

JOHANNESBURG SUMMIT 2002

PHILIPPINES



COUNTRY PROFILE



UNITED NATIONS

INTRODUCTION - 2002 COUNTRY PROFILES SERIES

Agenda 21, adopted at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992, underscored the important role that States play in the implementation of the Agenda at the national level. It recommended that States consider preparing national reports and communicating the information therein to the Commission on Sustainable Development (CSD) including, activities they undertake to implement Agenda 21, the obstacles and challenges they confront, and other environment and development issues they find relevant.

As a result, in 1993 governments began preparing national reports for submission to the CSD. After two years of following this practice, the CSD decided that a summarized version of national reports submitted thus far would be useful. Subsequently, the CSD Secretariat published the first Country Profiles series in 1997 on the occasion of the five-year review of the Earth Summit (Rio + 5). The series summarized, on a country-by-country basis, all the national reports submitted between 1994 and 1996. Each Profile covered the status of all Agenda 21 chapters.

The purpose of Country Profiles is to:

- Help countries monitor their own progress;
- Share experiences and information with others; and,
- Serve as institutional memory to track and record national actions undertaken to implement Agenda 21.

A second series of Country Profiles is being published on the occasion of the World Summit on Sustainable Development being held in Johannesburg from August 26 to September 4, 2002. Each profile covers all 40 chapters of Agenda 21, as well as those issues that have been separately addressed by the CSD since 1997, including trade, energy, transport, sustainable tourism and industry.

The 2002 Country Profiles series provides the most comprehensive overview to date of the status of implementation of Agenda 21 at the national level. Each Country Profile is based on information updated from that contained in the national reports submitted annually by governments.

Preparing national reports is often a challenging exercise. It can also be a productive and rewarding one in terms of taking stock of what has been achieved and by increasing communication, coordination and cooperation among a range of national agencies, institutions and groups. Hopefully, the information contained in this series of Country Profiles will serve as a useful tool for learning from the experience and knowledge gained by each country in its pursuit of sustainable development.

NOTE TO READERS

The 2002 Country Profiles Series provides information on the implementation of Agenda 21 on a country-by-country and chapter-by-chapter basis (with the exception of chapters 1 and 23, which are preambles). Since Rio 1992, the Commission on Sustainable Development has specifically addressed other topics not included as separate chapters in Agenda 21. These issues of trade, industry, energy, transport and sustainable tourism are, therefore, treated as distinct sections in the Country Profiles. In instances where several Agenda 21 chapters are closely related, for example, chapters 20 to 22 which cover environmentally sound management of hazardous, solid and radioactive wastes, and chapters 24 to 32 which refer to strengthening of major groups, the information appears under a single heading in the Country Profile Series. Lastly, chapters 16 and 34, which deal with environmentally sound management of biotechnology, and transfer of environmentally sound technology, cooperation, capacity-building respectively, are presented together under one heading in those Country Profiles where information is relatively scarce.

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LIST OF COMMONLY USED ACRONYMS

ACS	Association of Caribbean States
AMCEN	Africa Ministerial Conference on the Environment
AMU	Arab Maghreb Union
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
CARICOM	The Caribbean Community and Common Market
CBD	Convention on Biological Diversity
CIS	Commonwealth of Independent States
CGIAR	Consultative Group on International Agricultural Research
CILSS	Permanent Inter-State Committee for Drought Control in the Sahel
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COMESA	Common Market for Eastern and Southern Africa
CSD	Commission on Sustainable Development of the United Nations
DESA	Department for Economic and Social Affairs
ECA	Economic Commission for Africa
ECCAS	Economic Community for Central African States
ECE	Economic Commission for Europe
ECLAC	Economic Commission for Latin America and the Caribbean
ECOWAS	Economic Community of West African States
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
ESCAP	Economic and Social Commission for Asia and the Pacific
ESCWA	Economic and Social Commission for Western Asia
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FIDA	Foundation for International Development Assistance
GATT	General Agreement on Tariffs and Trade
GAW	Global Atmosphere Watch (WMO)
GEF	Global Environment Facility
GEMS	Global Environmental Monitoring System (UNEP)
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection
GHG	Greenhouse Gas
GIS	Geographical Information Systems
GLOBE	Global Legislators Organisation for a Balanced Environment
GOS	Global Observing System (WMO/WWW)
GRID	Global Resource Information Database
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
IAEA	International Atomic Energy Agency
ICSC	International Civil Service Commission
ICSU	International Council of Scientific Unions
ICT	Information and Communication Technology
ICTSD	International Centre for Trade and Sustainable Development

IEEA	Integrated Environmental and Economic Accounting
IFAD	International Fund for Agricultural Development
IFCS	Intergovernmental Forum on Chemical Safety
IGADD	Intergovernmental Authority on Drought and Development
ILO	International Labour Organisation
IMF	International Monetary Fund
IMO	International Maritime Organization
IOC	Intergovernmental Oceanographic Commission
IPCC	Intergovernmental Panel on Climate Change
IPCS	International Programme on Chemical Safety
IPM	Integrated Pest Management
IRPTC	International Register of Potentially Toxic Chemicals
ISDR	International Strategy for Disaster Reduction
ISO	International Organization for Standardization
ITTO	International Tropical Timber Organization
IUCN	International Union for Conservation of Nature and Natural Resources
LA21	Local Agenda 21
LDCs	Least Developed Countries
MARPOL	International Convention for the Prevention of Pollution from Ships
MEAs	Multilateral Environmental Agreements
NEAP	National Environmental Action Plan
NEPAD	New Partnership for Africa's Development
NGOs	Non-Governmental Organizations
NSDS	National Sustainable Development Strategies
OAS	Organization of American States
OAU	Organization for African Unity
ODA	Official Development Assistance/Overseas Development Assistance
OECD	Organisation for Economic Co-operation and Development
PPP	Public-Private Partnership
PRSP	Poverty Reduction Strategy Papers
SACEP	South Asian Cooperative Environment Programme
SADC	Southern African Development Community
SARD	Sustainable Agriculture and Rural Development
SIDS	Small Island Developing States
SPREP	South Pacific Regional Environment Programme
UN	United Nations
UNAIDS	United Nations Programme on HIV/AIDS
UNCED	United Nations Conference on Environment and Development
UNCCD	United Nations Convention to Combat Desertification
UNCHS	United Nations Centre for Human Settlements (Habitat)
UNCLOS	United Nations Convention on the Law of the Sea
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDRO	Office of the United Nations Disaster Relief Coordinator
UNEP	United Nations Environment Programme

UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNIFEM	United Nations Development Fund for Women
UNU	United Nations University
WFC	World Food Council
WHO	World Health Organization
WMO	World Meteorological Organization
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization
WWF	World Wildlife Fund
WWW	World Weather Watch (WMO)

CHAPTER 2: INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES

Decision-Making: The major outputs of the Asia-Pacific Economic Cooperation Council (APEC) Senior Officials' (9-10 July 1996) and Ministerial Meetings (11-12 July 1996) on Sustainable Development included the Ministerial declaration and Action Programme on Sustainable Development. The documents essentially embody the need to advance cooperation on the following major sustainable development themes of the meeting: a) sustainable cities/urban management; b) clean production/clean technology; and c) sustainability of the marine environment. The Philippines is also involved in the formulation of the International Standards Organization ISO 14000. The objective of this wide-ranging set of international standards is to guide companies on how to manage, measure, improve, and communicate the environmental aspects of their operations in a systematic way.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: The Philippines hosted a series of Asia-Pacific Economic Cooperation Council (APEC) meetings on sustainable development. These meetings were aimed at advocating wide-ranging concerns and forging APEC-wide consensus on the need for increased economic and technical cooperation on sustainable development. The PCSD, being the country's focal point in sustainable development efforts, was instrumental in forging position papers for international gatherings and dialogues. Among its commitments is the preparation and coordination of country papers for the annual sessions of the United Nations Commission on Sustainable Development (UNCSD) in New York.

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CHAPTER 2: INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES - TRADE

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 3: COMBATING POVERTY

Decision-Making: Major policies and legislations that were passed include: the Agricultural Fisheries Modernization Act (AFMA) that was enacted to improve the incomes and productivity of farmers and fisherfolk; the Indigenous Peoples Rights Act (IPRA) that lays down the basic policies to the IP's rights to their ancestral domains; the repealed Anti-Squatting Law that decriminalizes squatting but maintains sanctions against professional squatters and syndicates; and the Gintong Ani for Marginal and Poverty Stricken Areas (GAMA) that will improve equity and provide equal access to marginal farmers and fisherfolk. Indigenous, environmental-friendly, and community-accepted technologies will be promoted in the upland areas particularly with critical environmental conditions. The GAMA programme will cover a total of 36 provinces, 20 of which are provinces in 9 regions identified under SRA. At the same time, the Department of Agriculture (DA) and the Department of Interior and Local Government (DILG) issued the implementing rules and regulations (IRR), on the preferential treatment and access of marginal fishermen to municipal waters under the Local Government Code (LGC). The Philippines launched the Social Reform Agenda (SRA) on June 4, 1995 to enable people to have access to opportunities for undertaking sustainable livelihoods espoused under the agenda for change. The SRA is an integrated set of major reforms to enable the citizens to: a) meet their basic human needs and live decent lives; b) widen their share of resources from which they can earn a living or increase the fruits of their labour; and c) enable them to effectively participate in the decision-making process that affects their rights, interests, and welfare. These reforms are perceived to enhance democratic processes. The SRA is composed of social reform packages providing programmes and services for marginalized sectors of society in the country's 20 poorest provinces. The enhancement of the SRA resulted in sharper definition of the social equity, economic, ecological, and democratizing components of the various flagship programmes. Increased participation by civil society and major groups has been promoted. To date a total of 34 provinces (43%), 9 cities (13%) and 274 municipalities (18%) have sectoral representatives in such local bodies.

Programmes and Projects: The nine (9) flagship programmes of the SRA include: Agricultural Development for Farmers and Landless Rural Workers; Fisheries Management and Development; Protection of Ancestral Domain for Indigenous Peoples; Workers Welfare and Protection; Expansion of Credit; Livelihood Programmes; Socialized Housing Delivery for the Poor; Comprehensive and Integrated Delivery of Social Services; and Institution Building and Effective Participation in Governance.

