The Fourth Asian Pacific Population Conference held at Bali in September 1992 expressed serious concern on population size and growth and its impact on resource loss and environmental degradation. The Bali Declaration emphasised that the ultimate objectives of sustainable development are to achieve a balance between human needs and aspirations in harmony with population, resources and the environment as well as enhancement of the quality of life of the people.

Rapid population growth in poor countries has already affected detrimentally the environment, resources and the quality of life of people. Decisive policies and programmes need to be designed and implemented to stop rapid population growth, combat poverty and check the degradation of environment. A reduction in population growth rates would of course facilitate socio-economic development and ensure sustainability of development in many developing countries.

For the poor developing countries, sustained high population growth rates mean continuous environmental degradation which is evident from the deteriorating quality of fresh water, depletion of renewable sources of energy, deforestation, desertification and erosion of productive soil, resulting in the growing number of poor being driven from degraded lands to seek refuge in cities and towns or marginal areas compounding the already existing problems of urban areas and adversely affecting fragile ecosystems.

Most of these countries are unable to provide the basic needs to their existing population including, safe drinking water, health and sanitation facilities and job opportunities. They will inevitably face increasing pressure from the incremental population particularly because they also have problems of heavy debt burden, unfavourable terms of trade and dependence on external supplies for food and energy. These critical problems need to be tackled through a focussed approach by reducing population growth, alleviating poverty, improving status of women, providing basic amenities, improving the environment, and developing social infrastructure in developing countries of the region.
The consequences of population growth on natural resources depletion and environmental degradation are long standing. There is a dire need to promote public awareness on the linkages between population factors, resources, environment and development. During early nineties these linkages have already risen to the top of the international agenda and brought in its wake renewed attention to population issues.

The Cairo World Conference on Population was the second chance after Rio to bring together the Planet’s leaders to discuss the population crisis and make the hard decisions necessary to save the Planet. Population Programmes in the South are seen as the urgent expedient solution to prevent the destruction of the environment and improve economic growth, perhaps even to improve women’s status along the way through health, education and more development aid. In the North, populations are asked to consume less, though ways to do so are vague and certainly no alternatives exist to family planning programmes such as consumption reduction programmes. The Cairo Conference has addressed issues relating to rapid population growth, increasing environmental degradation, and pervasive poverty. The status of women in this context was also emphasised. It is hoped that the recommendations of the Cairo Meeting will get fully digested by the countries of the world and will get implemented with necessary political will which lacks most of the time.

* * *

SIXTH GOVERNING COUNCIL MEETING OF SACEP

The Sixth Governing Council Meeting of the South Asia Co-operative Environment Programme was held on 1st September 1994, in Islamabad, Pakistan. The Meeting was attended by the representatives from the Member Countries of Bangladesh, Bhutan, India, Iran, Pakistan and Sri Lanka. There was also representation from UN and International organisations such as Economic and Social Commission for Asia and Pacific (ESCAP), The World Conservation Union (IUCN), United Nations Development Programme (UNDP) and United Nations Environment Programme (UNEP).

The Meeting was inaugurated by the representative of the Hon Prime Minister of Pakistan, Mr Asif Ali Zardari. Member National Assembly and Chairperson, Pakistan Environmental Protection Council. In his inaugural address Mr Zardari said that environment is a subject which concerns the entire mankind and is not the concern of just one country or nation, earth and its resources on which we freely draw including air and water, rivers and lakes, greenery and forests belong to mankind. He also said that the greatest environmental challenge of our time is to strike a balance between the needs of the people and the environment in which we live. The challenge is to strike a balance between our present day needs and the needs of our future generations.

New Director for UNEP/ROAP

Dr Suvit Yodmani has been appointed as Director of UNEP’s Regional Office for Asia and the Pacific (ROAP) effective 16th August 1994.

Dr Yodmani, a national of Thailand, was serving, since May 1992, as Vice-President for Development at the Asian Institute of Technology in Bangkok, where he was responsible, among other things, for resource generation and enhancing the Institute’s profile regionally and internationally. He has a Bachelor’s degree in History and International Relations from the Boston University, U.S.A. and also Master’s and Doctoral degrees with distinction in Administration of Higher Education and Community Development from the same University.

Before joining the Asian Institute of Technology, Dr Yodmani served in the Office of the Prime Minister of Thailand beginning in December 1990, first as an Advisor for Environmental and Public Affairs and then as First Deputy Secretary-General for Political Affairs.

Dr Yodmani is married and has three sons.

Outgoing Chairman of the SACEP Governing Council, H.E. Mr J. B. Nakkawita, High Commissioner for Sri Lanka in Pakistan, Mr Muhammad Zafarullah Khan, Secretary, Environment and Urban Affairs Division, Government of Pakistan, Mr Mitsuo Usuki, Deputy Regional Representative, United Nations Environment Programme Regional Office for Asia and Pacific and Mr V.P. Jauhari, Director, SACEP address the inaugural session.

