

FOREWORD

South Asia is the largest developing region but has emerged as the poorest, the most illiterate, and the most malnourished region in the world. It accommodates around 23 percent of the world's population and houses over 35 percent of the world's poor. At the macro level despite food security over 40 percent of world's food insecure live in the region. These economies have enormous natural and human resources but are facing several environmental challenges emanating from air and water pollution and poor sanitation. Waterborne diseases are common due to unsafe drinking water. The level of air pollution in large cities is considerably high compared to the WHO standards. Due to air pollution incidence of lower respiratory tracheal infection is high and a significant number of children and adults are suffering from upper respiratory tracheal infection. Spread of infectious diseases has increased the disease ridden by at least 20% to 30%. The key challenge for the region, therefore, is to combat poverty while preserving environmental resources.

In recent years, the most significant achievements have been incorporation of environmental concerns in government policies and initiation of process of Environmental Impact Assessment (EIA) in the development schemes. The SAARC Members States have developed Poverty Reduction Strategies, which cover an array of actions to be taken to increase the income levels of the poor. Macro-economic and social policies, aimed at poverty alleviation would definitely have beneficial environmental impact as well. The full implementation of these strategies will help alleviate poverty and consequently conserve natural resources to ensure long-term sustainable environment and economic gains.

The training course on "Environment, Population and Development" highlights important success stories, which have unmasked the vicious cycle of the poverty-environment nexus and established innovative ways to address it. This report details the reasons behind the increasing poverty and environmental degradation and the factors that most affect it. There is little doubt that income improvement through community participation complemented by training in environment friendly methodologies that are generally cost effective is the best way forward to reduce poverty in a sustainable manner.

This report based on presentation of professional resource persons identifies the dynamics of the poverty-environment nexus in the SAARC region and suggests ways and means to resolve the important issues. I congratulate the SHRDC team for writing this report. Particular thanks to Mr. Kiran Rupakhetee and Ms. Wadiat Kazmi. We hope that the report is likely to initiate further dialogue and will set a stage for initiating substantive projects/programmes in Member Countries that address poverty and environment issues simultaneously.

Dr. Muhammad Aslam Khan
Director (SHRDC)

Contents

1. **Foreword**
2. **Executive Summary**
3. **Background**
4. **Inaugural Ceremony**
5. **Business of the Training Programme**
6. **Evaluation of the Training Programme**
7. **Concluding Ceremony**

Annexes

Annex I:	Concept Paper of the Training Course
Annex II:	List of Participants
Annex III:	Working Programme
Annex IV:	Papers of the Resource Persons
Annex V:	Guidelines for Country Report Preparation
Annex VI:	Country Reports
Annex VII:	Evaluation Results

EXECUTIVE SUMMARY

1. South Asia is blessed with tremendous human and natural resources, which if used prudently can bring sustainable development and prosperity to the majority of the population. The region, however, faces many problems such as poverty, lack of access to basic services, low literacy rate, gender disparities, and environmental degradation. It is confronted with a number of environmental threats which are also linked with poverty, such as degradation of natural resources, industrial and vehicular pollution, pollution of marine environment, degradation of human health, etc. Summarizing in monetary terms, the annual cost of environmental degradation in the region is high.
2. Despite largest developing region, it has emerged as the poorest, the most illiterate, and the most malnourished region in the world. It accommodates around 23 percent of the world's population and house over 35 percent of the world's poor. At the macro level despite food security over 40 percent of world's food insecure live in the region. Poverty in the region is because of economic growth has failed to trickle down to the poor at a sustainable scale. The missing link is the lack of adequate growth in the social and governance indicators and the inadequate attention paid to environmental indicators (air, water, forest, soil, watersheds). This means that while economic growth is necessary for poverty reduction, poverty reduction is itself necessary for sustained growth defined in terms of social and environmental sustainability. In recent years, the high economic growth has positive impact on poverty reduction in most of the regional economies.
3. The majority of the regional countries currently lack the necessary water storage capacity. These countries have regularly experienced critical water shortages and also inadequate supplies of irrigation water for the crop-growing seasons. The consequence of heavy deforestation include soil erosion and sedimentation, desertification of once- productive upland areas, silting up of waterways thus making them more prone to flooding, and marked scarcities of fuel-wood and building timber which creates an economic burden on low-income communities.
4. Population pressure on these economies and the large rural influx has, in turn, contributed to the overburdening of urban infrastructure and services. There has not only been a rapid decline in the quality and availability of basic urban resources and amenities, such as housing, potable water, transportation, electricity, gas, drainage and sewage but also a mushrooming of squatter settlements, often located on the most marginal lands.
5. The incidence of diseases related to insanitation and unsafe drinking water, like diarrhoea, hepatitis, etc., is on the rise. The poor are more prone to the adverse health impacts. This is both because of their greater exposure to polluted water, as well as the lack of health facilities to deal with them. Unavailability of adequate nutrition, lack of education and overcrowded housing increase their vulnerability to diseases. Low-income neighbourhoods mushroom around industrial areas, where exposure to air pollution is high. Poor communities are the most exposed to auto-emission and other toxic fumes, as they tend to live close to the main trunk roads. Vehicular pollution in highly congested urban centres where movement of air is minimal is a major environmental problem, leading to human health hazards. Untreated effluent contaminates water bodies and makes water unfit both for human consumption and aquatic life. Similarly, smoke

emissions from factory stacks and disposal of industrial waste are a serious threat to the atmosphere, soils and health of nearby inhabitants who are generally poor.

6. The report documents the vicious cycle of the poverty-environment nexus. It has been pointed out that causes of increasing poverty and environmental degradation have been broadly grouped as: (i) population growth; (ii) increasing human and livestock population; (iii) stagnant agricultural growth and rural to urban resource transfer; (iv) climate change and shift in cropping pattern; (v) lack of capital and access to technology; and (vi) weak governance.

7. The vicious cycle of poverty- environment nexus could be broken through redistribution of economic opportunities and empowerment of communities. This is where participatory community based development programs appear as a most effective entry point for reversing the existing trends.

8. Some of the strategies which can be adopted to resolve above mentioned issues are as: (i) increase access to safe drinking water and sanitation. Control of drainage of untreated domestic wastewater into open streams where sewerage system exist. Introduce the cleaner fuels to improve environment; (ii) adopt improved petroleum products specifications. Filtration system should be used by industries. Non-point sources of PM in the ambient air can be reduced by the fleet management, plantation in the open area and paving the roads; (iii) conservation of forests for sustainability of natural resource base; (iv) solid waste management by promoting reuse and recycling by privatization of collections. Color-coding system should be adopted at national level. Extend the supply of piped natural gas, LPG, solar energy and micro-hydel power to the wooded mountains; (v) mass awareness among people. Access to environmental friendly techniques for the poor and subsidized them. Institutionalization of pollution charge enforcement system, and (vi) establishment of Environmental Data Base.

9. Addressing environmental degradation and conservation concerns require macroeconomic and social, as well as specific environmental policy interventions. Macro-economic and social policies, aimed at poverty alleviation have beneficial environmental impacts as well. Thus the key actions identified relate to income re-distributions, provision of social services, promotion of rural infrastructure, employment promotion and provision of credit to the rural and urban poor.

10. In order to enhance the understanding of the gravity of the problem and to comprehend multisectoral and multidisciplinary linkages between population, sustainable development and environment, the SAARC Human Resource Development Centre (SHRDC) organised a training course on "Environment, Population and Development" from 29th March to 11th April 2004.

11. The training course was designed for the mid level functionaries, trainers / professionals from the Government, Semi Government organisations, working under the Ministries of Environment, Population, Planning & Development and other related organisations and NGOs of SAARC Member States. 15 participants, one each from Bangladesh, Bhutan, Maldives, Nepal, and Sri Lanka, and 10 from Pakistan attended the training course. Two of them were observer participants- one from Pakistan and the other was from the United Kingdom. .

12. 20 sessions were organized based on six modules, namely (i) Environment, population & development context ;(ii) Environment, population & development intervention;(iii) Social policy

analysis;(iv) Women, environmental management & sustainable development;(v) Techniques of demographic & environmental analysis; and (vi) Political economy of migration

13. Methodology followed include: lectures by resource persons followed by floor discussion on cross cutting issues, group work exercises, case studies, and the field visits in and outside Islamabad. Besides, the participants presented Country Reports in different sessions highlighting lessons from their country experience. .

14. Resource persons were drawn from government, semi government organisations, universities, ADB, UNDP etc. Group work was also carried out in order to give the participants ample opportunity to discuss cross cutting issues and share their country specific experiences. The group work helped expose participants to discuss national problems in regional perspective and suggest remedial measures to get rid of unemployment problems.

15. The structured questionnaires were designed to solicit participants' views/comments about the training course. According to their evaluation, the course was highly beneficial to them and had achieved its objectives. They felt that selection of the topics for the sessions was relevant and most of the resource persons were very knowledgeable having in-depth understanding in their subject areas. They recommended arranging resource persons not only from Pakistan but also from other SAARC member states. Participants also showed their concern on the physical facilities of the SHRDC and suggested having separate rooms for Group Works, uninterrupted internet facilities; and upgraded Computer Lab.

Background

Poverty is a major cause and effect of global environmental problems. It is, therefore, futile to attempt to deal with environmental problems without a broader perspective that encompasses the factors underlying poverty and inequality. Pollution is contributing to a number of health hazards, which increases the burden of disease and affects the poor resulting loss of income. Environmental degradation affects the poverty through access to natural resources. In the first place, poverty increases the vulnerability of the poor to degradation. Secondly by restricting the choices and entitlements for the poor it forces poor people to overuse environmental resources to survive from day to day, and the impoverishment of their environment further impoverishes them, making their survival ever more difficult and uncertain. However, other resources, waste generation, inefficient use of resource, and pollution from industry are key factors in environmental degradation. It has been seen that people and countries make an explicit trade off, accepting long term environmental degradation to meet their immediate needs. The key challenge, therefore, is to combat poverty while preserving environmental resources.