Status: Two years after the initial implementation, the SRA was expanded to include an ecosystem perspective, emphasizing four dimensions of poverty where reform can have the greatest impact: On social equity, by providing the poorest of the poor with access to basic services for survival; on economic prosperity, by ensuring that the basic sectors have access to productive assets that allow them to contribute to National growth; on ecological security, by incorporating the parameters of sustainable development in the management and utilization of natural resources; and on responsible and responsive governance, by making structures and processes democratic to allow the meaningful participation of key stakeholders in policy and decision-making. The National Anti-Poverty Summit drew-up poverty reduction targets at the regional level to achieve a national target of 30% by 1998. It also resolved to expand the coverage of the SRA from an initial concentration on 20 priority provinces to an additional 57 provinces and 65 cities.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 4: CHANGING CONSUMPTION PATTERNS

Decision-Making: The Philippines Agenda 21 (PA 21) recommends the adoption of a mixture of market-based instruments, and command and control measures to provide the needed financial flows to support its implementation. The strategy aims to influence the consumption and production behavior of the general public, including the business sector, in favor of sustainable development.

Programmes and Projects: Country initiatives focus on two major programmes: unsustainable patterns of production and consumption and developing national policies and strategies to encourage changes in unsustainable consumption patterns. Under the first programme, the following commitments are being attended to: adoption of an international approach to achieving sustainable consumption patterns, such as the international environmental standards ISO 14000 and undertaking research on consumption and developing new concepts. New concepts on the production of low-cost housing were developed, paving the way to the development and accreditation of new technologies. Proponents were also encouraged to undertake research and development of new technologies for housing construction to make housing more affordable to a larger segment of the society. Under the second programme area, initiatives include the following: encouraging the dissemination of existing environmentally sound technologies through incentives from the Board of Investments (BOI) under the Investment Priorities Plan (IPP); promoting research and development in environmentally-sound technologies; encouraging the environmentally-sound use of renewable natural resources and sources of energy through the BOI-IPP guideline; reducing wasteful packing of products; encouraging the introduction of more environmentally sound products; and encouraging specific consumer-oriented programmes such as recycling and waste management projects of the Department of Environment and Natural Resources (DENR).

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 4: CHANGING CONSUMPTION PATTERNS-ENERGY

Decision-Making: In pursuit of sustainable energy production and utilization, the Department of Energy (DOE) oversees the exploration, development and production of local energy sources and promotion and commercialization of new and renewable sources of energy to achieve the country's long-term self-sufficiency objective while implementing environmental safety and protection measures in all development projects. The DOE promotes energy efficiency through energy audits in commercial, industrial and transport sectors and through the implementation of locally-funded energy conservation projects. Policy geared towards energy efficiency includes the formulation of demand-side management and energy labeling. To promote eco-efficiency, tax exemptions are provided to firms which import brand new equipment. Facilitated by the Board of Investments (BOI) of the Philippines Department of Trade and Industry (DTI), incentives are granted for the installation of pollution control equipment whether locally manufactured or imported. The BOI, in cooperation with the Green Aide Plan of the Ministry of International Trade and Industry of Japan, transfers technology on pollution control and energy. The private sector, in partnership with the government and civil society, shall undertake major activities in energy resource development, power generation and distribution under a market-oriented environment in an efficient and environmentally sustainable manner.

Programmes and Projects: The New and Renewable Energy (NRE) Programme consists of major locally-funded and multilateral assisted projects and activities and currently supports the 100% barangay (village) electrification and the addition of about 600MW grid-connected NRE-based power capacity in the medium term. NRE Systems (NRES) total 298 demonstration projects under the Affiliated Non-Conventional Energy Center (ANEC) Programme. Other demonstration projects also installed include the solar home systems, photovoltaic (PV) streetlights, PV refrigerators, PV water pumping stations, biogas systems, micro-hydro systems and windmills for water pumping. The Area-Based Energy Technology (ABET) conducted consultations in the provinces of Ifugao, Apayao, Abra, Batanes and Biliran to raise awareness of the local people on the techno-economic viability of NRES. The National Biogas Demonstration Project was completed with the installation of three units of biogas systems to demonstrate the development and utilization of biogas technology in key livestock areas. ADB's Advisory Technical Assistance (ADTA) on Rural Electrification Institutional Strengthening include, among others, the development of the procedural instructions on the implementation of overall rural electrification program and the policy study on sustainable development through the integration of livelihood and income-generating activities on off-grid electrification. Ongoing WB initiatives include market assessment, policy studies on rural electrification, and pre-investment studies on market packages for off-grid rural electrification using decentralized NRE systems. The proposed UNDP-Global Environmental Facility (UNDP-GEF) project entitled "Capacity Building to Remove Barriers on Renewable Energy in the Philippines" involves the implementation of various strategies and activities that will remove all policy, institutional, informational, promotional and financing barriers to the development of NRE industry in the country. The Malampaya Deep Water Gas-to-Power project achieved a historic milestone and engineering feat with the completion and tow-out of the 95,000-ton concrete gravity structure (CGS) from the Subic Bay Freeport to Palawan. The CGS was installed on the seabed 50 kms offshore Northwest Palawan in May 2000. Subsequently, the laying of the 504-km pipeline from the offshore field to the Tabangao onshore gas processing plant in Batangas was completed on November 8, 2000. Higher production from geothermal facilities could be attributed to the completion of the Leyte-Luzon interconnection project, commissioning of the 48.25 MW Mindanao II geothermal plant and the stability of existing geothermal facilities in the country. The commissioning of Bakun I hydro power plant increased the share of hydro in the generation mix. The Water Inventory Project was conducted in 1995 and involved the identification and assessment of 25 mini-hydro sited in the country. There were three mini-hydro projects implemented under RA 7156 (Mini-Hydroelectric Power Incentive Act) namely, the Inarihan (960kW), Matling (1500kW) and Bubunawan (7MW). The Mahagnao Micro-hydro Demonstration Project in Leyte is being jointly implemented with the New Energy Foundation of Japan.

Status: In 1997, energy source exploration and development included: the production of 7,1686.6 GWh of geothermal steam, the displacement of 12.4 million barrels of fuel oil equivalent, spudding and completion of 12 wells in 7 provinces, conduct of reconnaissance geological and geochemical surveys in 11 provinces, the generation

of 170,080 MWh by the country's 35 mini-hydro plants and the assessment of 26 more potential sites for mini-hydro development. In terms of the power generation mix, the share of indigenous energy showed an increasing trend primarily due to the higher share of geothermal energy (25 % in 2000 from 21% in 1998). The share of geothermal energy rose from 8,914 gigawatt-hours (GWh) in 1998 to 11,445 GWh in 2000. Hydro's contribution also increased from 5,066 GWh in 1998 to 7,152 GWh in 2000. As a result, the share of indigenous energy to the total generation mix expanded from 38.9 percent in 1998 to 46.9 percent in 2000. New and Renewable Energy Systems (NRES) contributed 30% to the country's energy consumption. As exploration and development works progress in the Malampaya gas-to-power project, the DOE assessed more natural gas supply and demand prospects. To address the regulatory gaps and to enhance investors' confidence in the gas industry, the DOE is preparing a comprehensive set of rules and regulations to guide pipeline construction, operation and maintenance as well as pricing of gas commodity and transport. In terms of mini and micro hydro, from 1993 to present, the DOE has issued 85 reconnaissance permits and granted 15 operating contracts having combined capacity of 35.9MW. Of the 15 operating plants, 7 have undergone expansion that increased the total capacity to 45.97MW. The inventory of existing mini-hydro power plants yielded a number of 52 plants having a total capacity of 82.02MW. A total of 485 energy audit and energy management technical services were extended to industrial and commercial establishments, government offices and electric cooperatives from 1992-2000.

Capacity-Building, Education, Training and Awareness Raising: The recently completed USAID-funded "Philippine Renewable Energy project" introduced and conducted appreciation trainings on the software HOMER and VIPOR which are basically simulation models for the conduct of NRE-based village electrification projects. The ongoing UNDP-Financing Energy Services for Small Scale End-users (FINESSE) Project has strengthened the capacity of the Development Bank of the Philippines to finance NRE projects. The WB is also planning to do similar capacity building activity for other financing institutions to strengthen their capacity in evaluating NRE projects. The ADB-ADTA Project also involves the conduct of trainings for key stakeholders on rural electrification and NRE in aspects such as NRE technologies, project management, policy development, sustainable development, community organizing and NRE system repair and maintenance. The proposed UNDP-GEF Project aims to develop and implement a sustainable human resource development program for NRE sector, which shall build on the past and ongoing trainings. The Philippine-German Special Energy Project (PG-SEP) provided technical assistance through trainings on mini-hydropower technology. In 1994, USAID sponsored a modular short course training program for the DOE staff on Hydropower Engineering. In 1995 and 1996, the DOE benefited from UNDP experts who conducted lectures and seminars on mini-hydro technology. Further, the Philippine Hydropower Database is regularly updated with assistance and cooperation of the NREL. Also, the formation of the Philippine Association of Small Scale Hydro, Inc. (PASSHYDRO), which is composed of various stakeholders providing assistance in promoting mini-hydro development in the local and international scene, was initiated by DOE. The Mini-hydro Division of the DOE had been exposed to various trainings enabling the personnel to conduct lectures to students and engineers on hydropower technology as well as local government units' engineers on the conduct of site assessments and project formulation programs. To make the people aware, promotional business and consultation meetings on mini-hydro development are regularly conducted to promote the development of potential sites in the country. Short courses on energy management and energy conservation technologies were conducted in commercial and industrial establishments and co-sponsored by the Resource Management International Inc., UP-National Engineering Center, Energy Management Association, etc. The information dissemination program on energy efficiency includes distribution of several technical publications, brochures, posters and stickers to schools, commercial and industrial establishments to promote energy conservation awareness.

Information: The PNOC/Winrock/US NRE Laboratory (NREL) activity developed the Philippine Wind Atlas useful in developing wind projects. Similar activities under USAID's PREP, implemented by NREL, have developed database on solar, biomass and micro-hydro resources. The planned UNDP-GEF Project shall establish the Market Service Center that will manage all available NRE information in the country and to provide support to private entities in developing NRE Projects. From 1992-2000, the combined savings of the Don Emilio Abello awardees have reached PhP3.48B. The award is given to outstanding companies and energy managers who have

undertaken or are responsible in implementing energy efficiency and conservation programs to achieve substantial savings in their energy consumption. Also, the DOE has two major campaigns in energy efficiency: the Power Conservation and Demand Management (Power Patrol) and the Fuel Conservation and Efficiency in Road Transport (Road Transport Patrol).