In accordance with the provisions of the Articles of Association of SACEP, Mr Muhammad Zafarullah Khan of Pakistan was elected Chairman of the Sixth Governing Council of SACEP. The two Vice Chairman elected were Mr Haroon A. Pasha of Bangladesh and Mr Vinay Shankar of India. Mr Surya Man Shakya of Nepal was elected as Rapporteur.

Having adopted the Agenda, the meeting then considered the Report of the Preparatory Meeting of Senior Officials.
of SACEP which had taken place on 29th & 30th August 1994.

The Governing Council was appreciative of the fact of the increased Programme Activities of SACEP and that SACEP has now greater visibility in the region in respect of environmental activities. The meeting noted that the current activities of SACEP focused on the SACEP’s Strategy and Programme I (1992-1996), SACEP Environment and Natural Resources Information Centre (SENRJC), Capacity Building in the Field of Planning and Management of Coastal Areas in the South Asian Seas Programme, Preparation of the State of Environment Report for South Asia 1995, Preparation of Children’s Books, Publication of SACEP Newsletter and the South Asian Seas Programme.

BANGLADESH

OBSERVANCE OF WORLD ENVIRONMENT DAY

The World Environment day 1994 was observed throughout Bangladesh on June 5th 1994 as elsewhere in the world with a reiteration of the Stockholm Declaration calling for global protection of the environment from degradation.

Different Government, Non-Government bodies and socio-cultural organisations had organised various programmes on the day which included seminars, symposia, walkathons, processions, etc in the capital and other parts of the country.

The slogan of the UN sponsored day for this year was “One Earth, One Family”. The day marked the 22nd anniversary of the opening of the UN Conference on Human Environment held in Stockholm, Sweden in 1972. The Conference led to the establishment of the United Nations Environment Programme (UNEP) based in Nairobi.

Ministry of Environment and Forest chalked out elaborate programmes to mark the day. The programmes included, inter alia, a Children’s Rally at Shishu Park, and a Walkathon from Shishu Park to Shishu Academy in the morning at 7 a.m., Mr Akbar Hossain, Hon’ble Minister for Environment and Forest, led the walkathon. The walkathon was organised by Department of Environment under the auspices of the Ministry of Environment and Forest. Several hundred children, men, women and environment protection campaigners marched with banners and placards containing environment slogans.

The national media also focussed on the significance of the day and programmes were also taken up at the district and thana levels. Radio Bangladesh and Bangladesh Television put up special programme and newspapers also published special supplements highlighting the importance of the day.

Mr Abdur Rahman Biswas, Hon’ble President and Begum Khaleda Zia, Hon’ble Prime Minister of the People’s Republic of Bangladesh graced the occasion with their messages. The Prime Minister also distributed “Prime Minister’s Award on Tree Plantation 1992”, first of its kind in the country, to the winners at Osmany Memorial Auditorium in Dhaka.
A four day Workshop on Ecological Farming and Promotion of appropriate Technology for Rural Development was held at the Bangladesh Academy for Rural Development (BARD), Khulna. The methods of ecological farming and Spark Programme had proved successful in China and these were introduced to the participants at the workshop, who were from local villages, BARD and Governmental and Non Governmental Offices. Professor Li Zhengfang (EPA), gave an excellent presentation on 'Ecological Agriculture', which has been practiced in China for little more than a decade.

Ecological Agriculture is defined as 'a multi-layered, multi-structured, multi-functional comprehensive agricultural production system, intensively managed in accordance with principles of ecology and ecological economy'. The basis of this approach is to plan the comprehensive agricultural activities of a village/community (including forestry, agriculture, animal husbandry, subsidiary production and fisheries) around one marketable product. The system incorporates stability and sustainability as it is an effective recycling system in which productivity remains constant despite normal, small scale fluctuation in environmental variations.

Professor Da Jie, State Science and Technology Commission of China (SSTC) gave an interesting and informative account of the Spark Programme that has been developed in China since 1985. The basic concept of the Programme is to bring appropriate science and technology to the rural areas in order to increase economic production and support development. The Spark programme represents a "Technological Development Programme for the Vitalisation of Local Economies". The Programme depends on the development of efficient Village and Township Enterprises (VTES) and training of personnel in the rural areas in the new technologies achieving long-term goals of sustainable development.

According to reports, insufficient governmental attention to the environmental impact of industries has taken toll of Bangladesh's cities. Dhaka's Tejgaon area, for instance, has food processing industries located near chemical and heavy metal processing industries. In Tongi, a pharmaceutical unit functions close to a pesticide factory and the tanneries of Hazaribagh are right in the midst of a densely-populated residential area. Chittagong and Khulna are similarly threatened.

LAY OF THE LAND

The Soil Survey and Land Utilisation Directory, brought out by the Bangladesh Government's Soil Resources Development Institute (SRDI), is likely to make farming an easier proposition. Till now, farmers did not know the characteristics of the soil put to the plough and thus could not make accurate judgements about fertiliser requirements. However, all that has changed with the determination of soil characteristics in 260 out of 460 sub-districts in the country by the SRDI, which now plans to extend its survey to 42 other sub-districts.

GRASSROOTS ENVIROPLAN

The grassroots level environmental concerns of Bangladeshi citizens may finally be reflected in the Bangladesh Government's latest National Environmental Management Action Plan (NEMAP).

