanitary latrines, house drains, and shallow sewers in the lanes and streets at an average cost of about \$25 per household. Household holders contribute their share of the costs, participate in construction, and elect a "lane manager" to represent about 20-30 households.

These impressive achievements required the overcoming of four barriers:

- the psychological barrier posed by peoples' belief that developing a sewerage system is the duty of government and should be given free of cost;
- the economic barrier posed by the high cost of the conventional system designed to specifications developed in rich countries;
- the technical barrier requiring the training of local residents and their contractors in the skills necessary to construct an underground sanitation system; and
- the sociological barrier requiring organizational skills for community collective action with full public participation.

Source : Sustainable Development in Asia, ADB, Pg. 120

PRIVATE SECTOR INITIATIVE TOWARDS URBAN WASTE MANAGEMENT IN PAKISTAN

Rotting garbage creating a health hazard is a common sight in many parts of Karachi. It is also a civic menace for city-dwellers. Municipal authorities have failed to address the issue of solid waste disposal due to lack of capacity. Once it leaves the house, waste is often dumped on any vacant plot of land, or on streets, for want of a proper neighbourhood dumpsite. Where a site exists-usually a low four-wall structure open to the air-waste is more likely to be found lying outside rather than within this makeshift "receptacle". Scavengers rummage there for recyclables, but a large part of garbage remains because there is no regular waste collection service to ensure that the waste is cleared away daily. Waste Busters, a private enterprise has now become active to offer a solution to the poor.

Waste Busters began life three years ago as the Lahore Sanitation Programme. They aimed at providing solid waste disposal services through recycling. They are now called Waste Busters and have branches in Islamabad and Karachi. For Rs100 a month, Waste Busters provide a daily collection service to households who share a concern for the environment. In Lahore, Waste Busters service 10 000 eco-conscious households in Gulberg, Shadman, Model Town, Muslim Town and Cantonment areas. They employ 200 people and an average 50 tonnes of waste is collected and disposed of daily.

In order to manage waste properly, collection isn't enough. Waste Busters now sorts out materials like plastic, glass, paper and organic waste retrieved for recycling purposes. The enterprise divides the city into zones and each zone requires a transfer station where the waste is taken after being collected, for sorting.

In Lahore, organic waste is being efficiently sorted and turned into compost which is sold to farmers and nurseries to be used as fertilizer. The sorting is done at transfer stations set up by Waste Busters at sites allocated by the local municipal administration.

Unfortunately, sorting at source, the mode employed in the West, doesn't work in Lahore. The Waste Busters tried getting households just to separate the organic waste from other household waste but it didn't happen.

Waste Busters are not keen to incur the wrath of the big waste dealers, nor do they want to rob scavengers of their livelihood. "In fact, in Lahore they invite the scavengers to their transfer stations to sort the waste for them and buy it off them."

Eventually the Waste Busters would like to progress from a self-sustaining to a profitable operation. That has already begun to happen in Lahore where the daily production of an average 500 bags of the organic fertilizer, along with the sale of other recyclable material to recycling industries, has brought Waste Busters out of the red.

Source : State of Environment Asia and the Pacific – 2000, Pg. 188, UNESCAP and ADB

WOMEN'S ORGANIZATIONS FOR RURAL DEVELOPMENT IN NORTHERN PAKISTAN

The Aga Khan Rural Support Programme (AKRSP) has been forming village and women's organizations in Pakistan since December 1982. The northern Pakistan program has the twin objectives of improving the quality of small farmers' lives and developing a replicable model of participatory rural development. Forming women's organizations is an innovative approach to rural development as it empowers women in communities where they previously had low social and economic status. Since 1984, AKRSP has been assisting women's organizations by providing them with technical assistance and credit for productive packages, and training them in organization and management. Women's organizations have evolved into complex organizational systems, but management remains based on a discussion-vote-resolution procedure. In 1985, there were 40 women's organizations in the program area; by 1996, there were 834 with over 28,200 members with over Rs44.5 million in collective savings.

AKRSP's production packages focus on vegetable and poultry production, and forest and fruit nurseries, where women's productive capacities can be enhanced since the women's only income-generating asset is labor. Production packages are of two levels: the subsistence package, which provides the basic requirements of production; and the graduated package, which takes the productive activity to a commercial level. The program provides technical support through AKRSP-trained women village specialists who assist villagers adopt the production packages. It has 4,000 trained specialists and four credit windows.

The program's primary benefit is increased income for women from income-generating schemes and access to credit, resulting in an increased standard of living for families. Women gain control and use of extra income earned, and are no longer highly marginalized in household decisions. Increased income leads to increased use of social services such as health and education. It also increases savings, which increases financial security. Related to increased income is increased access to resources and markets, since women's organizations have helped overcome mobility and religious constraints.

Beyond increased income and economic bargaining power are changing gender roles. Women's Organizations for Rural Development in Northern Pakistan. The status of women has increased within the family unit, consequently increasing participation in decision making. Skills and knowledge gained through women's organizations have increased women's self-worth, redefined their roles and responsibilities, and increased their choices and expectations in life. Women's status and contribution to village-level decision making are also enhanced by women's organizations, which are thus effective instruments for fostering women's economic and overall empowerment at the grass-roots level.

Women's organizations now tackle issues that go beyond their original mandate, evolving into multi-purpose, micro-level development bodies. The sustainability of women's organizations requires institutional linkages between them and other regional service providers. Women's organizations channel services such as family planning, health care, drinking water supply, and education. They are increasingly independent and autonomous. Benefits will conceivably be sustainable due to increasing demand for products that ensure expanding market opportunities, and the changing patterns of women's participation in household and village-level decisions. Although women's bargaining power in the economic sphere requires more time to develop and a change in thinking, the impacts of women's organizations are crucial first steps.