Research and Technologies: Aggressive research and exploration initiatives were undertaken to harness the country's indigenous resources. Developing indigenous and renewable energy sources for energy self-sufficiency is a continuing task in the energy sector. Data from the Philippine Atmospheric, Geophysical and Astronomical Organization (PAGASA) showed that the national average mean wind power density is about 31 watts per square meter (W/m^2). A wind resource analysis and mapping study showed that the country has over 10,000 square km of windy land areas with good to excellent wind resource for utility-scale operations and village power applications, particularly in the northern and central regions. This can support over 70,000 megawatts (MW) of potential installed capacity. The first large-scale wind power project of 40 MW capacity will be developed in Ilocos Norte by the Philippine National Oil Company - Energy Development Corporation (PNOC-EDC) for commissioning in 2003. There is also vast potential for various solar energy applications considering the country's average solar radiation based on sunshine duration at 161.7W/m^2 with a range of 128–203 W/m^2 . Microhydro has a potential of about 28 MW located in various areas of the country. The DOE also signed an implementation agreement with the Japan International Cooperation Agency (JICA) for the conduct of the "Master Plan Study for Natural Gas Utilization in the Philippines." The study will prepare demand projections in various sectors, evaluate supply options, and suggest measure to promote natural gas utilization, among others. Meanwhile, the Philippine National Oil Company-Exploration Corporation (PNOC-EC) worked on a study which focused on the technical and economic viability of a natural gas transmission and distribution network in Southern Luzon which will primarily target the industrial sector. The first phase of the feasibility study was completed in November 1999 and the second phase is underway towards detailed pipeline route studies, as well as to address right-of-way and environmental issues of the CALABARZON-Manila-Bataan gas transmission system. Furthermore, a pilot project entitled "Study on Natural Gas Utilization in Transport" looks into the use of natural gas as an alternative fuel to diesel for the transport sector. Jointly conducted by the DOE, Department of Science and Technology (DOST), and PNOC, the project has successfully converted an Isuzu diesel vehicle to use compressed natural gas (CNG) for fuel. The country's first CNG station was commissioned last March 2000 in PNOC-EC's gas power plant compound in Echague, Isabela. The government, through DOE, continues to finance the implementation and strengthening of UP Solar Laboratory and the UPLB Biomass Laboratory to further enhance the capacity of NRE sector in NRE system local manufacturing and fabrication through conduct of performance testing and evaluation. The proposed UNDP-GEF Full Project shall also assist the private enterprises in manufacturing and packaging NRE products and systems.

Financing: DBP's window III provides financing to NRE projects and project developers at concessional terms. The UNDP-GEF Full Project shall also establish financial mechanisms such as Project Preparation Fund, Loan Guarantee Fund, and Micro-financing for NRE Projects. Said mechanisms will also be implemented through GFIs and other banks as fund conduits. The WB is set to finance an Adaptable Program Loan (APL) for rural electrification including the market packages for off grid electrification using NRE systems. GEF shall provide grant financing for the renewable energy component of the APL. Financing is also derived from DOE regular funds and from the private sector.

Cooperation: GOP, through DOE, undertakes various bilateral and multilateral cooperation activities in the field of NRE. Ongoing cooperation includes agreement with government of UK, India and Hawaii which focus on NRE promotion and technology transfer. DOE is also an active participant to NRE TWG of ASEAN and APEC. Technical Cooperation/Assistance Programs on mini and micro-hydropower development were secured from the PG-SEP, UNDP, and JICA Program. The DOE implements energy conservation and efficiency projects such as conduct of workshops and research with the New Energy and Industrial Technology Development Organization

(NEDO), US Department of Business, Economic Development and Tourism, and the U.S. Asia Environmental Partnership Program (USAEP).

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CHAPTER 4: CHANGING CONSUMPTION PATTERNS - TRANSPORT

Decision-Making: After more than two years of extensive discussions, President Fidel V. Ramos approved EO No. 446 on September 26, 1997. It directs the phase-out of leaded gasoline in Metro Manila by the year 2000, and nationwide by the year 2001. The Implementing Rules and Regulations (IRR) of EO No.446 was issued by the Department of Environment and Natural Resource (DENR) Secretary in April 1998. The IRR will cover general provisions and administrative procedures; fuels and facilities quality standards; monitoring, evaluation and assessment; inspection/maintenance and emission control system; public information dissemination; research and development; and prohibited acts and penalties. The Philippine Council for Sustainable Development (PCSD) Subcommittee on Atmosphere, with members from the government, civil society and business, began consultations in 1994 with the oil industry, car manufacturing association, government planning and policy bodies, and non-governmental organizations, particularly tackling the health effects of lead and the economic impacts of the phase-out of leaded gasoline. Low-leaded gasoline was initially introduced in the Philippines in 1994 following the Clean Air Act introduced by the Chair of the Senate Committee on Ecology and Natural Resources.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 5: DEMOGRAPHIC DYNAMICS AND SUSTAINABILITY

Decision-Making: In 1999, the Commission on Population (POPCOM) initiated the expansion of the Population-Resource-Environment (PRE) Framework to the Population and Sustainable Development (PSD) Framework. This reformulated framework emphasizes that well-being is not only gained indirectly through population processes, population growth and their impact on economic development, but directly as well, since one aspect of well-being is the ability of couples to achieve their fertility goals within the context of responsible parenthood (RP). It explains how population-related processes of fertility, mortality and migration affect population size, structure and distribution. These have an impact on both human and natural resources, which in turn have an impact on development. It also considers the impact of population growth on the ability of government to provide services to the people as well as the impact of population growth on resources and the environment. At the same time, it includes the relationship between population, human resources and productivity.

To be consistent with this new framework, the population policy was restated with the following objectives:

- (a) Help couples/parents achieve their desired family size within the context of RP for SD;
- (b) Improve the reproductive health (RH) of individuals and contribute to the lessening of maternal mortality, infant mortality, and early child (under 5 years of age) mortality;
- (c) Reduce the incidence of teenage pregnancy, incidence of early marriage and the incidence of other RH problems; and
- (d) Contribute to the policies that will assist government achieve a favorable balance between population distribution, economic activities and the environment.

To achieve these objectives, the following strategies were pursued:

- (a) assisting couples/parents achieve their desired family size within the context of RP for SD;
- (b) ensuring that adolescents are provided with appropriate (scientific and policy-consistent) information, knowledge, education and services on population and RH;
- (c) integrating population variables with emphasis on migration and urbanization into population policies, plans and programs at all levels; and
- (d) mobilizing resources for the Philippine Population Management Program (PPMP).

In 2000, the POPCOM spearheaded the updating of the PPMP Directional Plan (DP) 2001-2004 with the objective of aligning the population program to the thrust of the Estrada Administration and the developments in the international scene. The Plan serves as the blueprint of all the programs, projects and activities under the four thrusts of the PPMP, namely: Reproductive Health/Family Planning (RH/FP); Adolescent Reproductive Health and Youth Development (AHYD); Population and Development (POPDEV) Integration; and Resource Generation, Programming and Mobilization. It also includes an Advocacy Plan that outlines the framework by which population advocacy efforts can be carried out more efficiently and effectively at all levels. The PPMP-DP comes with a companion document, the PPMP Population Investment Plan (PIP), which shall be the resource allocation instrument for implementing the plan. It describes priority projects and activities and the sources of funds for these projects. The PPMP DP and PIP considered the national, regional and local inputs. Moreover, aside from the national government agencies, the non-government organizations (NGOs) and representatives from the private sector participated in the crafting of the updated PPMP DP.

Programmes and Projects: The enactment of the Local Government Code in 1991 shifted the locus of power from the central to local government. It placed in the hands of the local government units (LGUs) the responsibility of planning for the development of their communities. In view of this, POPDEV planning initiatives at the local level were conducted through the project POPDEV Planning at the Local Level (PPLL) in 1996 to 1999. The project assisted the LGUs in the preparation of socio-economic profiles (SEFs), situational analysis (SAs), local

development plans (LDPs), and local investment plans (LIPs), and in the establishment of POPDEV indicators for LGU planning and monitoring activities. Another project which attempted to influence the agenda of national government agencies in POPDEV is the UNFPA-supported “Population Policy Operations Project (PPOP)” implemented through the POPCOM. One of the areas identified to ensure operationalization and synchronization of policies was migration and urbanization. Several activities were undertaken by the project in relation with migration and urbanization such as the creation of an organizing committee on urbanization; the mobilization of a sectoral task force on migration and urbanization; the collection of and analysis of existing policies and studies on migration and urbanization; and the incorporation of population as a key consideration in land use planning. In 1995, UNFPA funded a five-year advocacy project to create an enabling environment for the PPMP by securing the support and commitment of national and local legislators, executives and implementers. The project assisted in revising the population bill to capture the essence of the new population policy; passing local ordinances in support of the PPMP; increasing LGUs’ financial support to the program; establishing/designating/strengthening of population offices; and building the advocacy skills of selected (national and regional) POPCOM, NGOs and LGU staff. The POPCOM, the Philippine Legislative Committee on Population and Development (PLCPD) and the Philippine Non-Government Organizations Council (PNGOC), with funding support from The Futures Group, an NGO under the USAID, embarked on the project that assisted in the establishment of local advocacy teams in three selected municipalities to elicit financial support for the PPMP at the local level. Another undertaking is with the John Hopkins University (JHU) for the Communication and Advocacy for Population Issues and Development (CAPID) Project which aims to generate greater understanding of the closer interrelationship between POPDEV issue among the general public and policy makers, paving the way for higher acceptance of family planning. To help couples/parents achieve their desired family size within the context of RP for SD and improve the RH of individuals, the Department of Health (DOH) created the Philippine RH Program on 15 January 1998 through Administrative Order (AO) No.1-A. The AO identified and adopted the ten key service elements of RH, namely, (1) FP; (2) maternal and child health (MCH) and nutrition; (3) prevention and management of abortion complications; (4) prevention and treatment of reproductive tract infections (RTIs) including sexually transmitted diseases (STDs); human immune-deficiency virus/acquired immune deficiency syndrome (HIV/AIDS); (5) breast and reproductive tract cancers and other gynecological conditions; (6) adolescent RH; (7) education and counseling on sexuality and sexual health; (8) men’s RH; (9) violence against women; and (10) prevention and treatment of infertility and sexual disorders.