A series of consultation meetings with a cross-section of the population - NGOs, Farmers, Religious leaders, Teachers, Chairpersons and members of the union parishads - between the end of February and June will ferret out the environmental problems and strategies.

The sudden concern for those at ground level probably has to do with the dissatisfaction of foreign donors with the NEMAP document of the past 3 years.

INDIA

MOVE TO CHECK POLLUTION

The Ministry of Environment and Forests is exploring possibilities to introduce a provision for used batteries in the manufacture, storage and import of hazardous chemical rules, 1989.

According to Ministry Officials if the provision for used battery is introduced in the rules, the agencies importing the used battery have to take prior permission from the Environment Ministry. The permission will be given to those agencies only who have proper air pollution control equipments.

The existing rule includes only lead waste and not used battery lead. The need for the modification in the rule came into light after the Central Pollution Control Board (CPCB), an autonomous body under the ministry of Environment and forests, urged the ministry to take up the issue of import of lead waste by smelting units located in Delhi, with the Departments of Customs and Export-Import Division of the Ministries of Finance and Commerce, so that such hazardous waste material are not brought into the country.

The matter was taken up when a CPCB team found out after investigation that owners of about 18 lead smelting units in the densely populated Nangolipur-Mundka region of North-West Delhi were using lead waste as a raw material for refining. The use of lead waste was causing havoc in the areas as villagers complained to the CPCB of serious health problems and death of their livestock.

INDIA CHAIRS GEF MEETING

Mr N.K. Singh, Additional Secretary in the Department of Economic Affairs, was elected to preside at the Executive Council Meeting of the Restructured Global Environmental Facility (GEF) held recently.
India is a permanent member of the GEF and Mr Singh, India's representative on the Executive Council, played a leading role in the two-year-long negotiations which led to the restructuring of GEF in accordance with the mandate of the Rio Conference on Environment in 1992. This was the first meeting of the Council after the GEF was reshaped to accord with the aims of the Rio Conference.

Donor Nations have committed 2 billion dollars to the replenishment of the GEF Trust Fund, to be utilised over the next three years as the principle source of financing to meet the incremental costs of environment related projects.

INDIAN INDUSTRY GROUP
AGENDA 21 INITIATIVES

The Confederation of Indian Industries (CII) has recently published a report on the initiatives in the implementation of Agenda 21 last year. An Environmental Management Division was created in the CII shortly after UNCED and the basic thrust of its activities was to improve the eco-efficiency of the Indian industry and business. It has been addressing issues related to economic as well as ecological efficiency with equal emphasis. So far the division has proved specialised professional services on: Waste Minimisation, Environmental Audit, Air and Water Pollution Control, Resource Recovery, Reuse, Recycling and Waste Utilisation, Solid Waste and Hazardous Waste Management and Environmental Impact Assessment. The Environment Management Division also provides environmental policy services, sharing of experiences, information services, training and awareness services, international linkages and publications. The thrust in all of these areas is to convert environmental problems into opportunities, to improve profitability through pollution prevention, waste minimisation and waste utilisation.

INDIA PLEADS FOR
RIO PRINCIPLES

Environment and Forests Minister Mr Kamal Nath inaugurating an Indo-UK sponsored International Workshop titled “Towards Sustainable Forestry: Preparing for Commission on Sustainable Development 1993” said that if the forests principles evolved at the Rio de Janerio Earth Summit were to be truly implemented, the world would have to ensure a “sustainable management” of forests resources to meet society’s multifarious activities. The three day Workshop was attended by representative of 43 countries. Dr Klaus Topfer, German Environment Minister, who is also the Chairman of the Commission on Sustainable Development (CSD) and UK Environment Secretary John Gummer were also present.

The Objective of this Workshop was to develop formats on which information is to be presented to the CSD at its next session. The CSD is responsible for monitoring the agreements arrived at UNCED at Rio in 1992.

Mr Kamal Nath said India’s policies and programmes in the realm of forestry, particularly in the last 15 years, were of conformity with the forest principles and were in a sense their precursor. The country’s Forest Conservation Act of 1980 initiated a process by which the forests were rendered into an environmental and social resource rather than a revenue or commercial resource. Strictest controls were placed on diversion of forest land to other uses and in rare cases this was allowed for developmental projects, compensatory afforestation had to be taken first.

Mr Gummer said despite passage of two years since the Rio Meeting, the whole concept of sustainability lacked real force. Unless the fundamental issues of forests were dealt with, there could be no headway, he said.

CSD Chairman Dr Klaus Topfer underlined the importance of action-oriented decisions to implement the Rio Principles. He stressed the need for a systematic and transparent preparation for the next CSD Meeting.

BIOGAS FROM
OIL SEEDS

Farmers who want to set up a biogas plant are short of cattle dung - the primary raw material used by majority of the 1.2 million biogas plants that exist today - now have an alternative in non-edible oil seeds, which are easily available.

Scientists at the Tata Research Development and Design Centre (TRDDC) at Pune have successfully extracted biogas from oil seed cakes whose oil has been tapped. The scientists have also bred special cultures of dung-residing microbes that increase biogas yield by 2 to 5 times, claims a spokesman from TRDC. The residue of the treated waste acts as an excellent fertiliser.