2. World Summit on Sustainable Development (WSSD) had proposed five key areas for particular focus on: water, energy, health, agriculture and bio-diversity, and these have been brought together under the acronym "WEHAB". The main targets of WSSD are to be able to help at least one billion people without drinking water and two billion without sanitation. Stop deaths of three million people each year from air pollution, addressing effects of toxic and hazardous materials, and lower the incidence of malaria through polluted water and poor sanitation. Assure protection to two thirds of the world's agricultural lands affected by land degradation by reversing it. Build "a new ethic of global stewardship", challenging processes that have destroyed about half of the world's tropical rainforest and mangroves, threatened more than two thirds of the world's coral reefs and decimated the planet's fisheries. Provide electricity and other modern energy services to more than two billion without them, while reducing over-consumption, promoting renewable energy and addressing climate change.

3. In South Asia human development is adversely affected by environmental problems. Environmental problems are emanating from industrial wastewater pollution; domestic wastewater pollution; motor vehicle emissions, industrial air pollution; marine and coastal zone pollution; unsafe drinking water and poor sanitation; deteriorating natural resources, land water; watersheds etc. The majority of population lacks access to safe drinking water and sanitation facilities. Waterborne diseases are common due to unsafe drinking water. The level of air pollution in large cities is considerably high compared to the WHO standards. Due to air pollution incidence of lower respiratory tracheal infection is high and a significant number of children are suffering from upper respiratory tracheal infection. Spread of infectious diseases has increased the disease burden by at least 20% to 30%. About 70% of the total prevalent Hepatitis B cases are caused by the improper disposal of hospital waste. Two third of burden of disease is due to child and infectious diseases. Deforestation rate is also high and woody biomass is declining.

4. The poor are mainly dependent on natural resources and virtually have no resources to invest in their conservation. For instance, the soils are not adequately fertilized, high efficiency irrigation techniques are not used to conserve water, rangelands are overgrazed for livestock production, and forests are degraded for extracting timber, fuel wood and grass which consequently deplete capacity of water reservoirs due to siltation. Once the ecosystems are

degraded, they cannot sustain the human and livestock population which results in reduced income of the already poor people, thus leading to widespread poverty. In urban centres, the poor have to spend more on below standard housing and face health hazards due to lack of safe drinking water, sanitation and exposure to industrial and air pollution. The pooled effect of these factors is: reduced life span, loss of income due to lost job-days because of illnesses and increased expenses on health care. Again the poor remain entangled in the poverty trap.

5. The poverty- environment nexus is formed through redistribution of economic resources from vulnerable sections of society to the power holding elite due to monopolistic control exercised by these groups over productive and mainly non-reproducible natural resources, constituting the natural capital of a society. Monopolistic control enables power holding groups to: (i) transfer the cost of environmental pollution and degradation to weaker, disorganized, disenfranchised and marginalized groups, sexes and communities, and (ii) earn above normal profits by paying very low prices for accessing natural resources which do not reflect their natural scarcity and take undue share of natural capital in public domain due to non-availability of effective legal protection and poor governance.

6. Poverty, it is presumed, imposes short time horizons. Poor people, simply put, eat into their savings and borrow whenever possible. In terms of land use, this means overgrazing of pastures, shortening of fallow periods and a reluctance to invest in land improvements where returns occur after a long gestation period. A related presumption - one with stronger empirical grounds - is that poor people are more risk prone. This is not an innate trait but one which stems from relegation to marginal areas which are already experiencing high levels of degradation and where future outcomes are uncertain; consequently there is a tendency to mine resources unsustainably. Also, poor face greater constraints in managing their risks, with few assets / and limited access to credit and insurance. A more doubtful conjecture is that poverty breeds fatalism which leads to acceptance of a given situation rather than a desire and resultant efforts to change it.

7. Some of the strategies which can be adopted to resolve above mentioned issues are as: (i) an increased access to safe drinking water and sanitation; proper drainage of untreated domestic wastewater into open streams where sewerage system does exist; introduce the cleaner fuels to improve environment; (ii) adopt improved petroleum products specifications. Filtration system should be used by industries. Non-point sources of PM in the ambient air can be reduced by the fleet management, plantation in the open area and paving the roads; (iii) conservation of forests for sustainability of natural resource base; (iv) solid waste management by promoting reuse and recycling by privatization of collections. Color-coding system should be adopted at national level. Extend the supply of piped natural gas, LPG, solar energy and micro-hydel power to the wooded mountains; (v) mass awareness among people. Access to environmental friendly techniques for the poor and subsidized them. Institutionalization of pollution charge enforcement system, and (vi) establishment of Environmental Data Base.

8. Keeping in view of the problems of environment and population in South Asia, the SAARC Human Resource Development Centre (SHRDC) has organised a training programme on “Environment, Population & Development” to enhance the understanding of the gravity of the problem and to comprehend multisectoral and multidisciplinary linkages between population, sustainable development and environment from 29th March to 11th April, 2004.

Objectives

9. The aim of the training programme was to harmonize & enhance the mutual relationship among population dynamics, the environment and social and economic development, while specific objectives were to:

- Broaden the consideration of trends in demographic variables in sectoral and regional policies
- The coherent integration of population and environmental policies into economic and social development strategies.

Methodology

10. Training methodology included lectures by resource persons, discussions on cross cutting issues, case studies, report presentation by the participants and exposure visits in and outside Islamabad. All audio, visual aids like multimedia projector, slide projector, overhead projector, flip chart and board etc. were used for the training programme.

Modules

11. There were altogether six modules to frame the sessions. They were:

- Environment, population & development Context
- Environment, population & development intervention
- Social policy analysis
- Women, environmental management & sustainable development
- Techniques of demographic & environmental analysis
- Political economy of migration.

The Concept Paper containing these modules is at *Annex-1*.

Participant's Profile

12. The training course was geared towards mid level functionaries, trainers / professionals from the Government, Semi Government organisations, working under the Ministries of Environment, Population, Planning & Development and other related organisations and Civil Society Organisations of SAARC Member States. 16 participants, one each from Bangladesh, Bhutan, Maldives, Nepal, and Sri Lanka, and 10 from Pakistan attended the training course. Two of them were observer participants- one from Pakistan and the other was from the United Kingdom. The list of the participants is at *Annex-II*.

Inaugural Ceremony

13. Major (Retd.) Tahir Iqbal, Honourable Minister of State for Environment, Local Government and Rural Development, Government of Pakistan inaugurated the training course on March 29, 2004. SAARC Member States' Heads of Diplomatic Missions in Islamabad, other Diplomats, officials from the different government organizations of the Government of Pakistan, distinguished invitees from other private and non-governmental organizations and journalists were present on the occasion. The ceremony started after the recitation from the Holy Quran followed by Welcome Address by the Acting Director, SHRDC, Introduction to Course Objective by the Course Coordinator and Inaugural Address by the Chief Guest.

14. Dr. M. Zahangir Kabir, Acting Director, SHRDC in his welcome remarks said that SAARC region has a wealth of natural resources and ecological and biological diversity. But population growth and economic development are threatening the region's rich heritage through the expansion and intensification of agriculture, the uncontrolled growth of industrialisation, the destruction of natural habitats, and urban sprawl. Dr. Kabir viewed the training course as a step towards achieving the sustainable development in the SAARC region which calls for tackling poverty, development and environment as one, by focussing on people's resources and productivity. Syed Ejaz Wasti, Course Coordinator highlighting the objective of the training course said that it aims at understanding the importance of population issues in achieving sustainable development by conceptualising and analysing the interrelationship between population dynamics, environment and processes of economic development.

15. The Chief Guest in his inaugural speech said that South Asia is confronted with problems of high population growth, low agricultural development, and large disparities in income, high environmental degradation, and high incidence of poverty. If these problems continue, South Asia's food, agriculture, environment, and quality of human life will be seriously threatened in the years to come.

16. The Chief Guest noted the fact that policies which have been adopted by the SAARC member states to stabilise population or reverse environmental damage have had limited success because of their narrow focus on fertility control and strict nature conservation. For the most part, such measures have not addressed the needs and constraints of the rural poor, especially

enhancing their livelihood security. Therefore, focusing projects solely on population growth or environment is not a useful approach to poverty reduction and environmental sustainability. Therefore, there should be an integrated approach bringing environment, population and development together in order to fulfil basic needs, improve living standard for all, and better manage and protect ecosystem for longer time. The Chief Guest hoped that by the end of the course the participants would be able to understand the linkages between population and environment which will serve as the basis for the formulation of development strategies, with special attention to social equity and resource use and taking into account the knowledge of the populations with regard to their relationship with nature.

Getting acquainted

17. Acting Director Dr. M. Zahangir Kabir, Course Coordinator Mr. S. Ejaz Wasti, and Deputy Course Coordinator Mr. Kiran Ruapkhete, had Introduction Session with the participants. The participants were requested to introduce themselves along with their experience, education qualification, role and responsibilities at their respective organizations and expectations from the course. Participants were also informed regarding their lodging, boarding and other logistic arrangements. Finally, participants had a City Tour of Islamabad on the day.

Business of the Training Programme

Training Sessions

18. All the training sessions were organized as per working programme of the training course (*Annex III*). The papers presented by resource persons are placed at *Annex-IV*

19. On the **second day** of the training programme, there were three sessions. Dr. Noman Kadir, National Project Manager, POPs Enabling Activity, Pakistan Environmental Protection Agency taking a session on “**Environment, Population and Development**” said that the awareness in general public on the environmental issues is on rise, consumptive patterns of developed world characterised by resource intensive life style mimicked by the developing world puts more burden on environment. He underlined the fact that concern about environment and eco-sustainability relate not only to a country’s individual but also beyond national boundaries. In this age of globalisation, development is the prime agenda of all the countries. Development requires growth and production and they cause pollution. Consequently, pollution degrades the environment and ecosystem. Therefore, there is need to incorporate environmental concerns effectively in integrated policies and strategies. Referring to carrying capacity, he said that world has limited carrying capacity in terms of sources of environmental resources and sinks for pollution and wastes, and hence each global inhabitant has an equal right to this limited capacity. In this context, a priority should be placed on meeting basic needs and food safety. Furthermore, the world should move towards sustainable trade which is based on ecological surpluses. For this, goods

and services should incorporate full social and environmental costs at each stage of the life cycle from extraction through production and consumption to disposal.