Status: Based on the results of the 2000 census, the country’s population growth rate for the 1995-2000 period is 2.36 percent- a rate higher than the 1990-1995 period which is 2.32 percent. Relative to other ASEAN countries, this growth rate is very high given that Thailand and Indonesia have reduced their growth rates to 0.9 percent and 1.5 percent, respectively, since the early 1990s. Given the demographic trend in the country, the population policy embodied in the PPMP DP was restated to address the need for RH and FP information and services. Likewise, its companion document- the PIP- was revised. Despite these efforts in POPDEV, several issues have not been addressed. For one, there is still gap between desired and actual family size. In 1998, actual family size was 3.7 children while the desired family size per women was 2.7 children. Contraceptive use is low as indicated by the 28.2 percent contraceptive prevalence rate for modern method. Moreover, unmet need remains high at 19 percent (about three million women). Meanwhile, male participation in fertility management, childcare and household activities still need some improvement. Other issues are the increasing incidence of teenage pregnancy and the lack of a sustainable operating mechanism for RH/FP.

Capacity-Building, Education, Training and Awareness-Raising: Several modules, standards and guidelines to support the population program were completed by POPCOM prior to 2000 which include AHYD and POPDEV Planning modules, and the framework for population policies and programs with gender/RH perspective. These modules and framework are now being used by the regional population offices and other program workers especially those at the local level. In terms of enhancing the capabilities of the organization, in 2000, POPCOM staff from the central and regional offices were trained on the following: (a) Policy Environment Score which is a tool to assess the overall status of policy environment for the RH/FP program; (b) the Technology of Participation (TOP) Basic Group Facilitation methods which strengthens POPCOM capacity for networking; (c) orientation

workshops on investment programming; (d) Training of Trainers on Census 2000; (e) policy analysis; (f) peer counseling; (g) migration; (h) gender and development; (i) communication and advocacy; and (j) demography and POPDEV. To improve the policy environment of the population and RH/FP programs, the PPMP DP has included an Advocacy Plan which will enhance the capacities/capabilities of POPCOM staff, selected local government and NGO staff on advocacy; broaden the partnership and advocacy network; establish new and maintain existing local advocacy groups; develop, produce and disseminate advocacy materials; coordinate/conduct special events; and strengthen national and local population information centers. In 2000, POPCOM, in consultation with other population stakeholders, produced the first State of the Philippine Population Report (SPPR) entitled "Time to Act: Needs, Options, Decisions." It focused on unmet need and its impact on infant, child and maternal health and family welfare at the micro level, and its impact on the country's social and economic development at the macro level. It signals the government's commitment to the rest of civil society to confront POPDEV issues and provide opportunity for government and civil society to begin an informed dialogue on population and RH issues. This will also serve as an advocacy tool for the population stakeholders to respond to a main issue or theme. POPCOM is also in the process of enhancing its official website (www.popcom.gov.ph). Other awareness-raising activities were undertaken in 2000 such as the National Population Congress, Rafael M. Salas Population and Development Awards, Global Media Awards for Excellence in Population Reporting, and the National Population Quiz; launching of the State of the World Population Report; and the celebration of the Population and Development Week in coordination with participating agencies.

Information: POPCOM developed the framework for the National Population Database Information System (NPDIS), which forms part of the POPCOM Information System. The NPDIS will track down and monitor the progress of its demographic and socio-economic indicators of the International Conference and Population and Development (ICPD); policy, program and project implementation including the accounting of population program expenditures and analysis of these data and information to recommend appropriate policy and program reforms.

Research and Technologies: In 2000, one of the important studies conducted nationwide is the Policy Environment Score Survey which assessed the policy environment for three program areas of the PPMP DP, namely: RH/FP, AHYD and POPDEV integration. Another study conducted nationwide is the survey by the League of Population Officers in the Philippines on the establishment of a responsive population structure at the LGU level. Finally, POPCOM provided technical assistance in the conduct of the Population Council's Rapid Field Appraisal (RFA) Study. The objective of the study is to develop a health care policy that would support the implementation of quality FP and RH care programs at the local level. For 2001, there is a joint research project between the POPCOM and the National Statistics Office (NSO) that will revalidate the proposed redefinition of urban and rural areas in the Philippines. Another project is the policy evaluation research of the PPMP which will be jointly conducted by the POPCOM and the Philippine Institute for Development Studies (PIDS).

Financing: Funding for the PPMP comes from the national government through the regular budget of the national agencies and the internal revenue allotment of the LGUs. Local NGOs also provide resources care of the program and this comes mainly from external sources. The PPMP likewise relies on overseas development assistance. Among the many foreign donors that have contributed immensely to the PPMP are: the United States Agency for International Development (USAID); United Nations Population Fund (UNFPA); and the World Bank. Historical trends show that most of the donor funding for the population program was focused on FP and to some extent, on POPDEV activities. The recent adoption of the RH framework and the inclusion of FP as just one of the several elements in RH could broaden the distribution of donor funding. Meanwhile, the gradual phase out of contraceptive assistance by donor agencies led to the development of Contraceptive Interdependence Initiative Framework and Strategic Options by the POPCOM together with representatives from other concerned government agencies, the private sector and the NGOs. The framework identifies the best approach/strategy in ensuring that contraceptives will be available and affordable to FP users in the succeeding years especially with the possible phase-out of contraceptive grants. This will also serve as a guide for mobilization of resources for contraceptives.

Cooperation: POPCOM, the National Economic and Development Authority (NEDA) and the UNFPA spearheaded a comprehensive population review to set in motion activities that will provide an appropriate population policy climate for sustainable development.

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CHAPTER 6: PROTECTING AND PROMOTING HUMAN HEALTH

Decision-Making: In 1999, DOH set the goal for the nation's health in the National Objectives for Health (NOH), 1999-2004 and the Health Sector Reform Agenda (HSRA). The NOH focused on the country's major health problems, specific issues that cut across several disease prevention and control measures, and special target groups that need urgent attention. It underscores the need for preventive and promotive health services especially at the grassroots where some of the most vulnerable sector of the population are located. HSRA, on the other hand, provides for crucial reforms as the backdrop for attainment of national goals, quality and equity in health care for Filipinos. It specifies reforms in five major areas: (a) hospital systems; (b) public health programs; (c) local health systems; (d) health financing; and (e) health regulation. It translates into specific plans and programs the far-reaching reforms necessary for extending "Health for All Filipinos". Its long-term goals would be to: (a) improve efficiency in the delivery of health services; (b) ensure access to basic health services; and (c) secure enough funds to sustain quality health care. The year 2000 marked the start of the institutionalization of the HSRA. Several innovative projects and programs have been approved and started in pursuit of these reforms. The Macapagal-Arroyo Administration has pledged the reduction by 50% of the prices of drugs frequently bought by the poor, and the enrollment of 500,000 indigents in the Philippine Health Insurance Corporation (PHIC) indigency program. The strategy for the former calls for the use of generic drugs and parallel drug imports by DOH, which are 400% cheaper than their equal counterparts in the country. The latter, on the other hand, will be done with LGUs cost-sharing with the National Government (NG) in the payment of premium. Another approach will be to enroll indigents with LGUs and partners from the private sectors, and NGOs sharing with the NG in the payment of premium. In nutrition, the Implementing Rules and Regulations (IRR) of RA 8172 entitled An Act for Salt Iodization Nationwide (ASIN) was formulated. Failure to reach the goal of universal salt iodization in 2000 however demands stricter implementation of the ASIN law. Other accomplishments in the sector include the enactment of Food Fortification Act which aims to compensate for the inadequacies in Filipino diet based on present-day needs as measured by the Recommended Dietary Allowance (RDA), and the updating of the national nutrition action agenda and the Medium-Term Philippine Plan of Action on Nutrition (MTPPAN)."

Programmes and Projects: Programmes and projects in basic health services, disease prevention and health promotion were started in previous years. These include the following: Expanded Program on Immunization (EPI); Maternal Care and Breast Feeding Program; the National Family Planning Program; Prevention and Control of Cardiovascular Diseases and Cancer Program; Prevention of Blindness Program; Environmental Health Program; National Rabies Control Program; Tuberculosis Control Program; National AIDS/STD Prevention and Control Program; Malaria Control Program; Dengue Prevention and Control Program; the Herbal and Philippine Traditional Medicine Program; the National Drug Policy Program; Safe Water and Sanitation Program; "Araw ng Sangkap Pinoy" Program; Hospital Services Program; and Nutrition Program. At the local level, the implementation of the Philippine Plan of Action for Nutrition (PPAN) has involved the delivery of a mix of services along with PPAN's impact programs on home, school and community food production; micronutrient supplementation; food fortification; nutrition education and food assistance. The "Garantisadong Pambata" (GP) Program provides a package of health services for 0-59 months old to reduce mortality among under-fives through the promotion of positive Filipino values for proper growth and development. The "Sentrong Sigla" Movement was launched in 1999, as a major initiative to promote quality health care from the barrios to the cities. Its primary purpose is to promote availability of quality health services in health centers and hospitals and making these services accessible to every Filipino. Its main component is a certification and recognition program that develops and promotes standards for health facilities. To address problems of the local health systems, inter-local health zones (ILHZ) were established using the District Health System. Another program of the DOH is the Health Passport Initiative, which is a joint effort of the DOH, PHIC and the LGUs to ensure that Filipinos will have access to essential health services through the universal coverage of social health insurance in a specific area. This health passport entitles a member and his/her dependents to a wide range of health benefits through a network of providers.

Status: Advances in public health care in the Philippines have resulted in enormous gains in the health status of the Filipinos, which have significantly improved in the last 50 years. The infant mortality rate (IMR) decreased from 48.9 per 1,000 live births in 1995 to 41.2 per 1,000 live births in 2000. However, the Philippines still ranks far below our neighboring countries like Singapore and Thailand with IMR of 3.1 and 6.3 per 1,000 live births respectively in 2000.

Capacity-Building, Education, Training and Awareness-Raising: DOH has started its Re-engineering and Streamlining Program (RSP) to make the organization more efficient in its role after devolution of health services. It developed the National Health Human Resource Plan (NHHRP) and conducted a training needs analysis (TNA) for re-tooling/retraining plan for Central Office personnel for effective post devolution role.

Information: The National Epidemiology Center (NEC) of the DOH has been created under RSP Executive Order No. 102 to maintain the Field Health Service Information System (FHSIS) of the Department and establish updated weekly morbidity report of the ten most notifiable diseases from Metro Manila hospital surveillance sites. Annual reports of the FHSIS and the National Epidemiology Sentinel Surveillance System (NESSS) from the different sites in the country are also available. Other information about the DOH can also be accessed at www.doh.gov.ph. Special surveys have been started to monitor the national health accounts in the country since 1998 and the baseline survey for the NOH has been completed.