The seeds that are being exploited are castor, mohwa, karanj and tobacco. The de-oiled cakes of these seeds are unsuitable for livestock feed because they contain substance that are toxic, although the seeds of karanj and mohwa are sometimes used for manure for their nitrogen content.

GREEN HOTEL INDUSTRY

When the Raheja Group of Hotels brought the old fashioned Carlton Hotel in Kodakanal, it discovered that the hill station, like many others, suffered from an acute shortage of water and an over-strained waste disposal system. Keen on improving waste disposal and the water supply, the management invested Rs 12 lakhs in a new sewage treatment plant to service the hotel's 100 rooms.

The hotel now recycles all its waste water. It purifies and pumps the water back to the washrooms and irrigates the gardens with the kitchen and bath water. Such have been the cost savings from the plant that the Rahejas are setting up similar systems at their hotels in Bombay, Surat and New Delhi.
Like the Rahejas, a similar problem prompted the Welcom Group Chain of Hotels to make a major investment in a waste recovery system at the Bay Island Hotel in Port Blair. The hotel has also installed a desalination plant and converts about 10 kilo litres of sea water into fresh water every day, thus easing the pressure on the municipal supply. Encouraged by the Andaman experience, the hotel chain has started a recycling plant at the Mayura Sheraton in New delhi. All of which helped it to bag the British Airways’ hotel industry award for environmental protection.

In a bid to be eco-friendly, the Taj Group has begun replacing various polluting elements in its hotels with biodegradable material. Paper bags have replaced plastic laundry bags, shower curtains are made of synthetic fibre and shampoo containers are also biodegradable. The group has dispensed with foil packaging and no longer uses plastic containers. The Oberoi Chain has gone in for similar environment-friendly revamping programme. On an average, the Oberoi handles over 20 tons of garbage a day and to reduce the waste they have ensured that their suppliers keep the packaging to the minimum.

NEPAL

CALLOUSNESS

The Internationally acclaimed Annapurna Conservation Area Project (ACAP) in Nepal is being flayed for its failure to involve the people living in the vicinity of Mount Annapurna in Mustang District in the conservation and development programmes, reports Panos.

The Chairperson of the Mustang District Development Committee says, “there is no co-ordination between ACAP activities and the actual needs of the local communities it claims to serve.” The main grouse of the committee is that ACAP Officials arbitrarily decide on community projects themselves.

DAMAGE PREVENTION

Nepal has tied up with Japan to establish a Water-induced Disaster Prevention Technology Centre. Among other things the US $8 million project envisages the training of technicians in flood control, development of flood control technologies and appropriate construction methods.

According to Mr Surya Nath Upadhayay, Secretary in Nepal’s Water Resource Ministry, the Centre will use appropriate low-cost technology to cope with water-induced disasters such as soil erosion and landslides.

FRETTING OVER FUMES

The Environment Conservation Council of Nepal, headed by Prime Minister Girija Prasad Koirala, has stipulated permissible smoke limits of 65 Hartridge Smoke Unit (HSU) on diesel vehicles and 3 per cent Carbon Monoxide standards on petrol vehicles.

Initially, the new regulation will cover only government and diplomatic vehicles. Private vehicles and taxis will come within its ambit in the “near future”.

RIVER POLLUTION

The apathy of the Nepalese Government to the pollution of the once crystal pure waters of the Bagmati river has resulted in court action. Environmentalists have filed a petition at the country’s apex court, questioning why action should not be taken against Prime Minister Girija Prasad Koirala for his failure to save the river.

163 km long river, which originates at the Shivapuri hills north of Kathmandu, has a special significance for the Nepalese because many Hindu temples are situated on its banks. Untreated domestic and industrial wastes and ashes of corpses have polluted the “sacred river”.

PAKISTAN

PAKISTAN DEVELOPS NATIONAL PLAN OF ACTION TO COMBAT DESERTIFICATION

A National Workshop on “Combating Desertification in Pakistan” was held at the National Agricultural Research Centre (NARC) in April 1994. The Meeting was organised by the Rangeland Research Institute, at the centre, which comes under the Pakistan Agricultural Research Council (PARC). The Workshop was attended by representatives UNEP, UNDP, ESCAP, ICIMOD, World Bank, Asian Development Bank and other international agencies besides 50 senior scientists drawn from all provinces of Pakistan and Azad Jammu and Kashmir.

The Federal Minister for Food, Agriculture and Livestock, Nawab Mohammad Yousaf Talpur in his inaugural address stated that the Government of Pakistan is attaching high priority to the development of fragile and under developed areas such as Deserts, Rod Kohi and Coastal Belts. He further added the accelerating rate of land degradation in the fragile ecosystem and the resulting problems were rendering many areas unproductive and urged the scientists to make concerted endeavours to save the environment from further degradation.