20. Taking a session on “**Macro Economic Policies, Environment and Development**”, **Dr. A.R. Kemal**, Director, Pakistan Institute of Development Economics (PIDE) underscored the fact that poverty is one of the main factors promoting environmental degradation. The experience of many countries shows that macro economic policies for example, SAP, Stabilization Programmes etc. may result in higher level of efficiency and positive impact on growth even in short run but it may generate more unemployment and more poverty in the long run which ultimately cause environmental degradation. Therefore, the need is to analyze and adopt policies which promote growth and environmental balance. Besides, public expenditure should be focused on those areas which are going to have positive impact on poor. If the public expenditure is made in areas like public health, education and other productive areas, they are going to reduce poverty with better environmental impact. Moreover, the investment policy should be framed in such a way that it can yield high level of growth. However, the policy becomes important from the growth stand points as well as from environmental aspects. Dr. Kemal was of the opinion that small scale industries are not environment friendly though they generate employment. The scenario is the same for large scale industries if they do not have proper treatment plant and disposal arrangements. In such cases, industries may generate growth but not necessarily preserve environment. He emphasized that we should have win-win situation with policies which can promote growth with minimum environmental damage.

21. **Dr. Rehana Siddiqui**, Chief of Research, Pakistan Institute of Development Economics (PIDE) speaking on “**Best Practices of Sustainable Environmental Development in SAARC Region**” said that South Asian countries have been trying their level best for sustainable environmental development though these efforts either are not enough or not effectively implemented. Nevertheless, there are many best practices related with environment and development prevailing in different South Asian countries. Compost production from collected garbage and elimination of plastic bags in Bangladesh and imposition of high tax on imported vehicles and establishment of Vehicle Emission Testing Stations (VETS) etc. are best practices in Pakistan. Moreover, tariff subsidy on LPG vehicles to replace polluting old diesel and petrol vehicles, removal of all three wheelers run by diesel from Kathmandu valley, promotion of clean three wheelers operated by the batteries and the provision of tariff subsidy to clean vehicles are the best practices adopted by Nepal to achieve sustainable environmental development. Sri Lanka has adopted “polluters pay” principle and complete removal of leaded gasoline, phasing out of old vehicles, and conversion of diesel vehicle to CNG in India are steps towards pollution free environment.

22. There were three sessions on the **third day** of the training course. **Mr. Irfan Saeed Alrai**, Programme Manager, Pollution Control, NEAP-SP, UNDP delivering a lecture on “**Environmental Regulatory Framework and its Implementation Status**” said that most important environmental

regulatory framework in Pakistan is “Pakistan Environmental Protection Act, 1997”. This is an Act formulated for the protection, conservation, rehabilitation and improvement of the environment for the prevention and control of pollution and promotion of sustainable development. In line with the act mentioned above, there are different rules now in place such as: National Environment Quality Standards Fund (Procedure) Rules, 2001, Pakistan Sustainable Development Fund (Utilisation) Rules, 2001, Environmental Tribunals Procedures and Qualification Rules, 2000, Environmental Samples Rules, 2001, Hazardous Substance Rules, 2000, Review of IEE/EIA Regulations, 2000 and Environmental Laboratories Certification Regulations, 2000. Regarding the implementation status of environmental regulatory framework in Pakistan, he acknowledged the fact that weak inspection, lack of sufficient capacity building of Environmental Protection Agencies, little environmental awareness among people, priority of attention towards socio-economic problems, inclination towards profitability and weak complaint response programme etc. are responsible factors for the non-compliance of acts and regulations and needs to be considered seriously.

23. **Mr. Amanullah Khan**, Chief, Population and Social Planning Section, Planning and Development Division of the Government of Pakistan talking on “**Issues and Problems in Population Dynamics in South Asia**” said that South Asia with 23 percent of the world’s population is characterised by persisting high levels of fertility, infant/child mortality, crude birth rate and crude death rate. Referring to the issues of population dynamics in South Asia, Mr. Khan said that factors such as low Contraceptive Prevalence Rate (CPR), which is only 34%, inability of health sector to deliver family planning services in accordance with its mandate, narrow focus of services provided by population programme confined to family planning rather than comprehensive reproductive health approach, weak monitoring and supervision system etc. are notable reasons and they need to be addressed.

24. **Dr. Javed Iqbal**, Director, Pakistan Environment Protection Agency spoke on the subject “**Environmental Issues in South Asia: Comparison with Developed Countries**”. He said that vast population of South Asian countries is at risk on account of increasing pressure on natural resources, pollution amid rapid urbanization, and natural hazards, all coupled with widespread poverty and non sustainable production practices. It has been estimated that some 20 percent of the total burden of disease is due to environmental causes. Besides, inadequate waste disposal and severe air and water problems are life-threatening health risks in most of the South Asian Countries. Deteriorating condition of environment has further augmented the problems as rural environments are threatened by deforestation resulting in soil erosion, biodiversity and natural resource losses. Besides, various natural environmental hazards such as floods, cyclones, seawater intrusion, and riverbank erosion show clear cause-effect relationships with these human-induced resource degradation problems. Dr. Javed was of the view that some of the environmental problems mentioned above such as air pollution, soil erosion and other environmental changes caused by both human activities and natural phenomena are also the problems of developed countries. However, they are sufficiently developed to cope with such problems. He opined that environmental problems in South Asia is serious and they need to be addressed with sound

implementation of laws, regulations and Acts which are in place for sustainable environmental development in each of SAARC member state. After the last session, there was a Country Report presentation by Mr. Mohammad Mizanur Rahaman from Bangladesh. The Guidelines for Country Report Preparation and Country Reports is at *Annex -V and Annex -VI* respectively.

25. A session at SHRDC and a Visit to Fauji Cement Factory were the programme for the **fourth day**. **Mr. Shahnawaz Hussain**, Deputy Chief, Planning and Development Division presenting on “**Planning, Monitoring and Evaluation of Environment and Population Projects**” said that demand for environmental project planning is derived from the mitigation requirements of environmental degradation resulting due to development in sectors like infrastructure, productive and social sectors. The focus of such planning should be on minimising environmental degradation and pollution and elimination of root cause of environmental degradation. Referring to monitoring, he explained that it is a systematic and purposeful observation carried out to assess whether a programme/project is being implemented as was planned. Evaluation on the other hand is the process of judging the value of the project after its completion. It judges the achievement of the project in relation to activities planned and overall objectives along with desired effects on intended beneficiaries. Monitoring and evaluation should be viewed as an integral part of the entire project cycle. Mr. Hussain underlined the fact that monitoring and evaluation of environment and population projects does not mean to go for routine monitoring of project activities such as employment of staff or acquisition and disbursement of inputs, but with the continuous or periodic assessment of project impacts-that is, with impact monitoring or ongoing evaluation-as well as evaluation in the ex-post sense. However, for the effective monitoring and evaluation, it is necessary to have a framework for a monitoring and evaluation process including identification of objectives and indicators. Besides, there should be an institutional mechanism for data collection, documentation, reporting and sharing of information.

Visit to Fauji Cement Factory, Jhang Bahtar

26. Participants visited Fauji Cement Factory at Jhang Bahtar, Tehsil Fateh Jang, District Attock in order to see how the environmental safety concerns are considered by the leading Cement Factory in Pakistan. General Manager of the factory gave a briefing. He said that the cement plant operating under the Fauji cement company is one of the most efficient and best maintained plants, and is the second largest single unit plant in Pakistan. The quality of Portland cement produced at this plant is used in the construction of highways, bridges, commercial and industrial complexes, residential homes, and a myriad fundamental to Pakistan’s economic vitality and quality of life.

Quality of Fauji Cement is its strength that makes it the premium selling brand of the country. It is a major contributor to the revenue of the Government of Pakistan and yearly contribution to the national exchequer is more than one billion rupees. The participants were informed that the factory is actively engaged in extending its share for the welfare of the community in which it operates. A Model School for boys and girls and free medical services through its dispensary for local community of village Jang, Tehsil Fateh Jhang, district Attock are examples of such welfare

projects. Considering the environmental safety, the company has installed dust collecting recycling system. Besides, they are not generating any solid or liquid waste. After the briefing, the participants visited different units of the factory.

27. There were two sessions & country report presentation on the **fifth day**. Delivering a session on **“Social Policy Analysis (Corporate Social Development)”**, **Mr. Arif Zaman**, Research Fellow, Henley College, London, UK said that more informed customers; more demanding employees; the investment climate ;and civil society are forces which act as the driving forces for corporate social responsibility. The initial pressure for businesses to adopt corporate social responsibility comes mainly from consumers and society. These pressures then bring corporate social responsibility into the mainstream of a company’s activity. While discussing the roles of business and government, Mr. Zaman noted that business can help harness the natural and human resources of a country in order to generate wealth, but governments must make sure that wealth is shared out in a fair way. Companies must pay taxes, so that governments can receive income they need to deliver services to their people. Businesses can help reduce poverty by creating jobs, providing skills and training, and producing products that meet the needs of the poor.