Research and Technologies: Through the Health Research Division of the Health Policy Development and Planning Bureau (formerly the Essential National Health Research) of the DOH, various researches are being done to continuously evaluate the health system. To facilitate the achievement of NOH and HSRA, the National Health Research Agenda, which contains the essential topics for research, has been finalized.

Financing: In 1999, the country's total health expenditure amounted to P108.3 billion representing government spent P104 billion on health care representing 3.43 percent of the Gross National Product (GNP). This is still below the standard set by the World Health Organization (WHO) for a developing country which is at least 5 percent of the GNP. Around 46.26 percent of the spending was paid from out of pocket of individual families, 37.91 percent from government (20.04 percent NG, 17.87 percent LGU), 4.86 percent from social insurance and 10.98 percent from other private sources. Since 1991, the country's health spending patterns in terms of the distribution of the three broad sources of financing (government, social insurance and private sources) remained fairly constant with private sources expenditure accounting for more than fifty percent followed by government constituting more than one third of the total expenditure. Social insurance share, on the other hand, remained very low at 4.9 percent in 1999. The large share of private sources implies that payments for health care most likely went to drugs, hospital charges, and doctors' fees instead of for basic preventive, promotive and early cure services. The DOH budget in 1999 was P11.3 billion, only 1.9 percent of the total Philippine Government budget. This was further reduced to P10.7 billion in 2000 and P9.9 billion in 2001 which is only 1.6 percent and 1.4 percent, respectively, of the Philippine budget. The country spends 76.33 percent of total health care expenditure on personal health care services, 12.3 percent on public health care, and 11.37 percent on overhead services needed to run the whole health delivery system. Health care financing reforms of the HSRA have been proposed to focus on making the NHIP the major payer of health services. These reforms include improving NHIP program benefits, expanding its membership base and using benefit spending to leverage for effective quality care.

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CHAPTER 7: PROMOTING SUSTAINABLE HUMAN SETTLEMENT DEVELOPMENT

Decision-Making: The Philippines has promoted the development of sustainable human settlements primarily through the implementation of the Global Strategy for Shelter, and more specifically through the following initiatives: a) preparation of a revised National Plan of Action for 1994-1995; b) enhancing the roles of government, private sector, scientific community, and NGOs; c) focusing on shelter-related issues including urban management, energy, transport, poverty alleviation, health, and the environment; d) expanding the role of women in shelter policies; e) establishing a National database on shelter and services; f) addressing constraints in shelter production; and g) improving overall performance of shelters. In terms of planning for the development of human settlements, several policy guidelines were formulated to create a more humane and livable settlements. In 2000, the National Urban Policy Agenda (NUPA) was completed. It contains broad policy sectors in the formulation and implementation of comprehensive plans, policies, programs and projects such as in the area of urban land use and housing. The NUPA likewise provided inputs in the formulation of the National Urban and Development Housing Framework, which contained the strategy for the development of environmentally sound and sustaining human settlements. Another major document that espouses and supports this thrust is the National Framework for Physical Planning (NFPP). The NFPP contains policy guidelines for settlements planning that embraces approaches that favor effective integration of activities within and among settlements, allowing efficient production and movement of people and commodities through the provision of appropriate land, infrastructure and facilities. Likewise, it espouses policies that would provide access of the population to housing, education, health care, recreation, transportation and communication, sanitation, and basic utilities such as water, power, waste disposal and other services.

Programmes and Projects: The government is considering four aspects namely: a) housing finance; housing production; urban development and housing regulation; and d) housing administration. On housing finance, options that are being considered are the establishment of a secondary mortgage institution; the creation of a special window for informal sector; innovative fund sourcing and payment schemes; and loan guarantees/secularization. On housing production, the following concerns are being considered: subsidies on housing production; relocation/resettlement programs; local government housing programs; land inventory and disposition of public lands; land titling; and financing infrastructure development. On urban development and housing regulation, among the concerns that are being pursued are: rationalizing land use laws and town planning; permitting process for land and housing development; design and standards for housing; environmental concerns in land planning and development. On housing administration, the options being considered are the creation of the Department of Housing; local housing boards; and tax exemption schemes. The Housing and Urban Development Coordinating Council, in coordination with other concerned agencies has identified sites for socialized/mass housing in every city and municipality all over the country. A total of 35,000 hectares for socialized/mass housing program is presently being validated at the regional level.

Status: The improved overall performance of the shelter sector is characterized by the following: a) increased access by the poor to land, finance, infrastructures, and building materials; b) strengthened capability of local authorities for improved management; c) regularized and upgraded slums and squatter settlements; d) improved rural living conditions; and e) private sector involvement in shelter and service production for the middle and lower income groups.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 8: INTEGRATING ENVIRONMENT AND DEVELOPMENT IN DECISION-MAKING

Decision-Making: In implementing its commitment at the 1992 United Nations Conference on Environment and Development (UNCED), the Philippines has begun the process of integrating Agenda 21 principles into its development plans, programmes, and budgets at the national, regional, and local levels. To assist this progress, the Philippine Council for Sustainable Development (PCSD) has coordinated the integration of a number of priority actions into the country's Medium-Term Philippine Development Plan (MTPDP), 1993-1998. A development vision and framework for the 21st Century has been formulated under the Long-Term Philippine Development Plan (LTPDP), 2000-2025 or Plan 21. The LTPDP framework recognizes that the new millennium will increasingly call for economic development to become less ecologically destructive. Plan 21 builds on the solid foundations created by the MTPDP. Plan 21 sets the broad developmental directions of the country and will serve as the basis for the detailed plans of the sector agencies. It ensures the continuation of policies based on self-responsibility, productivity, creation of opportunities through competitive markets and enlightened government regulation. The Philippines has also established a national Agenda 21 called the Philippine Agenda 21, or PA 21. It provides for the creation of an enabling environment which would assist various stakeholders to integrate sustainable development in their decision-making processes. A mechanism to ensure integration of sustainable development in local plans, programmes, and projects is through the localization of PA 21. In this regard, the PCSD has been supporting local initiatives on the creation of local councils through technical assistance and training. A resolution recognizing and advocating the leading participation of NGOs and POs in the implementation of development programmes and projects has been passed. The other major groups of society, for example women, youth, indigenous peoples, and communities, have been recognized as equal partners in shaping, crafting, and implementing development programmes. They participate in all stages of development. The business sector continues to be involved in a number of programmes to ensure that environmental considerations are integrated in their activities.

Programmes and Projects: The Integrated Environmental Management for Sustainable Development (IEMSD) and Capacity Building in Support of the PCSD project aim to integrate environment and development in the decision-making process. In particular, the IEMSD Programme was implemented to support efforts in the integration of the environment in decision-making, proper pricing of natural resources, and strengthening of peoples' participation and constituency-building for environmental policy advocacy. The IEMSD has six (6) sub-programmes, namely: a) Environment and Natural Resources Accounting (ENRA); b) Integration of Environmental and Socio-Economic Development Policies (SEI); c) Environmental Impact Assessment (EIA); d) Sustainable Development Models (SDM); e) Environment and Natural Resource (ENR) Database (DBAS); and f) Programme Management Support System (PMSS). Under the IEMSD Programme, the following major activities have been undertaken: a) development of a comprehensive operational framework for the Philippine System of Economic and Environmental Accounts; b) formulation of sustainable development indicators; c) incorporation of environmental concerns in the project evaluation process; d) development of an action impact matrix which identifies priority areas of study on environment-economy integration; e) strengthening of the EIA system; f) reformulation of guidelines for the implementation of the Environmental Guarantee Fund; g) preparation of an EIA Procedural Handbook; h) development of environmental risk assessment software; and i) documentation of sustainable development projects. Continuously being implemented is EO No. 291 entitled "Improving the Environmental Impact Statement (EIS) System" which aims to integrate EIS system early into the project development cycle. It also encourages the establishment of environmental units (EUs) in all implementing agencies of government, including government-owned-and-controlled corporations and government financial institutions, particularly those whose mandates include the introduction of physical plants and infrastructure.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: Another innovation in integrating sustainable development (SD) in governance is to implement the “Environmental Intelligence Quotient Scheme (EIQS).” The EIQS will integrate environmental and SD aptitude test in the examination administered by the Philippines’ Civil Service Commission (CSC) and Career Executive Service Board (CESB) for career service officers and other government personnel. An Environment and Natural Resources Network (ENR Net) has also been set-up to provide information on SD and environment.

Information: No information available.

Research and Technologies: No information available.

Financing: In addition to these initiatives, the integration of SD principles into budgetary guidelines is being pursued. The Department of Budget and Management (DBM), the lead agency in the integration process, is currently developing a general framework for integrating SD principles and parameters in the budgetary process in coordination with the PCSD Committee on Socio-Economic Dimensions. With the institutionalization of the system, public sector spending may be made more in line with the goals of SD.

Cooperation: No information available.

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CHAPTER 9: PROTECTION OF THE ATMOSPHERE

Decision-Making: The Philippine Inter-Agency Committee on Climate Change (IACCC) established in 1991 by virtue of Residential Order No. 220 is tasked to coordinate various climate change-related activities, propose climate change policies and prepare the Philippine positions to the UNFCCC negotiations. Two laws which have reference to climate change were approved: 1) The Agriculture and Fisheries Modernization Act of 1997 which provides that the DA, in coordination with PAGASA and other agencies, devise a method of regularly monitoring and considering the effect of global climate changes, weather disturbances and annual productivity cycles for the purpose of forecasting and formulating agriculture and fisheries production program; and 2) the Philippine Clean Air Act of 1999 (RA8749) that was enacted into Law on 23 June 1999. The Act mandated the DENR through the Environmental Management Bureau (EMB) as the lead agency to formulate the Implementing Rules and Regulations (IRR), Integrated Air Quality Management Framework and National Action Plan. On November 7, 2000, the above requirements were approved as Department Administrative Order No. 2000-81 and made effective on November 26, 2000. The integrated rules and regulations of the Act is to be implemented by the following agencies, namely:

- a) DENR - Environmental Management Bureau (EMB): Stationary Sources (Industry) Management and Control of Air Pollution and Issuance of Certificate of Conformity to New Motor Vehicle;
- b) DOTC - Land Transportation Office (LTO): The management and control of air pollution from mobile sources (motor vehicles) to include installation of rebuilt/used engines;
- c) DTI : Accredite the Motor Vehicles Testing Centers called Motor Vehicle Inspection System (MVIS). The MVIS can be operated by private entities and concerned regulatory body of the government. The system includes the testing of motor vehicle emission and road safety prior to the issuance of vehicle registration. The operation of the system will be supervised by the LTO-DOTC; and
- d) DOE : Manage and control the fuel specification and additives.