Source : Sustainable Development in Asia, ADB Pg. 76

Sri Lanka and its Biodiversity

Due to its location and topography, Sri Lanka, is one of the smallest but biologically most diverse countries in Asia. Consequently, it is recognized as a biodiversity hotspot of global importance. Among the terrestrial ecosystems are forests varying from wet evergreen forests to dry thorn forests, grasslands, wetlands and freshwater bodies and a complex network of rivers. These together with the coastal and marine ecosystems such as sea grass beds, coral reefs, estuaries and lagoons, and associated mangrove swamps constitute the diverse and complex network of ecosystems in the country. In addition, there are numerous man-made ecosystems related to agriculture and irrigation, which have a direct bearing on the conservation, sustenance and survival of biological resources.

Sri Lanka's high population density, high level of poverty, and wide spread dependence on subsistence agriculture are exerting considerable pressure on the biodiversity of the country. Extensive land degradation and deforestation and the unregulated exploitation of natural resources (e.g. Mining for coral lime, sand and gemstones) are some of Sri Lanka's most pressing problems. In response, the National Conservation Strategy, the National Environmental Action Plan, the Forestry Sector Master Plan, the National Coastal Zone Management Plan and Coastal 2000 are some of the policy instruments that are addressing biodiversity conservation. There are also many Government Institutions whose responsibility is to translate these policy initiatives into action. However, despite the legal, policy and institutional support for its conservation, the country's biodiversity is continuing to diminish. The growth and movement of population, the opening of economic markets, and new trends in industrial development are expected to have a growing adverse impact on biodiversity unless some systematic and stringent corrective measures are taken.

Sri Lanka ratified the Convention on Biodiversity in 1994 and as a response to article 6 of the Convention, the preparation of "Biodiversity Conservation in Sri Lanka- A Framework for Action" began in early 1996. What this plan proposes is a course of action to ensure that the biological diversity within the country is conserved and used sustainably.

Source : State of Environment Asia and the Pacific – 2000, Pg. 346, UNESCAP and ADB

THE KANDALAMA HOTEL: AN ECO EXPERIENCE

The Kandalama Hotel is the first hotel in Asia to be certified under the provisions of Agenda 21 of the Rio Earth Summit as a Green Globe Hotel. Built next to an ancient irrigation tank and surrounded by tropical dry evergreen forest, the hotel is within Sri Lanka's Cultural Triangle and is flanked by two World Heritage sites. The initial public protest due to the sensitivity of the hotel's location was overcome through the completion of a formal EIA report and the successful implementation of the report's recommendations.

The environmentally sensitive design of the hotel avoids disturbance to the existing landform profile and trees, which needed to be removed during construction, were rootballed and replanted. To replant denuded patches of land, a nursery of 3 000 indigenous plants was established.

The village community was given the highest priority in the provision of employment and many of the services and utilities brought into the remote rural area were extended to local villages including electricity, roadways, deep wells and biogas generators.

The environmental management of hotel operations are categorized into six key elements: waste minimization (reuse, recycling and reducing); energy efficiency conservation and management; fresh water resources management; wastewater management; environmentally sensitive purchasing; and social & cultural development. These areas are in accordance with those laid out in Agenda 21 of the Earth Summit.

In order to obtain total participation of hotel staff, environmental committees have been established to cover key factors and every employee as a member of at least one committee. Environmental conservation is an essential responsibility in everyone's job description.

The hotel's environmental policy is available to the public and the environment factors are deeply integrated into the hotel management. Leaflets and brochures with emphasis on environmental conservation are available for all stakeholders. Guests have access to information on nature, special bird watching trails, the surrounding forest, its fauna, flora and its unique bio-diversity. Sustainable practices such as use of rainwater, solar heating panels are currently being employed, whilst windmill pumps and biogas generation are planned for the future.

In recognition of the standards of environmental management adopted by Aitken Spence, the operators of the Kandalama Hotel, the hotel has won the following environmental awards :

- International Green Globe Award for 1996, 1997, 1998 and 1999;
- Sri Lanka Association for the Advancement of Science Award-1997;
- TRAVTALK' Award-1997 by the World Tourism and Travel Council; and
- PATA Green Leaf (Gold Award) for Environmental Education-2000.

Source : State of Environment Asia and the Pacific – 2000, Pg. 298, UNESCAP and ADB

**METROPOLITAN ENVIRONMENTAL IMPROVEMENT PROGRAMME (MEIP),
COLOMBO - SRI LANKA**

On the invitation of the Government of Sri Lanka, MEIP-Colombo was set up in 1990 and has assisted the city of Colombo in developing an Environmental Management Strategy (EMS) and Action Plan which has been effectively used to assess key environmental problems, identify options, devise strategies, implement action plans, and institutionalise the approach.

The major achievement of MEIP-Colombo was that in the short space of six years it prepared a "down stream" investment project, the Colombo Environment Improvement Project (CEIP) currently being implemented by the Ministry of Housing and Urban Development. CEIP incorporates EMS priorities, such as the restoration of Beira Lake, improving the garbage collection system, constructing a new sanitary landfill and transfer stations, construction of two centralised industrial effluent treatment plants, and developing a geographic information system for Colombo. Another significant achievement towards sustainability was the preparation and acceptance of Clean Air 2000 Action Plan as government policy for air quality management. Among the consequences of its implementation were the setting up of an air quality monitoring network, introduction of unleaded petrol and setting environmentally related standards. Also significant in the development of sectoral policy was MEIP's involvement in the preparation of the national policy on Industrial Pollution Management which is unique in that it was endorsed by three Cabinet ministers namely, Industry, Science & Technology, and Environment.

Source : <http://bestpractices.org/bpbriefs/Environment.html>