28. **Dr. W.G. Somaratne**, Research Fellow, SHRDC, Islamabad speaking on **“Population, Poverty and Environmental Nexus”** told that environmental damages – land degradation and air pollution are alarmingly high and thereby increasing poverty levels in most countries in South Asia. Poverty levels further caused devastating effects into native forests, biodiversity, and genetic resources. The contamination of water, air and noise pollution, urban congestion and solid waste disposal are other environmental problems in the region. He underlined the fact that population dynamics, poverty alleviation and environmental governance have close nexus in the region. Without alleviating poverty, South Asian countries are not in a position to reduce rapid population growth and improve environmental governance. Unless significant measures are taken to incorporate environmental concerns into agricultural development, urban planning, technological innovation, industrial growth and resource management, the situation of environmental degradation is likely to worsen in the future. Dr. Somaratne underscored the need to achieve both goals of poverty alleviation and environmental governance as win-win solutions through community based actions; formulation of complementary population, micro-economic and environmental policy options to manage land, water, air and biodiversity; reallocation of investments through private-state partnerships; protection and expansion of the asset base of the poor considering natural capital, social capital, human capital, physical and financial capital; building the asset base among poor, granting environmental entitlements for poor; co-management of resources with the poor; investment on education as a ‘social vaccine’; development of pro-poor infrastructure (rural electrification, housing, feeder roads, irrigation networks and marketing infrastructures – market places, and shops, IT centers); and technology for agriculture including forestry and fishing. At the end of the working day, Mr. Rinzin Dorji from Bhutan presented his Country Report.

Visit to Environmental Rehabilitation in North West Frontier Province (NWFP) and Punjab (ERNP) Project at Kotli Sattian, Murree

29. On the **sixth day** of the training programme the participants visited different programme sites of Environmental Rehabilitation in North West Frontier Province (NWFP) and Punjab (ERNP) Project at Kotli Sattian, Murree. Before moving to the project sites, Mr. Mahmmod Akhtar Cheema, Director, Resource Unit, IUCN gave presentation on ERNP Project at IUCN Office, Islamabad. He said that ERNP was a seven Years Programme (1997-2003) funded by the European Union and executed by the Department of Environment, NWFP, Department of Forestry, Fisheries, Wildlife and Tourism, Punjab. The project was implemented in collaboration with IUCN-The World Conservation Union. The Project covers Murree-Kahuta and Kotli Sattian Tehsils of Punjab Province and Galiat and Dir-Kohistan of NWFP Province. He added that the ERNP aimed at halting and reversing the processes of environmental degradation through integrated measures of rehabilitation/conservation of natural resources and sustainable socio-economic development with active participation of the local communities. The ultimate objectives were to develop and strengthen local capabilities for sustainable resource management and utilization; to interrupt the process of current degradation of the watershed lands and repair damage to natural resources; and to contribute to strike a balance between economic growth and conservation. Referring to lessons learnt from the project, Mr. Cheema said that effective tripartite management based on trust, transparency and shared understanding enabled successful implementation of the projects. Besides, participatory decision making mechanism fostered ownership, transparency and accountability. Furthermore, strategic and need based capacity building programme played critical role in successful implementation of project. Enhanced awareness among communities is another achievement of the project which reoriented their thinking, attitude and actions towards conservation and sustainable development. Most importantly, involvement of women in the decision making process contributed to empowerment of female folks.

30. After the presentation, the participants were taken to project sites of ERNP at Kotli Sattian, Murree. They observed Cemented Path at Jhilla constructed by a Community Organization. At Chaint the participants saw Nursery, Mott Grass Plantation, Homestead Fruit Orchards and Storage Tanks. They also observed Water Harvesting system at Lower Kotli and finally they met with Community Organization at Kamalabad. On the whole, the visit remained purposeful to give insight to the participants on the importance of peoples' participation in sustainable resource management and utilization.

31. On the **seventh day** participants visited Taxila which is an historical place from the perspective of Buddhist civilisation. There were four sessions on the **eighth day**. **Dr. Asif Zaidi**, Head, IUCN Islamabad Office delivering a lecture on "**Implementation of National Conservation Strategies: Strength and Weakness**" said that National Conservation Strategies has three objectives, namely conservation of natural resources, sustainable development, and improved efficiency in the use and management of resources. The three main operating principles of the NCS are to achieve greater public partnership in development and management; to merge environment and economics in decision making; and focus on durable improvements in the

quality of life. Referring to the focused areas of NCS in Pakistan, he informed that there are fourteen Recommended programme areas for priority implementation, namely maintaining soils in croplands, increasing irrigation efficiency, protecting watersheds, supporting forestry and plantations, restoring rangelands and improving livestock, protecting water bodies and sustaining fisheries, conserving biodiversity, increasing energy efficiency, developing and deploying renewable, preventing/abating pollution, managing urban wastes, supporting institutions for common resources, integrating population and environment programmes, preserving the cultural heritage. Dr. Asif explained that implementation of NCS in Pakistan started in 1992 and Mid Term Review (MTR) was carried out in 1999. The MTR unveiled the fact that achievements under the NCS have been primarily awareness raising and institution building rather than actual improvements in the productivity of environment and natural resources.

32. **“Women’s access to Natural Resources and United Nations Millennium Development Goals”** was the theme of a session by **Ms. Maheen Zehra**, consultant, ADB. She said that women’s survival, and that of their households and communities, depends on access to and control of natural resources – land, water, forests and plants. Traditional gender roles assigning different responsibilities to women and men have resulted in political, cultural and economic barriers that restrict women’s access to their resources. Government and institutional policies often fail to recognize the importance of women’s access to natural resources. Ms Maheen was of the view that linking Millennium Development Goals (MDGs) 1, 3, 7 that focus on poverty eradication, gender equality & environmental sustainability could expand women’s access to natural resources. The connection between gender and natural resources in the MDG process at both the national and global levels could be ensured through the availability of sex-disaggregated data, in-depth gender analysis and gender balance. Sex-disaggregated data makes it possible to measure and monitor different impact of economic, social and environmental policies on women and men. In-depth gender analysis contributes to integrate different needs of women and men in policymaking. Gender balance seeks to include women’s concerns and perspectives in the formulations, implementation, and evaluation of policy decisions and outcomes. Ms. Maheen acknowledged the fact that equal representation of women and men in all spheres of decision-making is essential for good governance including that of natural resources.

33. Speaking on **“Biodiversity Conservation in South Asia”** **Dr. Rakshan Roohi**, Incharge, GIS, National Agriculture Research Centre (NARC), Islamabad told that biodiversity conservation promotes and preserves varieties of life on earth by maintaining clean environment. As a consequence, natural ecosystem functions smoothly ensuring the sustainability of human civilization. Regarding the biodiversity losses, she opined that there are different factors responsible for biodiversity degradation such as population growth, deforestation, over-grazing, agricultural practices unfavorable to the environment, increased livestock population, water development schemes, environmental pollution and degradation, introduction of exotic species, habitat loss and degradation, changing biogeography, global/regional climatic changes,

infrastructure development, tourism, illegal hunting for sport, meat & trade, modern weapons and great mobility etc. Dr. Rakshan emphasized the fact that extensive manpower and financial resources are necessary in biodiversity conservation, which is merely impossible with limited technically skilled personals. She opined that different partners in biodiversity conservation such as international donors, international NGOs, local NGOs, Village-level elites, and common village folks have important role to play in bio-diversity conservation.

34. **Mr. Ozair A.Hanafi**, Executive Director, Human Development Institute, Khushali Bank, Islamabad, while speaking on “**Interrelationship between Environment, Population and Development**” underscored the fact that population with poverty is a threat to environment as it accentuates biodiversity loss specifically depletion of natural resources. The vicious cycle between poverty and environmental degradation makes poor even more vulnerable leading to further environmental degradation and more poverty. Mr. Ozair said that Rio Earth Summit (1992) provided a frame- work for sustainable development that focused on poverty, development and environment. However, emphasis was on combating poverty which is the basic condition for tackling environment, population and development. Importance given to other core areas like health care, education, women’s right and better governance needed to be explained also. He reiterated the need for an integrated approach to tackle the problems of ever increasing population, environmental degradation and poverty. However, poverty alleviation should be the prime objective of such approach by considering environment and population as important variables. The centre-piece of policy frame-work for poverty alleviation has to be the mobilization of the poor.

35. There were two sessions at the Centre and a visit to District Population & Welfare office, Islamabad on the **ninth day**. **Mr. Tariq Khosa**, Director (Management), NIPA, Lahore took a session on “**Role of Community Organizations in Environmental Management**”. He said that poor management of natural resources over many years and continuing higher population growth has had negative impacts on the environment of South Asian countries. With regard to environmental security, he noted it as the relative public safety from environmental danger caused by natural or human processes due to ignorance, accident, mismanagement; and it is originating from within or across national border. Mr. Khosa emphasized that state and non-state actors should guard against environmental degradation for the same reason they guard against organized violence. Political will, effective implementation of environmental safety activities and community participation is a three-pronged strategy to protect environment. Policy makers, leaders of the government, politicians, civil bureaucracy, and judiciary should be sensitized in this regard. He maintained the view that community has a greater role to play in environmental management through capacity building, lobbying, advocacy and social mobilization.

36. **Mr. M. Asif Zaman Ansari**, Director General , National Centre for Rural Development (NCRD), Islamabad speaking on “**Role of Local Government in promoting Environmental Agenda**” said that local governments have a great role to play in promoting environmental concerns .They

can implement a number of projects for environmental preservation at local level. Besides, they have roles of monitoring national level projects at local level from environmental perspective. Air pollution, land pollution, water pollution are the areas which have to be monitored by the local governments to keep local environment clean. In order to promote environmental agenda at local level, "Cooperative Government approach" should be in place which manifests the centrality of interlinkage and interdependence of various entities of the government within overall structure of the state. Besides, there should be a commitment at local government level for environmental governance. Functional and administrative autonomy of local governments backed by necessary financial resources is essential in this regard.