The National Action Plan on Climate Change that was formulated under the supervision of the IACCC and funded by the USAID, is aimed at integrating climate change concerns into the government's development plans and programmes.

Programmes and Projects: The Metro Manila Air Quality Improvement Sector Development Program, a loan project funded by the Asian Development Bank (ADB), with a duration from 1999 to 2002, aims to promote policy reforms to improve air quality through the abatement of mobile and stationary sources of air pollution. It focuses on the Metro Manila air shed, the location of the main concentration of air pollution. The program has the following objectives: Mitigate air pollution from mobile sources; Mitigate air pollution from stationary sources; Improve fuel quality; Reduce emissions from vehicular use; Reduce traffic congestion and improve traffic flow; Strengthen ambient air quality monitoring, evaluation and reporting; Intensify public awareness; Monitor coordination and implementation of Air Quality Action Plan; Strengthen capacity of institutions involved. The Asian Development Bank Climate Change Project which conducted vulnerability studies. It generated a rapid assessment of the country's vulnerable sectors and areas to climate change, including agriculture, water resources and coastal areas. The U.S. Country Studies Program which enabled the Philippines to produce its 1990 National Emissions Inventory and study in more detail, sectors and areas which are vulnerable to the impact of climate change.

Status: The rehabilitation and up-grading of nine (9) existing air quality monitoring station is to be implemented through the ADB funded project "Metro Manila Air Quality Improvement Sector Development Project (MMAQISDP)." There are pending bills still in Congress that are relevant to climate change: 1) New and Renewable Energy Program Act; 2) An Act to Institutionalize Energy Conservation and Enhance Efficient Use of Energy; and 3) An Act to Strengthen the national Program for the Development and Promotion of the Use of Non-Conventional Energy Systems.

Capacity-Building, Education, Training and Awareness-Raising: Activities pertaining to information dissemination and advocacy of the IRR of the Philippine Clean Air Act are currently undertaken through lectures, training, seminars and multi-media events and publications. The “Enabling Activity on Climate Change” was implemented by IACCC with funding support from the Global Environment Facility through the UNDP.

Information: The Climate Change Information Center (CCIC) was established in 1999 and located at the Manila Observatory within the campus of Ateneo de Manila University.

Research and Technologies: The Asia Least Cost Greenhouse Gas Abatement Strategy (ALGAS) launched in 1995 with funding from the GEF, implemented by UNDP and executed by the ADB looked into GHG mitigation options in the energy, agriculture and forestry sectors.

Financing: The Asian Development Bank (ADB) for “Metro Manila Air Quality Improvement Sector Development Project (MMAQISDP).”

Cooperation: The United Nations Framework Convention on Climate Change was signed by the Government of the Philippines on 12 June 1992 and ratified on 02 August 1994. The GOP acceded to the Vienna Convention for the protection of the Ozone Layer and ratified the Montreal Protocol on 17 July 1991 and ratified the London Amendments of 09 August 1993.

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CHAPTER 10: INTEGRATED APPROACH TO THE PLANNING AND MANAGEMENT OF LAND RESOURCES

Decision-Making: Under the auspices of the DA, the membership of the Technical Committee on Land Use Matters (TeCLUM) has been expanded to include other attached agencies of the department. The TeCLUM formulated a mechanism for the improvement of ongoing review of applications for land conversion. In the Philippines, a National Land Use Act (NLUA) has been drafted in line with the goal of strengthening the existing process of identifying, determining, and evaluating alternative land use patterns to guide and enable appropriate land management and development. The Act was certified as priority environmental legislation and is currently being discussed in both houses of Congress. In the interim, strategies to implement measures on the rational conversion of agricultural lands are being developed. A Charter on Agricultural Land, approved in 1991, embodies the Department of Agriculture's (DA) Land Use Principles and Guidelines. This document, together with the principles of agrarian reform, serves as a guide in preserving the country's agricultural lands. The procedural guidelines aim to improve the mechanism of issuing Certification of Viability of Agricultural Land (CVAL) and Certificate of Nonviability of Agricultural Land (CNVAL); or Special Certification for conversion to other agricultural use and support service. The Lands Management Bureau (LMB) has developed a National Master Plan on Land Resources Management which aims to provide an integrated approach to the planning and management of the country's land resources that will best suit the demands at the present times. Specifically, the Plan proposes the following: establishment of a monolithic agency which will adopt key and related functions; a gradual shift from freehold to a leasehold system of land disposition in view of the Philippines limited land resources; adoption of the computerized Survey Verification System (SVS) and Land Records Management Information System (LMRIS); adoption of Geographic Information System (GIS) Technology on a National scale and the acquisition of modern surveying equipment.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: The Bureau of Soils and Water Management (BSWM) of the Department of Agriculture continues to update the Network of Agricultural Area for Development (NAAD). The NAAD maps identify the agricultural areas restricted to conversion. To provide a guide for land use planning and crop development, the establishment of soil and land databases continued to be promoted at the local level. The BSWM also continues to promote the adoption of appropriate land use management systems. It is preparing hand guides for crop and land suitability and resource endowment. Crop diversification and integrated farming are promoted in suitable areas taking into account the physical limitations and the need for soil and water conservation

Research and Technologies: No information available.

Financing: The Land Management Fund will be a growth fund to be used for the purchase of lands for strategic inventories in land banking, development of A and D lands to improve land values, and investment in government securities. To date, the Master Plan is still pending approval at the Department of Environment and Natural Resources (DENR). Once approved, it will be translated into Regional Master Plans.

Cooperation: No information available.

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CHAPTER 11: COMBATING DEFORESTATION

Decision-Making: The Master Plan for Forestry Development (MPFD), adopted in 1990, provides the framework for combating deforestation and guiding the long-term development of the forestry sector in the Philippines. In line with the country's policy to ensure equitable access to, and sustainable development of forest resources, the President signed Executive Order 263 entitled Adopting Community-Based Forest Management (CBFM) as the National Strategy to Ensure the Sustainable Development of the Country's Forestland Resources and Providing Mechanisms for its Implementation.

Programmes and Projects: The Master Plan for Forestry Development (MPFD) has a total of 15 programmes thematically clustered into: a) Man and the Environment Programmes; b) Forest Management and Products Development Programmes; and c) Institutional Development Programmes. The Plan targets the reforestation of 1.8 million ha to meet the country's needs. Of the target, the Department of Environment and Natural Resources (DENR) has established and developed 276,834 ha of forest lands to date. National programmes and projects being implemented include the Integrated Social Forestry Programme which aims to promote a strong partnership between the forest occupants and the government in food production and forest rehabilitation; and the Industrial Forest Management Programme with the objective of establishing industrial forest plantations as an alternative resource base for forest-based export industries.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 12: MANAGING FRAGILE ECOSYSTEMS: COMBATING DESERTIFICATION AND DROUGHT

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 13: MANAGING FRAGILE ECOSYSTEMS: SUSTAINABLE MOUNTAIN DEVELOPMENT

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 14: PROMOTING SUSTAINABLE AGRICULTURE AND RURAL DEVELOPMENT

Decision-Making: The Philippines, through the Department of Agriculture (DA), implements the Key Production Area (KPA) Development approach to sustainable agriculture. The KPA approach is premised on the need to optimize the use of limited land and water to provide for the food requirements of the growing population and foster “export winners” within the context of equitable and sustainable development. It encourages farmers and fisherfolk to produce specific products suitable to the land, water resources, and climate of specific areas in the country. The integration of environmental concerns is being implemented through policies and programmes harnessing appropriate, cost efficient and environment-friendly strategies and technologies to satisfactorily meet both long-term economic and ecological needs.

Programmes and Projects: The country has adopted an ecological approach to crop cultivation through the following: Integrated Pest Management (IPM) which was introduced in 1993. The programme, known as “Kasaganaan Sakahan at Kalikasan” or “KASAKALIKASAN” represents the government’s commitment towards promoting sustainable agriculture and rural development; Soil conservation and management. Appropriate land use management systems and soil conservation techniques have been developed to minimize land degradation, indiscriminate conversion, and consequent deterioration of land productivity. These farming techniques include Contour Farming and Alley Cropping; and Water resource management. The Small Water Impounding Projects (SWIPs) have been developed as water storage mechanisms to supplement the water supply for subsistence farmers and as a deterrent to soil erosion. A programme of assistance to Local Government Units is also being implemented by the DA to prevent further environmental degradation by: a) prohibiting further destruction of the mangrove ecosystem and reconvertng abandoned, foreclosed, or unproductive fish ponds into mangrove farms; b) establishing and maintaining fish sanctuaries and marine parks in municipal waters; c) restoring productivity and ecological balance of exploited inland waters by prohibiting the use of destructive fishing methods and gears and by dispersing fingerling; and d) providing support for programmes which promote community participation in environmental conservation (that is, the Bantay Dagat Programme which encourages local communities to actively participate in the protection of their fishing grounds).

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 15: CONSERVATION OF BIOLOGICAL DIVERSITY

Decision-Making: Recognizing the need to confront the problems and issues relating to the conservation of biodiversity, the Philippine Strategy for Biological Diversity Conservation (PSBDC) was approved in 1994. The PSBDC was the basis for the preparation of the Philippine Biodiversity Country Study in 1995. The results were used for refining the PSBDC which is now known as the National Biodiversity Strategy and Action Plan (NBSAP). Approved in June 1997, NBSAP is composed of a multi-disciplinary team of experts. Its goals are consistent with those of the Convention on Biological Diversity. The implementation of NBSAP includes the following strategies. Strategy 1 includes a resource inventory and assessment of flora and fauna in the Subic forest. Strategy 2 incorporates past and present initiatives such as a Biodiversity Programme of Aurora province, promotion of ecotourism as a tool for biodiversity conservation in the Subic forest, documentation of the indigenous knowledge system and practices for biodiversity conservation and natural resource management among 15 indigenous cultural communities nationwide, and documentation of different plants used and propagated by the indigenous peoples to sustain their livelihood and cultural activities. Strategy 4 is the establishment of a Philippine Biodiversity Center. The Philippines makes decisions related to biodiversity through consultations, meetings, and discussions. Academia, non-government organizations, government agencies, local government units, and indigenous cultural communities contribute to biodiversity conservation decision-making.