During the deliberations, the workshop participants proposed the following priority areas for research and development:

(i) Halting land degradation in northern mountains
(ii) Soil and Water Conservation in barani lands
(iii) Controlling land degradation in irrigated plains
(iv) Combating Desertification in Sandy Deserts
(v) Management of Sulaiman Rod Kohi
(vi) Management of Western Dry Mountains
(vii) Development of Coastal Areas
For development of a comprehensive programme for combating land degradation, it was agreed that UNEP/ESCAP may sponsor a pilot project on Assessment for Land Degradation in some of the priority areas of the country. UNEP/ESCAP may also consider supporting a small unit for Desertification Control at the Federal level for proper co-ordination and execution of desertification control operations with different national and international agencies.

**SOLAR POWERED CAR**

Pakistan's first solar automobile was displayed at a recent exhibition in Lahore. The car designed by Zia Chaudhry, is very economical because it uses only solar power, which sunny Pakistan has no dearth of. All the car's parts can be purchased and replicated locally very cheaply and maintenance costs are minimal. The major drawback of the auto rickshaw-sized two-seater lies in its grumpy looks. So far, there haven't been any takers to mass produce it.

**GARBAGE DISPOSAL PROBLEMS**

Karachi and Lahore, the 2 major metros in Pakistan are facing garbage disposal problems. It has been reported that Karachi generates 5,000 tons of garbage a day and only about a 3rd of it is disposed. The Japanese Government has very generously gifted around 100 refuse vans to the Karachi Metropolitan Corporation. They have also given a grant of Rs 30 crore to finance a solid waste management project.

In Lahore, meanwhile, the problem of disposing of a staggering 2,600 tons of waste has made the Punjab administration approach the private sector to tackle the pollution and sanitation menace in Lahore.

**DEFORESTATION**

Ecologists warn the large-scale tree-felling may cause a drastic reduction in rainfall in Baluchistan in Pakistan and transform the beautiful orchard valleys into a barren landscape. According to some estimates, over a 1 million trees in various jungles of the province was hacked down by the local populace. If there is no let up in the tree felling, the next 3 or 4 decades are likely to be far from green they say.

**SRI LANKA**

**DISAPPEARING HERBS**

It has been reported that some of Sri Lanka's natural wonders could be destroyed in the frantic race for industrialisation. A case in point is the beautiful Roomassala Hill, once the repository of over 500 rare herbal plants. Today, they have dwindled to about 150 rare species. The biggest threat to Roomassala is a stone quarry operated by local businessmen.

**ANIMAL WASTES**

The Central Environmental Authority (CEA) of Sri Lanka has cracked down on the Dehiwela Zoo in response to complaints of smoke billowing from the zoo's garbage pits. It has prohibited the burning of animal wastes. According to a Panos Report, the zoo authorities have come up with an ingenious solution: they have decided to give away organic residues for compost.

The zoo accumulates over 1 ton of waste every day and ever since the zoo's incinerator suffered a break down recently, the zoo authorities have been trying to solve their problem by simply burning the enormous mountains of waste.

**SOIL EROSION**

There have been 180 landslides in Sri Lanka since 1945, says the National Building Research Organisation (NBRO) according to Panos report. Indiscriminate tree-felling, poor drainage and unscientific construction have eroded the soil in areas like Nuwara Eliya, Kegalle and Kandy. With the help from the United Nations Development Programme, NBRO is now mapping out areas prone to landslides and also devising an early warning system.

**WASTE WATER TREATMENT PROJECT**

A Rs 1.5 billion pollution prevention, wastewater management and treatment project for the Ratmalana-Moratuwa area will be undertaken by the Metropolitan Environmental Improvement Programme (MEIP) shortly with the assistance of the Ministry of Transport, Highways, Environment and Women's Affairs. It will be funded by UNDP, World Bank and CIDA.

According to Ministry sources, this project would be mainly undertaken by MEIP and the Ministry would only be assisting with co-ordination and monitoring. However, the Ministry would involve itself to incorporate environmental perspectives concerning the whole area under the project.

The final report on "Wastewater Treatment Plant for Industries in Ratmalana and Moratuwa Areas" was presented by the Vice President of Canada's Associated Engineering International Ltd (AEIL) to Dr D. Nesiah, Secretary to the Ministry.

**POPULATION STATISTICS**

* In mid 1994, the world's population reached 5.7 billion. Of this, 1.2 billion live in industrialised countries; 4.4 billion in developing countries.
* Every year there are more than 90 million additional people alive on Earth.
* Women in developing countries average 1.7 children apiece; those in developing countries average 3.6 children.
* By the end of the decade, India will have become the world's second population billionaire, after China.
* Usage of commercial energy each year in terms of kg of oil - Canadians 9,390, Chadians 17, Dutch 5,210 and Nepalese 22.
* In 1992, there were 19 million refugees in developing countries. Iran provided a home for 4.1 million of these, Pakistan 1.6 million and Malawi over 1 million.
Training Programme on GIS Technology for Natural Resources Management

As a part of the implementation of the SENRIC Project, training programmes aimed at different audiences have been formulated as detailed below.

1. Policy level
   (Duration: 1 day / 2 days)
   For decision makers / managers to introduce the capabilities of GIS and possibly to give a hands-on experience in using an existing database to deal with an environmental issue.

