REGIONAL ACTION PROGRAMME FOR ENVIRONMENTALLY SOUND AND SUSTAINABLE DEVELOPMENT, 2001-2005

ABBREVIATIONS

ADB	Asian Development Bank
APCTT	Asian and Pacific Centre for Transfer of Technology
ASEAN	Association of Southeast Asian Nations
ASOEN	ASEAN Senior Officials on the Environment
CDM	Clean Development Mechanism
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CITYNET	Regional Network of Local Authorities for the Management of Human Settlements
DESCONAP	Regional Network of Research and Training Centres on Desertification Control in Asia and the Pacific
FAO	Food and Agriculture Organization of the United Nations
FADINAP	Fertilizer Advisory, Development and Information Network for Asia and the Pacific
GEF	Global Environment Facility
GHG	greenhouse gas
GIS	geographic information systems
ILO	International Labour Organization
ISO	International Organization for Standardization
LOGOTRI	Network of Local Government Training and Research Institutes in Asia and the Pacific
ODA	official development assistance
OECD	Organization for Economic Cooperation and Development
RICAP	Regional Inter-agency Committee for Asia and the Pacific
SACEP	South Asian Cooperative Environment Programme
SPREP	South Pacific Regional Environment Programme
TPN	Thematic Programme Network
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDO	United Nations Industrial Development Organization
WHO	World Health Organization
WTO	World Trade Organization

INTRODUCTION

Following the United Nations Conference on Environment and Development, the governments of the Asian and Pacific region have, within certain limitations and constraints, drawn up and implemented national strategies, action plans and programmes to attain the objectives of sustainable development. The international, regional and subregional organizations have developed their respective action programmes to assist the governments in their efforts. There were also some common problems and transboundary issues that lent themselves to action at the regional and subregional levels. To assist the governments of the region, the third Ministerial Conference on Environment and Development in Asia and the Pacific, held in 1995, adopted the Ministerial Declaration on Environmentally Sound and Sustainable Development in Asia and the Pacific and the Regional Action Programme for Environmentally Sound and Sustainable Development, 1996-2000.

The General Assembly, at its nineteenth special session held in June 1997, reviewed the implementation of Agenda 21 and noted that despite some progress in terms of institutional development, international consensus-building, public participation and private sector action, the state of the global environment had continued to deteriorate. As a result, the General Assembly adopted the Programme for the Further Implementation of Agenda 21. The assessment and conclusion applies equally to the overall trends in the Asian and Pacific region. Similarly, the twenty-second special session of the General Assembly, held in September 1999, made a comprehensive review and appraisal of the implementation of the Programme of Action for the Sustainable Development of Small Island Developing States with guidance for further action, and the General Assembly, at its fifty-fourth session, adopted resolution 54/224 on the implementation of the outcome of the Global Conference on the Sustainable Development of Small Island Developing States.

The Ministerial Conference on Environment and Development in Asia and the Pacific, 2000 to be held on 31 August-5 September 2000 at Kitakyushu, Japan, will review major environmental and developmental trends and findings as highlighted in the report on the state of environment in Asia and the Pacific, 2000 and the implementation of the regional action programme, 1996-2000. Based on the recommendations of the General Assembly, a major effort to attain sustainable development in the region has been made. Drawing on the lessons learnt from this exercise and the implementation of earlier regional action programmes, the Regional Action Programme for Environmentally Sound and Sustainable Development, 2001-2005 has been developed to stimulate enhanced action. As we enter the twenty-first century, this Regional Action Programme is the fourth in a series of regional strategies and action programmes adopted at ministerial conferences since 1985. It is intended to build upon the progress to date and experiences gained through the previous regional action programmes and strategies. The Regional Action Programme covering the period

1996-2000, for example, identified 24 programme areas stemming from the major areas of priority action: pollution reduction, prevention and control and enhancement of environmental quality; conservation and management of natural resources and ecosystems; sustainable development policy improvement; and sustainable development indicators and assessment. Notable progress has been made in the region over the last five years in its implementation, and the Regional Action Programme takes into consideration those achievements to address effectively the emerging sustainable development issues and trends in the twenty-first century.

The Regional Action Programme fully recognizes the overarching need for poverty reduction as a fundamental prerequisite for achieving sustainable development. It further recognizes that poverty reduction through pro-poor economic growth, social development and the empowerment of peoples and institutions would contribute to such a process. The causes and effects of environmental degradation, like those of poverty, are wide-ranging and diverse. Environmental protection can only be effectively realized if it is accompanied by a comprehensive programme for social development and economic growth. In this connection, the Regional Action Programme identifies the programme areas that will address the issues of poverty reduction while securing a better environment.