Programmes and Projects: The National Integrated Protected Areas System (NIPAS) provides for the protection of habitats of rare and endangered species of plants and animals.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: No information available.

Research and Technologies: No information available.

Financing: Current efforts to institutionalize the National Biodiversity Strategy and Action Plan include the promotion of funding and support from the donor community and other sectors and the integration in sectoral plans, programmes and projects of national government agencies.

Cooperation: In the Philippines, the Convention on Biological Diversity was signed in 1992 and ratified in 1993. The latest report submitted by the country to the Convention Secretariat was in 1996. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was signed in 1973 and ratified in 1981. The latest report submitted to CITES was in 1995. Regional and international cooperation initiatives related to biodiversity conservation in the Philippines include the establishment of the Association of South East Asian Nations (ASEAN) Regional Center on Biodiversity Conservation; Joint Management of the Turtle Island Heritage Protected Area; the Shembird Reserve Network; and the assignment of a Japan International Cooperation Agency (JICA) Expert.

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CHAPTERS 16 AND 34: ENVIRONMENTALLY SOUND MANAGEMENT OF BIOTECHNOLOGY AND TRANSFER OF ENVIRONMENTALLY SOUND TECHNOLOGY, COOPERATION AND CAPACITY-BUILDING

Decision-Making:

Technologies: The Information Center for Clean Technology and Environmental Management (CTEM) managed by the Philippine Business for the Environment (PBE) is providing an information center on clean production and clean technologies. To promote eco-efficiency, tax exemptions are provided to firms which import brand new equipment and utilize industrial waste treatment systems. Facilitated by the Board of Investments (BOI) of the country's Department of Trade and Industry (DTI), incentives are granted for the installation of pollution control equipment whether locally manufactured or imported. Similarly, the Omnibus Investment Code under the supervision of DTI provides incentives to companies using anti-pollution devices. DENR certification is needed prior to the issue of incentives. To promote eco-efficiency, tax exemptions are provided to firms which import brand new equipment and utilize industrial waste treatment systems.

Biotechnologies: No information available.

Programmes and Projects:

Technologies: Private firms are increasingly adopting voluntary environmental guidelines such as the Philippine Business Charter for Sustainable Development (PBCSD), Responsible Care Programme or the International Standards Organization ISO 14000, and standards set by the Department of Environment and Natural Resources (DENR). The local chemical industry, for instance, has adopted the Responsible Care Programme as a means of minimizing risks and potential adverse effects associated with their operations. The recent adoption of the programme by the Chemical Industries Association of the Philippines, also known as the "Samahan sa Pilipinas ng mga Industriyang Kimika (SPIK)", is a commitment to continually improve their respective companies' performance regarding health, safety, and environmental aspects of their operations. Several other projects are being implemented by the Philippine Government through the DENR aimed at assisting private firms to be environmentally competitive. The Integrated Environmental Management Programme (IEMP), a joint undertaking of DENR and US AID, aims to encourage sustainable economic growth in the Philippine industrial sector while reducing pollution from industrial activities, and improving human health and the environment. It conducts pollution management appraisals (PMAs) to periodically assess waste minimization opportunities and improve firms' production processes and methods (PPM). There are also initiatives being coordinated by the PBE, a non-stock, non-profit organization formed to assist business firms in making their operations supportive of environmental thrusts. The PBE developed and promotes the PBCSD, an instrument which encourages business firms to adopt environmentally correct practices or cleaner production strategies. Some of the initiatives include implementation of a pollution control programme by Hi-Cement (cement plant) which includes the installation of a device that controls the release of dust and other particulate matter into the atmosphere.

Biotechnologies: No information available.

Status:

Technologies: No information available.

Biotechnologies: No information available.

Capacity-Building, Education, Training and Awareness-Raising:

Technologies: The Philippines' support for information/knowledge sharing is manifested by its initiative to establish the Asia Pacific Center for Technology Exchange and Training for Small and Medium Enterprises (ACTETSME) databank on clean production (CP) and clean technologies (CT) which can be accessed by all Asia-Pacific Economic Cooperation Council (APEC) member economies. Institute of Management (AIM) to introduce a three year Environment, Development and Management Programme with grant assistance from the MacArthur Foundation. The programme aims to make sustainable development a strategic concern in the training of Asian development and enterprising managers (Business and Environment: May-June 1995).

Biotechnologies: No information available.

Information:

Technologies: A survey of the country's top 1000 companies to benchmark existing environmental practices of these companies and identify areas where businesses can collectively work to improve local environment initiatives has been initiated by several organizations. It was undertaken to consolidate the business sector's contribution to the Philippine Agenda 21 (PA 21).

Biotechnologies: No information available.

Research and Technologies:

Technologies: Management of hazards, disasters and risks is also among the areas of concern. The establishment and operation of centralized waste handling is in progress. This is complemented by the development of training modules in the field. Other on-going R&D activities include: the development of efficient and clean technologies to reduce industrial wastes (such as the development of appropriate methods for water pollution control); utilization of renewable energy sources; strengthening of solid waste management; and air pollution quality.

Biotechnologies: No information available.

Financing:

Technologies: The CTEM derives funding support from the United States-Asia Environmental Partnership (US AEP), a project of the United States Agency for International Development (US AID).

Biotechnologies: No information available.

Cooperation:

Technologies: The BOI, in cooperation with the Green Aide Plan of the Ministry of International Trade and Industry of Japan, transfers technology on pollution control and energy. The country fully subscribes to mechanisms to stimulate cooperative activities among APEC member economies for the dissemination, promotion, transfer, and wider application of CP and CT practices. Moreover, it rallies behind the use of the ISO 14000 for wider dissemination and use of CP and CT in the APEC region.

Biotechnologies: No information available.

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CHAPTER 17: PROTECTION OF THE OCEANS, ALL KINDS OF SEAS, INCLUDING ENCLOSED AND SEMI-ENCLOSED SEAS, AND COASTAL AREAS AND THE PROTECTION, RATIONAL USE AND DEVELOPMENT OF THEIR LIVING RESOURCES

Decision-Making: To ensure a comprehensive and pragmatic approach to addressing marine and ocean concerns within the context of the Philippines' commitment to implement United Nations Convention on Law of the Sea (UNCLOS), the existing Cabinet Committee on the Treaty of the Law of the Sea created in 1981, has been reconstituted as the Cabinet Committee on Marine and Ocean Affairs (CABCOM-MOA). The Committee is mandated to formulate practical and viable policies to address the various concerns of UNCLOS and other marine related matters. As an initial output of the Committee, a National Marine Policy (NMP) has been formulated and adopted to serve as the umbrella framework for addressing ocean and marine concerns. In 2000, the CABCOM-MOA initiated activities to review the NMP with the objective to include a component policy on coastal management. Through the initiatives of the Department of Environment and Natural Resources-Coastal Resource Management Project (DENR-CRMP), two Round Table Discussions were conducted to serve as initial venue for consultations in the drafting of the National Coastal Management Policy (NCMP), a component policy of the NMP. In 1998, the Philippine Fisheries Code was enacted. The Code establishes coastal resource management as a national strategy, reinforces the constitutional mandate for preferential use of municipal waters by marginal and municipal fishers and reinforces the mandate of local government in the management of coastal resources and municipal waters. In 2000, the Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR) and the DENR signed a joint memorandum order, defining areas of cooperation and collaboration between the two agencies in the implementation of the Code. One of the main highlights of the memorandum is that the DENR shall have the primary responsibility for convening an interagency committee for the development and approval of the National Integrated Coastal and Marine Management Strategy (NICMMS). The NICMMS shall lay the foundation for local integrated coastal area management, applicable from the watersheds bordering the coast and out to the marine areas of the Philippines. The Philippines participated in the formulation of the Regional Action Plan for the East Asian Seas.

Programmes and Projects: The *Coastal Environment Program (CEP)* is being implemented by the DENR and integrates programs, projects and initiatives related to or concerning coastal environments. The program aims to promote community-based sustainable use of resources in coastal areas in the country by encouraging the use of environment friendly technologies, providing livelihood opportunities to coastal communities, promoting equitable access to resources, and building DENR capabilities in the management of coastal areas. The CEP is the only national government program to promote management of the entire coastal environment, including water quality and shoreline land use, and is not only focused on fisheries management. The CEP has the potential to develop into a national coordinating and policy unit supporting integrated coastal management throughout the Philippines if it is supported and can develop effective links with the DA-BFAR. The *Fisheries Resource Management Project (FRMP)* is a follow-up of the Fisheries Sector Program (FSP) implemented by the DA-BFAR from 1990-1995 in 12 priority bays and six aquaculture regions nationwide. It represents the most significant effort by the government to improve coastal resource management in the country. The primary objective of the FRMP is to reverse the trend of fisheries depletion in eleven municipal bays initially covered under the FSP, and in seven new bays. Its over-all long-term objective is to achieve sustainable development for the fisheries sector in the selected project sites through the reduction of poverty incidence among the marginal fisherfolk. The *Regional Programme for the Prevention and Management of Marine Pollution in East Asian Seas (RPPMMP-EAS)* is an on-going project of the United Nations Development Programme-Global Environment Facility whose major thrust is to strengthen the capacity of the participating governments to mitigate the marine pollution from land and sea-based sources. It involves the participation of eleven countries in East Asia with the Philippines as the host country through the DENR. RPPMMP-EAS has focused on developing Batangas Bay as a model site for integrated coastal management working with national and local government and promoting private sector partnerships to solve environment problems.

Status: All of the above-mentioned projects are currently being implemented in specific project sites of the country.

Capacity-Building, Education, Training and Awareness-Raising: The DENR, through its CRMP, implemented a capacity-building program for LGUs. CRMP has developed training modules, guidebooks, manuals, and a monitoring and evaluation framework for all aspects of coastal management at the local government level, which are available for continued widespread use. Representatives from LGUs, non-government organizations, national government agencies and academic institutions have been trained in participatory coastal resource assessment, Coastal Resource Management (CRM) planning, mangrove and marine sanctuary management, and information management systems. Likewise, training courses for database management and use of the GIS in six provinces was developed. The Haribon Foundation, together with other government organizations and research institutions have been implementing the project “Development of a Broad-Based Coastal Management Training Program in the Philippines,” since 1995. Under this program, the Foundation has already conducted various national (e.g. National Course on Integrated Coastal Management) and local trainings on CRM. To sustain these efforts, a trainers’ training program is regularly being conducted based on the specific needs of interested local government units.