2. Professional level
   (Duration: 1 month)
   For professional staff of different disciplines from the government departments. The one month long training course includes a training on raster and vector databases using the software, IDRISI (for raster databases) and Arc/Info (for vector databases). It is aimed to introduce the concepts of GIS and GIS based Database design/ development and GIS modelling to deal with the environmental issues to the participants of the training course.

3. Technical Level
   (Duration: 1 month)
   For technical staff to introduce the concept of database development and the details of digitization for a GIS database development.

   The first training course at Professional Level has been conducted during the month of September and the training has been given to staff members from:

   Central Environmental Authority
   Coast Conservation Department
   Department of Census and Statistics
   Department of Meteorology
   Department of Survey
   Malaria Research Unit
   Malaria Control Programme
   Natural Resources Management Centre

   During the training course, the participants prepared two case studies on Agro-Climatic Zonation and Rural Development Planning to demonstrate the strength of GIS in Decision Making.

   The first training course at Technical Level for Data Automation Techniques will commence from the 24 October 1994. Participants for this course would be from Maldives and Sri Lanka.
**PUDGY BABIES HAVE THE EDGE**

Not only are chubby babies adorable, scientists now say they are less prone during adulthood to disorders such as heart disease, high blood pressure and diabetes. Recent studies indicate that the nutritional status of the developing foetus and that of the infant in the early stages of growth have an influence on such disorders. (The Lancet Vol 343, No 8892, British Medical Journal, Vol 307, No 6918)

The first evidence of this came from two surveys undertaken in the UK. A team of researchers at the medical Research Council's Environmental Epidemiology Unit at the University of Southampton, led by DJP Baker, traced records of birth weights and weights of year later of 5,654 male born between 1911 and 1930. The researchers found the death rates from heart disease declined in children with the highest weights.

These results were supported by another survey of 1,586 men pioneered by Baker, which found a relationship between birth weight and death from cardiovascular disease.

**CURE FOR BALDNESS?**

Science appears to have finally the elusive cure for baldness. Proscar, a drug manufactured by Merck & Co to treat enlarged prostrate glands, has an interesting side-effect: in low doses, it increases hair growth.

In clinical trial carried out on 200 young men at an early stage of baldness, the drug produced a significant increase in hair numbers compared with patients taking placebo, according to Research Chief of Merck. The dose is much lower than used to treat enlarged prostates.

Merck Officials claim low doses of the drug are safe, but higher doses could cause some defects. Merck plans to market the drug as a baldness treatment once studies are completed.

**BROCCOLI PROTECTS**

Two Johns Hopkins University Scientists say they have discovered in broccoli the presence of a chemical compound, sulforaphane, which helps to fight cancer in animals. Paul Talalay and Gary Posner had previously reported that the sulforaphane increased the production of anti-cancer enzymes in laboratory cultures of human cells.

In their latest study, they found that sulforaphane and other chemically related compounds they had synthesised, arrested the development of breast tumours in rats.

**INTERNATIONAL ENVIRONMENTAL TECHNOLOGY CENTRE**

UNEP and Government of Japan have joined forces to facilitate the transfer of technology to the developing world and nations of Eastern Europe and the former Soviet Union with the recent opening of the International Environmental Technology Centre (IETC) in Japan.

IETC will be based in Osaka and Otsu and will operate on an annual budget of more than US $ 3 million.

"The objective of the Centre is to strengthen the capabilities of developing countries and countries with economies in transition to improve environmentally sound management of large cities and freshwater lakes and reservoirs or basins", said Elizabeth Dowdeswell, Executive Director of UNEP, when she helped open the Centre in April. "We hope to do this by increasing technology co-operation and partnerships. The strategy will be for the Centre to act as a proactive intermediary between sources and users of environmentally sound technology by bringing together collaborating parties and systematically building up capacities".

**BANKS SIGN ENVIRONMENTAL PRINCIPLE ACCORD**

 Twelve commercial banks from transitional and developing economies have recently signed the "Statement by Banks on the Environment and Sustainable Development", a series of commitments brokered by the United Nations Environment Programme to increase environmental principles in the financial services sector.

The 12 new banks join more than 40 other banks and financial institutions from across the globe.

**GLOBAL FORUM TO HELP SAVE THE TIGER**

Senior Officials from 12 Asian Nations agreed to set up a Global Forum of Tiger Range States with the goal of coordinating their efforts to save the tiger from the threat of extinction. The new forum was established at the First Meeting of Tiger Range States on the Conservation of the Tiger, which was convened by the Government of India and UNEP.

**MONTREAL PROTOCOL UPDATE**

The Copenhagen Amendment, which moved forward the phase out dates for various depleting chemicals, was ratified by more than 20 parties to the Montreal Protocol and came into effect on 20 June 1994, announced the UNEP Ozone Secretariat.
The new phase out schedule includes a ban on the use of 15 different chlorofluorocarbons (CFCs), carbon tetrachloride and methyl chloroform by 1996. Halons must be phased out by end of 1994. Developing nations have a 10-year grace period.