The current Regional Action Programme is designed to take an action-oriented and focused approach with clear goals and targets to address areas of priority concern. Strategic environmental planning and management and the integration of environmental policy with economic policy are important guiding principles of the new action programme.

The Regional Action Programme will seek to achieve its aim, inter alia, by facilitating, supporting and promoting the implementation of the existing international, regional and subregional agreements and treaties. It will also use a range of other mechanisms, such as fiscal and economic policies, to promote environmental management, with programmes aimed at preserving regional cultural diversity and beneficial traditional practices. Increased public awareness and participation will stimulate an enhanced environmental programme. More specifically, the programme areas have been clustered around a number of strategic themes: environmental quality and human health; biodiversity; coastal and marine environments; freshwater resources; desertification and land degradation; globalization and policy integration; climate change; and sustainable energy development. Tools and institutional arrangements for implementation, reporting and review mechanisms have been included to ensure effective implementation.

Prioritization of activities and targets in the Regional Action Programme is based on the following criteria: (a) the need to address urgent issues; (b) the possibility of taking advantage of unique opportunities and replicating successful actions and strategies; (c) the potential to ensure

concrete action and produce results within a set time frame; (d) the need to undertake activities in a structured and coordinated manner.

Consistent with the special focus on the Small Island Developing States by the General Assembly through its twenty-second special session and resolution 54/224 of its fifty-fourth session, the programme also recognizes the need to focus more attention on the Small Island Developing States in all programme areas.

While the primary responsibility for implementing the Regional Action Programme lies with national governments and the necessary resources are to be mobilized by the countries concerned, a significant part of the activities will need to be carried out or coordinated at regional and subregional levels. The Programme takes fully into account the priorities identified by the governments and attempts to provide synergy with the existing programmes of subregional and regional organizations. The United Nations bodies and agencies and other international organizations and multilateral financing institutions have to play a major role in the implementation of the Regional Action Programme, including coordination, human resources development, capacity-building and the provision of technical assistance. Efforts are also necessary to harmonize the Programme with the work programmes of subregional, regional and other relevant organizations with a view to minimizing the multiplicity of efforts and optimizing the incremental cost of implementation.

The time frame for the implementation of the Regional Action Programme is 2001-2005, except where indicated otherwise. This implementation period is considered short-term. While some tangible results and targets could be obtained during this period, major tangible and identifiable benefits will be achieved only after the activities have been continued over a longer time frame. Such activities are referred to as long-term activities. The next Ministerial Conference on Environment and Development in Asia and the Pacific, which is likely to be organized by the year 2005, will review the progress in the implementation of the Regional Action Programme and recommend further measures as necessary.

I. PROGRAMME AREAS

A. Environmental quality and human health

1. Status and trends

With rapid economic development and population increases over the past 30 years, the environmental quality of both rural and urban areas has continued to decrease. The major environmental problems facing the rural population are those associated with poverty and

underdevelopment, such as access to drinking water, sanitation, education and health care, poor rural infrastructure for agriculture and related developments, and poor nutritional intake. Increased use of fertilizers and pesticides is contaminating the land and water resources. Urban populations in Asia have increased faster and most of the urban population is concentrated in a few cities. Similar increases and urban population concentrations have occurred in some Small Island Developing States such as Papua New Guinea, Solomon Islands, and Vanuatu. The impacts of rapid urbanization include encroachment on agricultural and forest lands, including hazardous lands; urban air and water pollution and associated diseases; unavailability of safe drinking water and the over-exploitation of groundwater causing urban ground subsidence and saltwater intrusion; increasing traffic congestion; noise pollution; and significant increases in solid municipal and industrial wastes. The urban poor are the most affected by urban environmental degradation. They tend to live and work in the most polluted and environmentally sensitive places and they do not have the means to protect themselves against pollution. Many of their settlements lack safe water supplies and sewerage and drainage facilities. Environmental conditions affect their health, which impoverishes them further.

In 1995, nine of the world's 14 largest urban centres (megacities with more than 10 million residents) were in the Asian and Pacific region. By the year 2015, Asia will have 27 of the 33 largest cities. Ten of Asia's 11 megacities presently exceed World Health Organization (WHO) guidelines for particulate matter by a factor of at least three and in some cases it is 10 times higher. Levels of smoke and dust, a major cause of respiratory diseases, are generally twice the world average. Quality of air in terms of carbon monoxide, sulphur dioxide, and nitrogen oxides are in many cases above the WHO standards despite initiatives taken by many governments. Slums and squatter settlements are growing at a much higher rate than the urban growth rates in some of the cities, adding stress to the already stressed capacity of municipalities to provide public services. Traffic congestion is another serious problem, causing air pollution and extending travel times, thereby affecting human health and incurring economic losses through delays.