Visit to District Population & Welfare Office, Islamabad

37. **Dr. Athar Qayyum**, Director (Family Welfare Centre) of Ministry of Population and Welfare (MOPW) in his briefing said that District Population Welfare Office has a mandate to provide population and welfare services to 9,90,000 inhabitant of Islamabad residing at 12 Union Councils and 132 Villages. Such services include: reproductive health package, comprehensive family planning services for females and males, maternal health care including safe motherhood and pre and post abortion care for complications, infant health care, management of other reproductive health related problems of adolescents, prevention and management of RTIs/STDs and HIV/AIDS, management of other reproductive health related problems of women, management of infertility, detection of breast and cervical cancers, treatment of minor ailments, and management of reproductive health related issues of men. The participants were informed that these services are made available through Family Welfare Centers and Reproductive Health Centers located at different places and also through Mobile Service Units. Regarding the impacts of services delivered by the Office, he said that people have increased family planning practices with increased availability/accessibility of family planning services. Besides, awareness among people has increased by which now they are in a position to discuss common problem through the platform of Community Organizations.

38. Two sessions were delivered and Country Reports were presented on the **tenth day**. **Dr. Arshad Mahmood**, National Commission for Human Development (NCHD), taking a session on "**Techniques of Demographic Analysis**" elaborated different demographic terms and their significance in the analysis of demographic position of a particular country. The speaker in his deliberation, explained terms like Fertility, Crude Birth Rate (CBR), General Fertility Rate (GFR), Total Fertility Rate (TFR), Gross Reproduction Rate, Net Reproduction Rate (NRR), Replacement Level Fertility, Death Rate, Crude Death Rate, Age Specific Death Rates (ASDR), Infant Mortality Rate, Life expectancy at birth, Net Migration Rate etc. He underlined the fact that demography deals with size of the population, its composition in terms of age, sex, race, marital status, and the distribution of population. Demographic processes of fertility, mortality and migration are calculated and analysed in the techniques of demographic analysis. He opined that these techniques are very important in the planning process.

39. **Techniques of Environmental Impact Assessment**” was the theme of the next session by **Dr. Mohammad Irfan**, Head, Department of Environment Sciences, Allama Iqbal Open University, Islamabad. He said that EIA an essential part of development planning and management is a tool developed to forecast impacts that a project will have on the environment and find ways to reduce unacceptable impacts. Mr. Irfan explained different techniques for EIA, namely Baseline studies, Check-list, Matrices, Network Diagram, Overlays, Mathematical Modeling, Cost Effectiveness, Analyses Expert Opinions. Baseline studies using available data and local knowledge will be required for scoping. A Check-List, which includes extensive data collection sheets, is an invaluable aid for several activities of an EIA, particularly scoping and defining baseline studies. The major use of Matrices is to indicate cause and effect by listing activities along the horizontal axis and environmental parameters along the vertical axis. A Network Diagram is a technique for illustrating how impacts are related and what the consequences of impacts are. Overlays provide a technique for illustrating the geographical extent of different environmental impacts. Mathematical Modeling is one of the most useful tools for prediction work. Cost Effectiveness Analysis can also be used to determine what is the most efficient, least-cost method of meeting a given environmental objectives with cost including foregone environmental benefits. Expert advice is sought for predictions, which are inherently non-numeric, and is particularly suitable for estimating social and cultural impacts. After the lunch, the schedule was for Country Report presentation by Maldives and Nepal. Ms. Ikrisa Abdul Wahid from Maldives and Mr. Roshan Shrestha from Nepal presented their Country Reports.

Visit to Vehicle Emission Testing Station (VETS), Peshawar

40. On the **eleventh day**, the participants visited Vehicle Emission Testing Station (VETS), Chamkani Mor, Main GT Road, Peshawar. A briefing was given by **Mr. Pir Muhammad Zubair**, Manager VETS. He said that by considering Peshawar as one of the most polluted cities of Pakistan, VETS has been established under the technical assistance of GTZ. It consists of three sets of vehicle emission testing equipment, one each for petrol and diesel operated vehicles and one a combination of both (Petrol & Diesel), which is first of its kind in Pakistan. These modern equipments are facilitating in testing vehicle emission quality so as to identify those vehicles which are violating the notified National Environmental Quality Standards. Those vehicles which are violating standards are advised to correct their problems. As far the objective of the VETS is concerned, Mr. Zubair stated that it aims to support the reduction of vehicular emission and to promote awareness amongst the masses regarding the causes of noxious gasses from the vehicle exhaust and their remedial measures. To meet these objectives, testing and analyzing the load exhaust emission, issuing certificate (pass or fail), making the vehicle owners comply with the notified standards, providing technical and training support on emission equipments and disseminating know-how and information are the activities being conducted. He passed on information regarding the system of testing as well. The system of testing is devised in a way that a thorough diagnosis of every vehicle is carried out for the emission of the poisonous gases

such as carbon-monoxide, Hydrocarbons, Oxides of Nitrogen, Lead Components, Sulfur Dioxide and Sooth Constituents and recommendations are made to the owners for the adjustment or correction of the specific vehicle part that is the cause of emission above the permissible level.

41. The participants were informed that after the successful test of the vehicle a Green sticker is issued to the vehicle which is pasted on the wind screen. For small petrol vehicles the duration of Green sticker's validity is one year but for the large diesel vehicles the duration is of six months. In case of failing the test a Red sticker is issued and pasted on the wind screen symbolizing that the vehicle needs repair work. Along with stickers certificates of success or failure are also issued to the vehicle explaining in detail nature of the vehicle and the emission of CO or other harmful gases. These certificates are important because they verify whether the vehicle is fit to be run on the roads or not. On the whole, VETS is a real success that can be disseminated in other parts of the country. Regarding the capacity of the VETS, Mr. Zubair said that it was designed to handle 4200 vehicles per year. Considering the population of vehicles in Peshawar, it is estimated that 24 more VETS units will be required to cover all the in-coming vehicles under the assumption that all vehicles will be either brought or sent to VETS for emission test every year. However, the future of VETS will increasingly depend on the effective enforcement of laws and procedures concerning the emission of excess smoke in the city. After the briefing the participants went to VETS to see its testing procedure.

42. There were three Sessions and Country Reports presentations on the **twelfth day**. **Dr. Asif Zaidi**, Head, IUCN, Islamabad Office delivering a session on **“Population Growth, Environmental Scarcity and Conflict”** said that environmental scarcity often encourages powerful groups to capture valuable environmental resources and prompts marginal groups to migrate to ecologically marginal areas which are fragile in nature. High population densities in these regions, combined with a lack of knowledge and capital to protect the local ecosystem, cause severe environmental scarcity and chronic poverty. These two processes in turn reinforce environmental scarcity to raise the potential for social instability. Referring to the links between population growth and resource scarcity, the speaker stated that ever increasing population is one of the causes of resource scarcities which promote unsustainable level of environmental harm. Dr. Asif was of the opinion that better environmental conservation practices combined with lower population growth and equitable distribution of resources can prevent or at least reduce conflicts leading to violence.

43. In his session on **“Energy Crisis and Response Strategies in South Asia”** **Mr. Naseer A. Gillani**, Member (Technical), Ministry of Water and Power, Government of Pakistan said that South Asia is not very rich in energy resources in comparison to other parts of the world. In the region, the energy is available mainly in two different forms. First is renewable form of energy source like hydropower and wind. The next is diminishing type like coal, gas and oil. Maldives, because of geographical reason can not enjoy the potential of hydropower as it does not have mountains. Ever increasing demand of energy is largely met through imported non-renewable types of energy. In Sri Lanka, there is a quite good energy sources, basically hydro-energy.

Bangladesh has discovered a good quantity of gas, but they don't have prospect of hydropower and wind potential is less. In Nepal, the potentiality of hydropower is immense, but constrained by resource shortages and odd geographical location which prevent her to export electricity to Bangladesh through transmission lines by using neighboring country. Bhutan does also have rich hydro sources, but it is difficult for them to export electricity. Considering these realities, the speaker was of the opinion that South Asian countries should emphasize on use of available potential source of energy rather than importing oil from abroad which is prone to more pollution. Hydro, solar and wind energy are not only renewable but also perpetual and very useful in South Asian perspective.

44. Giving a presentation on “**Migration in South Asia: Causes and Consequences**” Ms. **Tahira Syed**, Coordinator, CIDA said that “push” and “pull” factors are responsible for migration in South Asia. Insecurity and conflicts are push factors whereas economic and social wellbeing and kinship are the pulling factors. However, it is hard to isolate the contributions of different factors that exert a simultaneous influence. In addition to the pull and push factors, migration may also be triggered by policy changes such as privatization of healthcare. Most of the countries in South Asia lack a policy of attempting to achieve balanced regional development and consequently people migrate to cities causing unnecessary pressure on available resources and facilities. As far as the consequences of migration are concerned, the speaker was of the opinion that it can become both boon and bane. Migration generates remittances which can be invested on education and health to improve the quality of life of people. Besides, it provides opportunities for diversification and reduction of resource dependency. At the same time, the migration can be a major cause of brain drain, disruption in social fabric and over pressure on resources causing environmental problems. At the end of working day, Country Reports were presented by Pakistan and Sri Lanka. Mr. Zia Ud Din Khattak on behalf of Pakistani Participants and Mr. A.H.T.T.Vidumini from Sri Lanka presented their Country Reports.

45. On the **last day** of the training program, there was a Group Exercise followed by Evaluation Session and Concluding Ceremony. Group Work was facilitated by Ch. Israr ul Haq, Director (Training), NCRD on “**Environment, Population and Development Problems: Issues and Solution**”. The participants divided into two groups were asked to discuss in groups focusing on (i) issues/problems related to environment, population and development in South Asia and, (ii) recommendations to address these problems. Findings of both groups are summarized as below:

Issues: Deforestation, industrial and transport emission, noise pollution, climatic change and mismanagement of solid wastes were some of the environmental issues pointed out by the groups. As far as the population issues are concerned, they were: high population growth rate; increasing pressure on natural resources; rapid rural urban migration; lack of proper reproductive health facilities; and lack of proper family planning facilities; land degradation and fragmentation. Apart from these issues, other development issues raised were: low educational standard / level of the people; poor health, which results in low productivity; political instability hampering business climate and globalization.