The Copenhagen Amendment also requires a gradual phase out of HCFCs, which are the primary replacement for CFCs, by the year 2030.

A CONVENTION FOR DESERTIFICATION ADOPTED

The delegates attending the Fifth Intergovernmental Negotiating Committee for a Convention on Desertification which took place in Paris from 6 - 17 June 1994 adopted the finalised text of the Convention; finalised the four regional annexes; and adopted resolutions concerning priority for Africa and the interim period between now and the convention's entry into force.

Due to regional-level initiatives taken by the Asians, Latin Americans and the Southern Europeans, draft annexes were tabled at INCD-4 and negotiated in Paris. The four annexes differ quite substantially in their content in order to reflect the different regional realities. Despite the fact that all the annexes cover the same range of issues, it is the African Annex that is the most elaborate in form and content.

The Asian Annex is much shorter and more general in scope, reflecting the diversity of that region. Similarly, the Latin American Annex is also general and concise, but it aims at identifying the important links between desertification and biodiversity loss as well as debt issues, unfavourable economic practices and other socio-economic factors.

The Convention made several concrete gains, including increased global awareness of the problem, legitimisation of public participation, impact of NGOs at the negotiations established a network to operate at all levels. It is called the “Reseau International des ONG sur la Desertification (RIOD)”. A planning committee has been established and more information will be circulated when available.

Of the major shortcomings of the session, the lack of new financial resources was the most obvious blow. Given the immense body of technical information that has been made available to the convention negotiators, many expressed the lack of scientific input in the convention.

The Convention will be opened for signature in Paris this Autumn. The exact dates were left blank, pending a decision by the French. It was also agreed that 50 ratifications are necessary for the Convention to enter into force. The Sixth Session of the INCD will meet in New York from 9 - 20 January 1995.

AGENDA 21: ENVIRONMENTAL TELEVISION SERIES

Starting this Autumn, the International Television Trust for the Environment (TVE) and Worldwide Television News (WTN) will co-produce a new television series on environmental issues for global distribution. TVE Director Robert Lamb said: “We are constantly coming across stories that viewers the world over would be fascinated by, but could only translate a minority of them to the screens. With Agenda 21, TVE will have a means to bring more to the attention of a global public”. The series will provide an outlet for programmes financed by the members of the informal Agenda 21 Helsinki Group.

UNDP: NEW INITIATIVES

UNDP is developing several strategy papers to guide it into the future, including: Desertification, Sustainable Agriculture, Sustainable Energy and Environment and Development. These strategy papers are meant to optimise UNDP’s involvement and direction in these areas.

Beyond this UNDP has announced the creation of 41 new field posts for “National Professional Advisors for Sustainable Development”. The posts are being established to meet an increasing demand for environmental management as a result of Agenda 21 and the widespread themes of environment and natural resources management in the majority of the ongoing country programmes. The posts are being created in Asia, Africa, The Arab States, Latin America and the Caribbean, and in Eastern Europe and the Commonwealth of Independent States.

The Environment and Natural Resources Group within UNDP now oversees the Montreal Protocol, UNDP’s Capacity 21 initiative and other major activities including the Environmental Management Guidelines Training Programme. Each UNDP Bureau has at least one person as an Environmental Focal Point. The Global Environmental Facility has six regional co-ordinators and one for the NGO Small Grants programme as well as specialists in biodiversity and global warming. Environmental news is the title of the new UNDP Newsletter that intends to inform UNDP Staff worldwide and other interested parties of these activities and initiatives.

NEWS ON THE BIODIVERSITY CONVENTION

The Second Session of the Intergovernmental Committee of the Convention on Biological Diversity (ICCBD-2) was held from 20 June to 1 July in Nairobi, Kenya, with the participation of 112 countries, 71 in full and several other UN and Intergovernmental Organisations. The ICCBD made significant headway on most of the issues on its agenda. The participants agreed that the Convention established a strong base for the upcoming Conference of the Parties in Nassau, the Bahamas, to be held from 28 November to 9 December 1994.
During the two weeks, the Committee discussed the following issues:
* Preparation for the Bahamas Conference
* Guidelines for selecting a permanent Convention Secretariat
* The financial mechanism for implementing the Convention
* The establishment of a biodiversity protocol
* Ownership of ex-situ genetic resources
* Rights of farmers and indigenous groups
* The Report of a March Meeting of Scientific Experts in Mexico
* The relationship between the CSD, which will address biodiversity at its 1995 session, and the Convention

The meeting generated the following recommendations:
* The establishment of a subsidiary body to provide advice on scientific, technical and technological matters
* A possible Protocol on biosafety to be included on the provisional agenda for the Bahamas Conference
* Negotiations on ex-situ genetic resources to be incorporated into the Convention's framework

Prior to the Conference of the Parties, Spain has offered to host a Workshop of 20 experts in September to address the possible input of the Convention in the 1995 session of the Commission on Sustainable Development. Peru also announced that it is preparing to host a Regional Ministerial Meeting on Biological Diversity prior to the Bahamas Conference.