Industrialization, poor quality of fuel, and inefficient and insufficient public transport systems are the factors behind the increasing air pollution. According to some estimates, automobile emissions account for two thirds of the pollutants. In particulate air pollution, local reductions were achieved in some countries by switching to cleaner fuel. Phasing out of leaded gasoline in some countries (India, Nepal, Republic of Korea, Thailand) resulted in the reduction of lead pollution but the level of lead in many cities is at a dangerously high level. The health effects of air pollution are a serious threat to the large urban centres and also in the rural areas because of indoor air pollution.

The production, conversion and use of energy have various environmental consequences.

The burning of biomass and coal for cooking is a major cause of indoor and local air pollution. Power stations using fossil fuels, especially coal, are a major source of carbon dioxide as well as sulphur dioxide and nitrogen oxides and cause local and long-range transboundary air pollution. Inefficient and unsustainable energy consumption patterns in industry, households and transport have also contributed to air pollution. With increasing sulphur dioxide emissions, acidification of the environment is an emerging issue. In response, many countries of East and South-East Asia have begun to monitor acid deposition in their own countries, and 10 countries have agreed to participate in the Acid Deposition Monitoring Network in East Asia. Similarly in South Asia, the Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia, was adopted by the Ministerial Conference of the South Asian Cooperative Environment Programme (SACEP) in 1998. Two centers namely North-East Asian Centre for Pollution Reduction in Coal-fired Power Plants and North-East Asian Centre for Environmental Data and Training have been established under the Framework for the North-East Asian Subregional Programme of Environmental Cooperation (NEASPEC).

Frequent and widespread forest fires in parts of Indonesia in recent years have caused problems of haze, posing a serious threat to the health of the people in neighbouring countries. The haze incident for several months in 1997 in South-East Asia was responsible for smoke pollution. In December 1998, the Association of Southeast Asian Nations (ASEAN) adopted the Hanoi Plan of Action reaffirming their commitment to implement the ASEAN Cooperation Plan on Transboundary Pollution with particular emphasis on the Regional Haze Action Plan, 1997.

Water quality has been steadily degraded by a combination of factors including human excreta, sewage and industrial effluent, urban and agricultural run-off and saline intrusion. Levels of suspended solids in Asia's rivers have almost quadrupled since the late 1970s and rivers typically contain four times the world average and 20 times the Organisation for Economic Cooperation and Development (OECD) levels. Water pollution caused by organic matter, pathogenic agents, fertilizers and pesticides, and hazardous and toxic wastes is another serious problem. Biochemical oxygen demand in Asian rivers is 1.4 times the world average. Asia's rivers contain three times as many bacteria from human waste (faecal coliform) as the world average and more than 10 times OECD guidelines.

With the growth in urban population, unsustainable consumption and consequent lifestyles, another problem faced in the Asian cities is waste disposal. Asia's rapidly rising incomes have brought about a dramatic increase in solid waste. The total amount of solid waste generated each year in the Asian and Pacific region is about 700 million tonnes and industrial activities generate 1,900 million tonnes of waste per year. On average, municipal authorities in Asian cities spend

between 50 and 70 per cent of their revenues on municipal waste management. Nonetheless, collection services remain low, with only 50 to 70 per cent of residents receiving any service. Landfill sites are rapidly running out and selection of new sites rarely takes geological suitability into account. Indeed many cities and towns do not have sanitary landfill sites. In places where wastes are incinerated, high levels of dioxin emissions are health hazards. In the cities where the capacities are meagre, wastes are piled up, breeding disease, or burned in which case toxic fumes pollute the atmosphere.

As urban areas, especially megacities, expand further, increases in traffic congestion, water and air pollution, and slums and squatter settlements can be expected. Most large Asian cities already face an acute shortage of safe drinking water and a fivefold increase in demand is anticipated within the next 40 years. Public expenditure on water and sanitation is around 1 per cent of gross domestic product for most countries of the region.

The limited scope for landfill sites in the Pacific Islands poses a significant problem for waste disposal and contributes to ground water pollution – a source of drinking water supply. In addition, economies of scale poses a major problem in the disposal of heavy machinery and vehicle parts within the Pacific Islands. Automobile emissions pose localized problems owing to inefficient combustion.

Successful urban projects, such as the Orangi pilot project in Pakistan to build a sewage system with community participation, offer examples to emulate. However, communities and non-governmental organizations can only solve the problems within the neighbourhood. The lack of external infrastructure and wastewater treatment remains a problem. The large cities in the developed world are examples of a revived urban environment achieved through regulations and clean-up efforts. These will be difficult to emulate mainly because of cost considerations. The