Solution: Both the groups underlined the fact that there is a nexus between poverty, environment, population and development and there is a need of a holistic approach to tackle environmental and population related problems. They were of the view that sustained economic growth, easy access to quality health and education are very important tools to address problems. Above all, the participants emphasized on political stability and political will to tackle problems of environment and population.

Evaluation Session

46. In this session the participants were distributed structured Evaluation Forms expecting their comments and suggestions on the various aspects of the training program. Participants commended the overall management of the training program. As per their evaluation, the sessions delivered had been very useful. However, sessions on areas like: cost benefit analysis, environmental impact assessment, forecasting methods should have been included in order to provide technical knowledge to the participants. Besides, practice on computer software is necessary in order to acquire practical know-how. Participants acknowledged that training had achieved its objectives and they had been benefited from the training program. As far as selection of resource persons is concerned, most of the participants were satisfied with their performance. However, some participants suggested inviting more qualified and experienced resource persons. Participants realised that there was a good level of participation in the training sessions and more group works should be organised in order to increase participation level further more. Duration of the training was appropriate for them. However, two participants opined that duration was too short considering the importance of the training theme and unavailability of time to deal with many sensitive issues. Three participants recommended extending its durations to three weeks. Besides, in continuation to this course, an advanced/refresher course should be arranged in future.

47. The participants gave suggestions to make future training programme purposeful, which need to include more exercises and case studies for the brainstorming during the training course, providing reading materials in advance, improving the quality of the papers, arranging more local field visits directly related with the issues etc. As far as the field visit outside Islamabad is concerned, a participant suggested visits in different provinces of Pakistan and also for overnight stay in the intended targeted area to enable participants to have closer view of the host country at local/ field level. The participants suggested upgrading the capacity of the computer lab with uninterrupted internet facilities and arranging separate rooms for the workshops and group works. The Evaluation of the training course in tabular form is *at Annex- VII*.

Concluding Ceremony

48. **Ms. Fauzia M. Sana, Director General (SAARC)**, Ministry of Foreign Affairs was the Chief Guest of the closing ceremony of the training program. After recitation from the Holy Quran, the Acting Director of the Centre, Dr. M. Zahangir Kabir in his remarks thanked SAARC member states and distinguished resource persons who have

contributed to organize the training course successfully. He requested the participants to keep in touch with the Centre and hoped that they would be able to utilize the knowledge they gained through this training course. Syed Ejaz Wasti, the Course Coordinator briefly summarised the activities during the training programme. Mr. Roshan Shrestha from Nepal praising over all management of the training course thanked the SAARC Human Resource Development Centre for organising such a timely and relevant training and providing them a wonderful opportunity to participate in the training program in the beautiful city of Islamabad. Referring to the usefulness of the training course, he noted that the training course was very useful to develop analytical capacity of the participants to establish a linkage among key variables such as environment, population and development. He acknowledged that exposure visits were very useful and the training gave a platform to them to familiarise themselves not only with the contents of the training course but also with the culture and people of this beautiful country. He hoped that the comments given through the structured questionnaire would be taken care of and the future training programmes would be arranged in such a way that they provide at most benefit to the participants. He stressed the need to carry out refresher course in the same area in future.

49. In her concluding remarks, Ms. Fouzia M. Sana appreciated the Centre for organising training on such an appropriate theme. She said that population and environment is one of the prioritized development agenda of the South Asian region which has clear and distinct nexus with poverty. Population and environment are two faces of a coin and these two aspects have to be dealt together to achieve the goal of development. She believed that the participants have developed knowledge on the concept of environment, population and development as well as their forward and backward linkages. She expected participants after going back to their respective positions in their homeland would act for the betterment of environment and development by using the knowledge and expertise they have gained through this training course. The Chief Guest awarded the certificates to the participants.

SAARC HUMAN RESOURCE DEVELOPMENT CENTRE (SHRDC)

Training course on Environment, Population & Development

(CONCEPT PAPER)

Introduction

Globally, the world population is rising by about 78 million every year. United Nations population projections for the year 2050 range from 7.3 billion to 10.7 billion. Population growth is commonly assumed to be directly responsible for environmental degradation and depletion of natural resources under conditions of poverty. Sustainability and human security are among the major challenges facing humanity in the 21st Century. Prospects for sustainability and security will depend to a significant degree on the interactions between three factors Population, Development and Environment.

Population & the environment are closely related, but links between them are complex and varied, and depend on specific circumstances. The relationships are increasingly better understood. There is broad agreement on means and end, for example, women's empowerment is a development end in itself. Removing the obstacles to women's exercise of economic and political power is also one of means to end poverty. Reproductive health is part of an essential package of health care and education. Its mean to the goal of women empowerment, but it is also a human right and includes the right to choose the size and spacing of the family. Achieving equal status between men and women, guaranteeing the right to reproductive health, and ensuring that individuals and couples can make their own choices about family size will also help to slow population growth rates and reduce the future size of world population, thus slower population growth will contribute measurably towards environment stress.

In 1992, the Rio Earth Summit focussed the international community on the critical linkages between environment and development. Agenda 21, the principal agreement of the Summit, provided a framework for sustainable development that called for tackling poverty, development and environment as one, by focusing on people resources and productivity. It called for the integration of environment development & population in order to fulfil basic needs, improve

living standard for all, and better manage & protect ecosystem for longer time. A lot has been changed since the Rio Summit, Globalisation has yielded benefit for many, but it has left many others behind. Environmental degradation has slowed in some areas and accelerated in other. In 2000, the world set Eight Millennium Development Goals with measurable targets for progress on sustainable development. Eradicating poverty and hunger by 2015 was the first goal, and thus combating poverty is the basic condition for tackling environment, development and poverty together. Issues such as health care, education, rights of women and improved governance are all essential concepts of sustainable development.

South Asia with 23 percent of the world's population is the planet's poorest region. About 540 million or 45 percent of the region's population are living below the poverty line, with daily income of less than a dollar a day. Simultaneously it is confronted with population growth as its population crossed 1.3 billion by 2000 up from 1.1 billion at the start of 1990s, whereas India representing 76% of South Asia's population. It is the most densely populated region with 278 people per sq km. The high level of population growth has put tremendous pressure on the resources of the region. Although there is some declining trend in some countries of South Asia's, e.g. Sri Lanka's birth rate has almost declined to a point where it is just replacing the present population, and India & Bangladesh are at the point where both fertility and mortality rates are beginning to decline. The population with poverty is a threat to environment and cause depletion or use of natural resources, i.e. biodiversity. The climate is affected by the human population and carbon omission, as well as distribution, migration, growth etc. In South Asia redistribution of resources through environment degradation and economic impoverishment has assumed the form of air pollution, contamination of ground and surface water, forest resources erosions, degradation and desertification of land due to loss of forest cover, water logging & salinity. Moreover, environment is further threatened by brown issues of industrial pollution. The vicious cycle between poverty and environmental degradation makes the poor ever more vulnerable leading to further environmental degradation and more poverty, thus poverty alleviation is the best win-win strategy, primarily focusing on resources, production and people including enhanced health care, education, empowerment of women, improved governance with focus on a) minimising environmental degradation and population, b) eliminating root causes of environmental degradation i.e. population pressure & poverty, c) integrating environment and development and d) vigorously pursuing the path of sustainable development.

The Countries of South Asia are committed to the goal of alleviating poverty, environmental protection, health care and education, beefing up the development activities and reduction of socio economic disparity and improving the quality of life. This has been clearly demonstrated in the past by several actions they have taken in the year after the Earth Summit in Rio. The work of the SAARC Technical Committee on Environment and the work by South Asia Co-operative Environment Programme has amply demonstrated in the past. The aim of the co-operative work by them is to promote and support the protection, management and enhancement of the

environment, both natural and human of the countries of South Asia, individually, collectively and co-operatively.

As a part of the continued activity the SHRDC is imparting a training programme on “Environment, Population & Development” to enhance institutional capacity on issues of environmentally sustainable development, to understand the gravity of the problem and to comprehend multisectoral and multidisciplinary linkages between population, sustainable development and environment.

Objectives

The general objective of the training programme is to harmonize & enhance the mutual relationship among population dynamics, the environment and social and economic development, while specific objectives are to broaden the consideration of trends in demographic variables in sectoral and regional policies, the coherent integration of population and environmental policies into economic and social development strategies.

Approach

The training programme will have an integrated comprehensive introductory and operationally oriented approach to the inter relationship between population environment and sustainable development. It will deal with the conceptual, theoretical aspect, sectoral and thematic approaches, methodologies, methods and techniques for analysis and policy and programme analyses.

Methodology

Training methodology includes lectures by resource persons, followed by discussions, and case studies, country report presentation by the participants and experience sharing. Field exposure visits have been arranged for the training purpose. All the audio visual aids like multi media projector, slide projector, overhead projector, flip chart and board etc will be used for the training programme.

Expected outcome of the training programme

At the end of the training programme, the participants will be able to:-

- a) Gain knowledge about the diversity and complexity of environmental problem.

- b) Develop a critical understanding of the major historical and current debates about relationship between population dynamics, resource constraints and the right to economic & social development.
- c) Conceptualize and analyse the interrelationship and feed-backs between population dynamics, system of strategic resources and processes of economic development.
- d) Integrate conceptual & analytical capabilities in the field of population and social development with investigative skill, methods and techniques to bring greater clarity, precision and insight to major contemporary question of population resources relation.
- e) Understanding the state of art monitoring & evaluation tools & techniques for a successful design and implementation of projects.
- f) Efficient and effective use of research findings from integrated population, health and environment, work for the improvement of policies and programmes.

Duration of the training programme

Duration of the training programme will be two weeks. It will start on 29th March, 2004 and end on 11th April, 2004.

Venue

SAARC Human Resource Development Centre, Islamabad – Pakistan.