Elizabeth Dowdeswell, Executive Director of UNEP, attributed the success of the meeting "to the establishment of fruitful dialogue and the 'courage and vision' of all delegates". She stressed that the Convention offered the opportunity for striking "a new contract between people and nature ... [and]

among different peoples and nations; a contract characterised by solidarity, interdependence and equity".

**SUSTAINABLE DEVELOPMENT NETWORKS**

The United Nations Development Programme (UNDP), along with representatives in 33 developing countries and territories, have launched Sustainable Development Networks (SDNs) to facilitate the flow of information and ideas pertaining to Agenda 21. The aim of SDNs is to help formulate national plans promoting sustainable development.

Chuck Lancaster, UNDP's Director of the SDN Project, said that developing countries can benefit from SDNs by decreasing their dependence on foreign donors an, in turn, make decisions to achieve sustainability. With the free flow of information, SDNs can also spark more co-operation among countries, speeding up efforts in implementing Agenda 21.

**EVALUATION OF OZONE FUND INITIATED**

An independent evaluation of the Ozone Fund's operations, taking into consideration the relevant clauses of the Agenda for the 21st century signed at the Earth Summit in Rio in 1992, was initiated by the Indian Government's party to the Montreal Protocol in Nairobi. This is to be completed by February 1995.

At Stake are the procedures used to define the technologies required to replace ozone-depleting substances, that are eligible for funds, and to what extent under the protocol.

The Fund was critisised by environmentalists as being dominated by the commercial concerns of a few industrialised countries and moving away from its original goal of saving the ozone layer.

India, representing Asia, has been nominated as one of the six members of an international panel to guide the review, which will be done by Consultants India, recently became a member of the Fund's 14 member Executive Committee.

**CLIMATE CHANGES TO AFFECT INDIA**

A 27 month, eight nation study has projected major dislocations from climate change to sea level rise throughout South and South East Asia. The nations affected include Bangladesh, India, Indonesia, Malaysia, Pakistan, Philippines, Sri Lanka and Viet Nam.

With the exception of Pakistan, the other seven nations will experience a sea level rise, resulting in coastal inundation and erosion, salt water intrusion into fresh water supplies, increased risk of storm damage and reduction of coastal fisheries production. And in Bangladesh, India, Indonesia, Philippines and Viet Nam, the coastal changes will, in all likelihood, lead to large population dislocations.

The problems in Pakistan are expected to be different, but no less grave. It is expected to face increased monsoon flooding and adverse impacts of food production from heat stress.
## FORTHCOMING EVENTS

<table>
<thead>
<tr>
<th>DATE</th>
<th>EVENT</th>
<th>VENUE</th>
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<tbody>
<tr>
<td>3 - 7 October 1994</td>
<td>Sixth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer</td>
<td>Nairobi, Kenya</td>
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<tr>
<td>8 - 10 November 1994</td>
<td>Meeting of Regional Seas Secretariats on GEF</td>
<td>Nairobi, Kenya</td>
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<td>9 November 1994</td>
<td>Seventh Session of the Intergovernmental Panel on Climate Change Bureau</td>
<td>Nairobi, Kenya</td>
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<tr>
<td>10 - 12 November 1994</td>
<td>Tenth Plenary Session of the Intergovernmental Panel on Climate Change Bureau</td>
<td>Nairobi, Kenya</td>
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<td>21 - 25 November 1994</td>
<td>NETILAP Workshop on Management of Toxic Chemicals &amp; Hazardous Wastes</td>
<td>Hyderabad, India</td>
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<td>28 Nov.-2 Dec. 1994</td>
<td>NETILAP Workshop on Coastal Zone Management</td>
<td>Kandy, Sri Lanka</td>
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<td>28 Nov.-9 Dec. 1994</td>
<td>First Meeting of the Conference of the Parties to the Biological Diversity Convention</td>
<td>Nassau, Bahamas</td>
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<tr>
<td>5 - 9 December 1994</td>
<td>NETILAP Workshop on Environmental Economics</td>
<td>Kathmandu, Nepal</td>
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## NEW PUBLICATIONS

- **Discordant Harmonies**
  Daniel B Botkin
  Publisher: Oxford University Press
  Price: US $10.95

- **Biodiversity Conservation: Forests, Wetlands and Deserts**
  Edited by Bob Frame, Joe Victor and Rassendra Joshi
  Publisher: Tata Energy Research Institute & British High Commission, New Delhi
  Price: Ind Rs 220

- **Biotechnology Priorities, Planning and Policies: A Framework for Decision Making**
  Publisher: International Service for Agricultural Research

- **Sustaining Water - Population and the Future of Renewable Water Supplies**
  Robert Engelman and Pamela LeRoy
  Publisher: Population Action International

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**SACEP NEWSLETTER** is distributed free of charge to National Environmental Agencies, Non Governmental Organisations, Citizens' Groups and Mass Media. It welcomes news items, short articles, and viewpoints on environmental issues from readers in order to promote environmental awareness in the South Asian Region. The Editor reserves the right to edit and publish manuscripts in accordance with the editorial requirements of the publication.

All enquiries related to **SACEP NEWSLETTER** should be addressed to SACEP Secretariat, 84 Lorens Road, Colombo 4, Sri Lanka.

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