Participants

This training course is primarily designed for the mid level functionaries, trainers / professionals from the Government, Semi Government organisations, working under the Ministries of Environment, Population, Planning & Development and other related organisations and NGOs of SAARC Member States. There will be 25 participants in total, 3 from Bangladesh, Bhutan, India, Maldives, Nepal, Sri Lanka and 7 from Pakistan (being the host country). The nominating / sending member Government state shall have to bear the two way air ticket of the participants, while SHRDC will provide local hospitality boarding and lodging and a daily pocket allowance.

Training Modules

There are altogether 6 modules which are described below in detail with objectives, approaches and contents.

Module – 1

Environment, Population & Development Context

The module will deepen the understanding of the context of Environment, Population & Development with focusing on three historical periods

- a) Ancient and pre-modern era (Ancient time until the early 19th century).
- b) Early modern period (late 19th century to 20th century).
- c) The late 20th century (focus on 1990s).

Module – 2

Environment, Population & Development Intervention

The module will equip the participants about the interrelationship between Environment, Population and Sustainable Development.

Contents:

- Conceptual & theoretical framework.
- Sectoral & Thematic approaches.
- Methodologies methods & techniques for analysis and integration of issues.
- Policy & programme analysis & formulation of actions.
- Environment and Natural Resource Management in South Asia.
- Characteristics of Environment, Population and Development problem in South Asia & differences with developed industrial countries.

Module – 3

Social Policy Analysis

The module will deepen the understanding of key debates and approaches in social policy making, the recent trend in development and poverty reduction, shifting the role of state, globalisation, changing financing regimes, new protections and provisioning measures with focus to address the central issue of vulnerability insecurity and exclusion.

Contents:

- Social policy in context.
- Conceptualizing vulnerability, insecurity.
- Organising and financing intervention to protect and enhance security.
- Integrated policy analysis.

Module – 4

Women, Environmental Management & Sustainable Development

It will enhance the understanding of the participants and the linkages between the role of women in development, reproductive health & the protection of the environment and assist in enabling a more participative role of women in sustainable development & environmental management.

Contents:

- Role of women in development & natural resource management.
- Gender & reproductive health.
- Health, mortality, fertility and the environment.
- New and re-emerging diseases.
- Women & Environmental health.
- Women as agent of change in the development sector.
- Women as managers of the environment.

Module – 5

Techniques of Demographic & Environmental Analysis

The module will explain the techniques of demographic and environmental analysis.

Contents:

- Measurement of fertility.
- Family planning.
- Mortality.
- Life table methods.
- Population projections.
- Resource management skills.
- Environmental conversation.
- Environmental impact assessment.
- Ecosystem measurement.

- Efficient allocation of resources.
- Role of biological diversity in the health & sustainability of ecological and economic system.
- Type of environmental indicators.

Module – 6

Political Economy of Migration

Population change, particularly via migration has had an important impact on the environment & development. The world has seen rapid migration from rural to urban areas, as well as inter region migration. The module will enable to understand and discuss ways to overcome the migration processes, importance of locating contemporary processes of migration in the globalisation world.

- Critical introduction to contemporary debates in migration theory.
- Issues in migration policy.
- Importance of globalisation and the changing context of international migration.
- Migration & urbanisation interrelationship with socio economic development & evolving policy issues.
- Urbanisation pattern & problem.
- Relationship between migration & development.
- Migration & organised labour.
- Migration & social policy design.

**SAARC Human Resource Development Centre
(SHRDC)
Islamabad-Pakistan**

*Training Course on
Environment, Population and Development
(March 29-April 11, 2004)*

L i s t o f P a r t i c i p a n t s

S. No.	Details of the Participants		
	Name	Designation	Address in their home countries
1.	Mr. Md. Mizanur Rahman	Senior Assistant Secretary	Office: Planning Division, Ministry of Planning Dhaka, Bangladesh. Phone. No. 0088-02-9117315 Residence: 2/7, Bailey G.O. Qtr. Bailey Road, Dhaka. Ph. No.0088-02-8357959, 0172131034(Mobile)
2.	Mr. Rinzin Dorje	Deputy Director	Office: Department of Planning, Ministry of Finance, Royal Government of Bhutan, Thimphu, Bhutan. Ph. No.975-2322928 E-mail- rdorji@pcs.gov.bt Residence: Jungshina, Pametsho, Thimphu: Bhutan. Ph. No.975-2323125
3.	Ms. Ikrisha Abdul Wahid	Assistant Research Officer	Office: Ministry of Planning and National Development, Maldives. Ph. No.(+960)332978, (+960)323919 E-mail- pop@planning.gov.mv Residence: Ministry of Planning and National Development, Ghazee Building, Ameer Ahmed Magu Male, Rep. of Maldives. Ph. No.(+960)710985, (+960)335848 E-mail- ikrisha@yahoo.com

4.	Mr. Roshan Shrestha	Demographer	<p>Office: Ministry of Population and Environment, His Majesty's Government of Nepal, Singh Durbar Kathmandu, Nepal. Ph. No.+(977-1)4245-368 E-mail- roshan@mope.gov.np</p> <p>Residence: 46/35 Vayu Marg, Pingan Sthan, old Baneswor, Kathmandu, Nepal. Ph. No.+(977-1)4495-913 E-mail- roshan_shrestha1@yahoo.com</p>
5	Mr. Mohammad Salim Khalid	Assistant Chief	<p>Office: Poverty Alleviation Section, Planning and Development Division, Government of Pakistan Islamabad, Pakistan. 44000 Ph. No.9211642 E-mail- mshkhalidch@hotmail.com</p> <p>Residence: H#31, St#14, Margalla Town Islamabad. Ph. No.0333-5175905(Mobile).</p>
6.	Dr. Muhammad Qasim Khan Afridi	District Program Officer (Health)	<p>Office: Bajaur Agency, National Commission for Human Development, Pakistan. Ph. No.09351-221344, 221350 E-mail- bajaur_dpoh@nchd.org.pk</p> <p>Residence: Political Coloney Khar Bajaur Agency NWFP Pakistan. Ph. No.09351-221278</p>
7.	Dr. Waheed Afzaal	Assistnat District Program Officer (Health)	<p>Office: Attock, National Commission for Human Development, Pakistan. Ph. No.92-0597-9316297 E-mail- Afili_mk@hotmail.com</p> <p>Residence: Mohalla Union Council Village & PO Mirza Attock City, Pakistan. Ph. No.92-0597-603504 E-mail- shamyl_khan73@yahoo.com</p>
8.	Mr. Zia Ud Din Khattak	Deputy Director (Research and Investigation)	<p>Office: 44-E, Office Tower, Pakistan Environmental Protection Agency, Blue Area, Islamabad. Ph. No.9204498 E-mail- pakepa@isb.compol.com</p> <p>Residence: Flat-2B, Shaikh Market, I-10/1. Islamabad. Ph. No.4444533</p>

			E-mail- ziakhattak_1@hotmail.com
9.	Mr. Sohail Nadir	Assistant Project Manager	Office: National Urban Poverty Alleviation Programme, Balochistan Ph. No.081-449690, 081-9211638 E-mail- sohail_nadir@hotmail.com Residence: 7-64/77-C, Alamdar Road Nichari Quetta. Ph. No.081-662738
10.	Mr. Abdur Razaq	Research Officer	Office: AHK National Centre for Rural Development and Municipal Administration, Ministry of Local Govt. & Rural Development, Government of Pakistan, Islamabad. Ph. No.9255150 Residence: H#408, St#15, Shahzad Town Chak Shahzad Islamabad. Ph. No.2242042
11.	Mr. Mehtab Ahmad Abbasi	Assistant Director (Com.)	Office: Ministry of Population Welfare, Government of Pakistan, Civic Centre Islamabad. Ph. No.9214017 Residence: H#1205, St#92, Sector I-10/1, Islamabad. Ph. No.4443507
12.	Mr. Muhammad Aftab Zahoor	Environmental Reporter	Office: Associated Press of Pakistan (APP), 18-Mauve Area, Zero point, Islamabad. Ph. No.+92-51-2203081-82 E-mail- aftabzahoor13@hotmail.com Residence: 434, St#01, I-9/1, Islamabad. Ph. No.+92-51-4438272
13.	Mr. Haji Akbar	Social Welfare Program Officer	Office: Ministry of Women Development, Social Welfare and Special Education, Government of Pakistan, Islamabad. Ph. No.092-51-9204698 Residence: Block#33/2 E, G-10/2, Islamabad. Ph. No.092-51-2292358 E-mail- akbarcheena@hotmail.com
14.	Mr. A.H.T.T.Vidumini	Environmental Management Officer	Office: Ministry of Environment and Natural Resources, Colombo, Sri Lanka

			Ph. No.011-2883098 E-mail- pmmst123@hotmail.com Residence: No. 9/50, Jayamaha Vihara R.d. Pamburana, Matara, Sri Lanka. Ph. No.041-2226018
	Observer Participants		
01.	Ms. Danishmond Farooqi	Director	Office: Office1. Director (Sports), St. Lawrence's Govt. Girls College, Jager Moradabadi Road, Karachi, Pakistan. Ph.No.9231211 Office2. Director, WCRP Pakistan Chapter. Ph. No. +92-077-7211426 E-mail- mkf1964@yahoo.com Residence: Banglow no. 30A, Block no. 2, Shah Faisal Colony Karachi Ph. No.+92-077-4584808
02.	Mr. Arif Zaman	Research Fellow	Office: Centre for Organisation Reputation and Relationships and Centre for Board Effectiveness, Henley Management College Greenlands, Henley-on-Thames, Oxfordshire RG9 3AU, UK. Ph. No.+44(0)1491 418733, 456335(Mobile) E-mail- arifzaman@ftnetwork.com Residence: 34 Stretton Road Croydon CRO 6EP Surrey, UK. Ph. No. 44(0)7956

ANNEX-III

**SAARC Human Resource Development Centre (SHRDC)
Islamabad, Pakistan**

Training course on Environment, Population and Development

(Working Programme)

INAUGURAL CEREMONY

Venue: Hotel Margala, Islamabad

<u>Day 1</u> 29 March, 2004 Monday		
09:45 Hrs	Arrival of the Guests.	
10:00 Hrs	Arrival of the Chief Guest.	
10:05 Hrs	Recitation from the Holy Quran.	
10:10 Hrs	Introduction to SHRDC and Welcome Address by the Director, SHRDC.	
10:30 Hrs	Introduction to Course Objective by the Course Coordinator.	
10:40 Hrs	Inaugural Address by the Chief Guest.	
11:00 - 11:30 Hrs	Refreshment/Photo Session of the Participants with the Chief Guest.	
12:30 - 13:00 Hrs	Registration of the Participants (at SHRDC).	
13:00 - 13:30 Hrs	Getting Acquainted.	Dr. M. Zahangir Kabir, Director, SHRDC, Course Coordinator and other Professionals, SHRDC
13:30 - 15:00 Hrs	Lunch Break.	
15:00 Hrs	Islamabad City Tour.	

TRAINING SESSIONS

Venue: SHRDC Training Hall

Date & Time	Topics	Resource Person
Day 2 30 March, 2004 Tuesday		
09:00 - 10:30 Hrs	Introduction / Historical Background of Environment, Population & Development (EPD).	Dr. Noman F. Kadir, National Project Manager, POPs Enabling Activity, Pakistan Environmental Protection Agency, Islamabad
10:30 - 11:00 Hrs	Refreshment	
11:00 - 12:30 Hrs	Macro Economic Policies, Environment & Development	Dr. A.R. Kemal Director, PIDE, Islamabad
12:30 - 14:00 Hrs	Lunch / prayer.	
14:00 - 15:30 Hrs	Best Practices of Sustainable Environmental Development in SAARC Region.	Dr. Rehana Siddiqui, Chief of Research, PIDE ©
15:30 - 16:00 Hrs	Tea.	
Day 3 31 March, 2004 Wednesday		
09:00 - 10:30 Hrs	Environmental Regulatory Framework and It's Implementation Status	Dr. Irfan Saeed, Programme Manager, Pakistan Environment Protection Agency, Islamabad
10:30 - 11:00 Hrs	Refreshment	
11:00 - 12:30 Hrs	Issues & Problems in Population Dynamics in South Asia.	Mr. Amanullah Khan, Chief, Population and Social Planning Section, Planning and Development Division
12:30 - 14:00 Hrs	Lunch / prayer.	
14:00 - 15:30 Hrs	Environmental Issues in South Asia Comparison with Developed Countries.	Dr. Javed Iqbal, Director, Pakistan Environmental

		Protection Agency, Islamabad
15:30 - 15:45 Hrs	Tea Break	
15:45 - 16:15 Hrs	Country Report Presentation by Bangladesh.	
Day 4 1 April, 2004 Thursday		
09:00-13:00 hrs.	Local Exposure Visit to Fauji Cement Factory, Jhang Bahtar, Tehsil Fateh Jang, District Attock	
13:00 – 14:00 Hrs	Lunch / Prayer	
14:00-15:30 hrs	Planning, M & E of Environment and Population related projects.	Mr. Shahnawaz Hussain, Deputy Chief, Planning and Development Division
Day 5 2 April, 2004 Friday		
09:00 - 10:30 Hrs	Social Policy Analysis (Corporate Social Development)	Arif Zaman, Research Fellow, Henley Management College, London, UK
10:30 - 11:00 Hrs	Refreshment	
11:00 - 12:30 Hrs	Population, Poverty and Environment Nexus.	Dr. W.G. Somaratne, Research Fellow, SHRDC
12:30 - 14:00 Hrs	Lunch / Prayer.	
14:00 - 15:30 Hrs	Country Report Presentation by Bhutan & India.	
15:30 - 16:00 Hrs	Tea Break	
Day 6 3 April, 2004 Saturday	Study Visit to Environment Rehabilitation Project (ERP), Murree	Mr. Mehmood Akhtar Cheema, Director, Resource Unit, IUCN Office, Islamabad
Day 7 4 April, 2004 Sunday	Rest Day / Visit to Taxila.	
Day 8 5 April, 2004 Monday		
09:00 - 10:30 Hrs	Implementation of National Conservation	Dr. Asif Zaidi, Head, IUCN

	Strategies (NCS): Strength & Weakness.	Islamabad Office
10:30 - 11:00 Hrs	Refreshment	
11:00 - 12:30 Hrs	Women's Access to Natural Resources and Millennium Development Goals	Ms. Maheen Zehra, Consultant, ADB
12:30 - 14:00 Hrs	Lunch / prayer.	
14:00 - 15:30 Hrs	Biodiversity Conservation in South Asia	Dr. Rakhshan Roohi, Incharge , GIS and RS, WARP, National Agriculture Research Centre, Islamabad
15:30 - 16:00 Hrs	Tea Break	
16:00-17:30 Hrs	Interrelationship between Environment, Population and Development	Mr. Ozair A. Hanafi Executive Director, Human Development Institute, Khushhali Bank, Islamabad

Day 9 6 April, 2004 Tuesday		
09:00 - 10:30 Hrs	District Population Office, Islamabad	Mr. Jehanzeb, District Population Welfare Officer, District Population Office, Islamabad
10:30 - 11:00 Hrs	Refreshment	
11:00 - 12:30 Hrs	Role of Community Organisations in Environmental Management.	Mr. Tariq Khosa, Director (Management), NIPA Lahore
12:30 - 14:00 Hrs	Lunch / prayer.	
14:00 - 15:30 Hrs	Role of Local Government in Promoting Environmental Agenda.	Mr. M. Asif Zaman Ansari, DG, National Centre for Rural Development
15:30 - 16:00 Hrs	Tea Break	

Day 10 7 April, 2004 Wednesday		
09:00 - 10:30 Hrs	Techniques of Demographic Analysis.	Dr. Arshad Mahmood, National Commission for

		Human Development
10:30 - 11:00 Hrs	Refreshment	
11:00 - 12:30 Hrs	Techniques of Environmental Impact Assessment (EIA).	Dr. Mohammad Irfan, Head, Department of Environment Sciences, Allama Iqbal Open University
12:30 - 14:00 Hrs	Lunch / prayer.	
14:00 - 15:30 Hrs	Country Report Presentation by Maldives & Nepal.	
15:30 - 16:00 Hrs	Tea Break	

Day 11 8 April, 2004 Thursday	Field Visit to Vehicle Emission Testing Station (VETS), Chamkani Mor, Main GT Road, Peshawar	Dr. Shafiq Rehman, Chairman, Department of Environmental Science, University of Peshawar
Day 12 9 April, 2004 Friday		
09:00 - 10:30 Hrs	Population Growth, Environmental Scarcity and Conflict	Dr. Asif Zaidi, Head, IUCN Islamabad Office
10:30 - 11:00 Hrs	Refreshment	
11:00 - 12:30 Hrs	Energy Crisis and Response Strategies in South Asia	Mr. Naseer Gillani, Member (Technical) ,Ministry of Water and Power
12:30 - 14:00 Hrs	Lunch / Prayer.	
14:00 - 15:30 Hrs	Migration in South Asia: Causes and Consequences.	Ms. Tahira Syed, Coordinator, Program for the Advancement of Gender Equality, Canadian International Development Agency, Islamabad
15:30 - 16:00 Hrs	Tea Break	
16:00 - 17:30 Hrs	Country Report Presentation by Pakistan & Sri Lanka.	

Day 13 10 April, 2004 Saturday		
09:00 - 11:00 Hrs	Group work on Environment, Population & Development Problems, Issues and Solution.	Ch. Israr ul Haq, Director (Training), NCRD,

		Islamabad
11:00 - 11:30 Hrs	Refreshment	
11:30 - 12:30 Hrs	Course Evaluation.	
12:30 - 13:30 Hrs	Conclusion and Certificate Distribution.	
13:30 - 15:00 Hrs	Lunch	

Day 14 11 April, 2004 Sunday	Departure of the Participants.	
---	--------------------------------	--

PAPERS OF RESOURCE PERSONS

**SAARC Human Resource Development Centre (SHRDC)
Islamabad, Pakistan**

**Training Course on
Environment, Population and Development
(March 29- April 11, 2004)**

Guide Lines for Preparation of Country Report by the Participants

A country report of 8-10 pages should contain the following points:

A. Background:

1. Country in brief
2. Analysis of existing population and environment situation in the country
3. Nexus between environment, population and development in the country

B. Efforts towards environmental and population management in the country:

1. Past initiatives and their impact in environmental conservation and population control
2. Policies and programs being adopted to maintain a balance between environment, population and development.

C. Environmental and population problems in the country and its impact on overall development process.

D. Recommendations:

Note:

Participants are requested to carry their country reports both in printed form as well as in the diskettes for the documentation in the SHRDC library. Besides, the participants in their country report should submit the organogram of their organizations showing the units where they have been serving for the cause of environment, population and development.

Country Reports

Evaluation of the Training Programme

Particulars	Ratings(number of students)											
	Very Much	Much	Not Much									
Attainment of Stated Course Objectives	7	6	1									
				Too Long	Appropriate	Too Short						
Duration of the Course				3	9	2						
Benefits from the Course							Very Much	To a Reasonable extent	Not Much			
Improvement in the appreciation of the subject areas							6	8				
Improvement of the knowledge & understanding of the subject areas							6	8				
Exchange of experiences							8	5				
<u>Others</u>												
									Excellent	Very good	Good	Poor
Time Management										5	8	
Participants' involvement									4	6	3	
Selection of the Resource Persons									4	8	2	
Usefulness of the Acquired Materials									2	5	6	

Note: Number of participants was 16, but some of them did not fill up evaluation form completely. Hence, ratings of number of students may not be summed up to 16.