Information: A national data center on coastal zone environment and resource management is currently being established under the auspices of the ASEAN-Australia Environment and Economic Program, Phase III. This project aims to create a meta-database on coastal resource management which will be implemented through a network approach, that is, a network of networks, and the development of a decision support system. The Municipal Coastal Database (MCD) 2000 was developed through the DENR-CRMP. It serves as an information management system for LGUs which they could utilize as a planning, monitoring and evaluation tool which cover all aspects of the CRM process. The MCD is the national database developed from the input of over 500 coastal communities.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: The Philippines signed the UNCLOS in 1982 and ratified it in 1984. The need to conserve and manage marine resources, particularly the straddling fish stocks (SFS) and the highly migratory fish stocks (HMFS), prompted the Philippines to sign an agreement in 1996 to prevent conflict over fishing on high seas and to conserve stocks of fish which migrate between international waters and areas under national jurisdiction. In preparation for the enforcement of the agreement, a draft Comprehensive Program has been prepared. Recognizing the impact of land-based resources of pollution in marine and coastal productivity, the Philippines actively participated in the series of meetings that led to the formulation and adoption of the Global Programme on Land-based Sources of Pollution. A national programme on land-based sources of pollution is currently being conceptualized to integrate Philippine initiatives and commitments to both the Association of South East Asian Nations (ASEAN) and the Coordinating Body on the Seas of East Asia (COBSEA) Regional Programmes, and NGO initiatives under the auspices of the Advisory Committee on the Protection of Seas (ACOPS). Also, the country has become a partner of the International Coral Initiative (ICRI), established in response to Agenda 21.

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CHAPTER 18: PROTECTION OF THE QUALITY AND SUPPLY OF FRESHWATER RESOURCES: APPLICATION OF INTEGRATED APPROACHES TO THE DEVELOPMENT, MANAGEMENT AND USE OF WATER RESOURCES

Decision-Making: Water resources management is a top priority of the government that needs sustained attention to promote socio-economic development. The government has decided to pursue, consistent with the December 1994 Water Summit decisions, an Integrated Water Resources Management WIRM based on river basin approach as the direction for future water resources planning and investment. The shift from a sector approach to a more focused river basin approach is integrative and coordinative of all water-related efforts. In line with this approach is the need to address the over-all institutional structure of the water resources sector and its management including the resource regulatory function; the water rights function; the water pricing regulation function; and water allocation. Currently, the National Water Resources Board (NWRB) acts as the overall water resource regulator except in the case of MWSS, while waiting for the creation of an independent water resources authority.

Programmes and Projects: Over the years, the government has implemented projects aimed at addressing the sector issues and concerns on planning, institutional capacity-building and regulatory body responsible for resource and/pr economic regulation. NWRB is a member of the TWG on Water of the Philippine Economic Environmental and Natural Resources Accounting (PEENRA) which aims to prioritize water resources (surface water) based on their economic importance and environmental significance and to ensure availability of the data needed in the compilation of the accounts.

Status: The Philippine Institute for Development Studies (PIDS) conducted a study on water pricing. The study aimed to determine the economic value of water for the development of a more realistic pricing scheme to consider full cost recovery and other externalities such as the public's willingness to pay for water as a commodity. Since then, the Government recently moved towards the privatization of the Metropolitan Waterworks and Sewerage System (MWSS) as a result of Executive Order No. 311. The privatization aimed to: improve service standards and expand service area coverage; increase the water supply system efficiency; eliminate fiscal burden on the government; and implement waste water management programmes. The privatized MWSS is obligated by the year 2000 to provide water on a 24-hour basis, to maintain water quality within World Health Organization standards and to ensure effluent discharge is within the standards set by the Department of Environment and Natural Resources (DENR). These concessionaires are required to provide clean and safe drinking water to 98% of the population in Metro Manila by the year 2001 and to expand the water supply facilities to include raw water sourcing and treatment. Wastewater development programmes such as septic tank dislodging, treatment and disposal, gravity-fed sewage collection network and treatment system, and rehabilitation and replacement of pipes will also be implemented. The Master Plan on Water Resources Management in the Philippines adopted the River Basin for comprehensive planning. It provided a framework for the orderly development and management of water and related land resources as well as identified and recommended water resources development projects to cope with the projected water shortage in the future.

Capacity-Building, Education, Training and Awareness-Raising: To raise the level of awareness of the general public on the efficient use of limited water resource, a massive information, education and communication campaign was conducted.

Information: The Government has developed an integrated water resource database to better manage and plan for the development of water resources in a sustainable manner.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: The Ramsar Convention on Wetlands entered into force in the Philippines in 1994. In July 1997, a Multi-Sectoral Summit convened to mitigate the impact of El Niño in various production areas of the country. The results of the summit include: an intensive campaign and information dissemination on the proper techniques for rain water harvesting, use, conservation and management for irrigation and domestic uses; and the provision of additional investments on shallow tube wells (STWs), small water impounding projects, and other small-scale irrigation projects especially for highly vulnerable areas.

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CHAPTER 19: ENVIRONMENTALLY SOUND MANAGEMENT OF TOXIC CHEMICALS, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN TOXIC AND DANGEROUS PRODUCTS

Decision-Making: Prior to UNCED, the Government of the Philippines (GOP) has passed RA 6969 "Toxic Substances and Hazardous and Nuclear Wastes Control Act" of 1990 and issued the IRR in 1992. From this point, the Environmental Management Bureau (EMB) issued Department Administrative Orders, defining the provisions required for compliance, as enumerated:

Department Administrative Orders (DAOs):

- DAO 97-38: Mercury and Mercury Compounds
- DAO 97-39: Cyanide and Cyanide Compounds
- DAO 98-58: Priority Chemical List (for restricted chemicals)
- DAO 200-02: Asbestos
- DAO 2000-18: Ozone Depleting Substances
- Drafting of Chemical Control Order for PCBs
- Creation of Chemical Review Committee for New Chemicals
- Preparation of the Philippine Inventory of Chemicals and Chemicals Substances (PICCS)

Programmes and Projects: No information available.

Status: No information available.

Capacity-Building for Education, Training and Awareness-Raising: National and Regional Training Workshop is a continuing activity of the Environmental Management Bureau (EMB) for its Regional Offices, Pollution Control Officers (PCOs), Industry, LGUs and Academe on the following topics: RA 6969 and its Implementing Rules and Regulations; Chemical Control Orders (CCOs); Understanding the Material Safety Data Sheet (MSDS); Responsible Care Program as corporate policy; Continuous education awareness; publication of brochures, flyers, regular air and print media interviews on chemicals Management

Information: No foreign funding/assistance for the Implementation of RA 6969

Research and Technologies: No information available.

Financing: No information available.

Cooperation: Commitment to International Conventions: POPs, PICs, CWC, IFCS

- Persistent Organic Pollutants Treaty (POPs) Stockholm Convention
- Prior Informed Consent (PIC) Rotterdam Convention
- Chemical Weapons Convention (CWC)
- Basel Convention on Transboundary Movement of Hazardous Wastes

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CHAPTER 20 TO 22: ENVIRONMENTALLY SOUND MANAGEMENT OF HAZARDOUS, SOLID AND RADIOACTIVE WASTES

Decision-Making: By virtue of the enactment of the Ecological Solid Waste Management Act of 2000 (RA 9003), it has become the policy of the state to adopt a systematic, comprehensive and ecological solid waste management program. Through the Act, the National Solid Waste Management Commission was created to oversee the implementation of solid waste management plans and prescribe policies to achieve the objectives of RA 9003. The use of non-environmentally acceptable packaging shall be prohibited and phase out period shall be determined after consultation and hearing with stakeholders. New open dump for solid waste shall be prohibited and existing open dumps shall be converted into controlled dumps within 3 years and no controlled dumps shall be allowed within 5 years after the effectivity of the above mentioned Act.

Programmes and Projects: Phase I of the Study on Hazardous Waste Management was conducted from July 2000 - May 2001. The EMB thru JICA prepared a Framework Plan for Hazardous Waste Management in the Philippines. The study reported that about 278,393 tons/year of hazardous wastes is generated in the country. The major generator of hazardous wastes comes from the Fabricated Metal Products, Machinery and Equipment manufacturing sector. The Phase 2 of the study which commenced early this month and ends in June 2002, will focus on the conduct of the Feasibility Study on the Establishment of an Integrated Hazardous Waste Treatment, Storage and Disposal Facility with special focus on the semi-conductor and electronics industry.

Status:

-As of September 2001

- Registered Hazardous Waste Generators: 1,852
- Recognized Transporters of Hazardous Waste: 91
- Recognized Treater/Recycler of Hazardous Waste: 42

-Regional Distribution of Hazardous Waste Generation

Region	Total Amount of Hazardous Waste Generation (tons)
1	3,937
2	1
3	18,939
4	56,613
5	97
6	7,210
7	8,912
8	11,323
9	60
10	14,178
11	7,771
12	17,383
CARAGA	42
ARMM	10
CAR	622
NCR	131,295
Total:	278,393

-Type of HW and industrial category

- Manufacture of Fabricated Metal Products, Machinery and Equipment: 5,600 tons/year (26%)
- Electric Gas and Water Supply: 5,000 tons/year (23.2%)
- Manufacture of Food, Beverage and Tobacco: 3,300 tons/year (15%)

Capacity-Building, Education, Training and Awareness-Raising:

- Information Dissemination of RA 6969 with PEZA, PCAPI and other industry organizations
- Team-building exercises and Hazardous Waste Management Training for EMB Regional Offices
- Planned IEC campaign and networking among stakeholders (e.g. treaters/recyclers, transporters, generators)
- A National Ecology Center is established to provide consultancy, information, training and networking services for the implementation of RA 9003

Information: A National Solid Waste Management Status Report containing an inventory of existing solid waste facilities, waste characterization, waste generation projections, and other pertinent information is regularly updated and published.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTERS 24 TO 32: STRENGTHENING THE ROLE OF MAJOR GROUPS

Women: Decision-Making: In 1993, a number of directives were issued to further promote empowerment of women and address their concerns during the Women's Day Celebration. These included the following: a) implementation of the Government Agencies of Republic Act (R.A) 7192, also known as Women in Development and Nation Building Act, and its implementing rules and regulations; b) the formulation of strategies to incorporate the Act in the government budget; and c) the identification of priority areas where Women's Desks in police stations may be established or implemented to enable law enforcement agencies to provide greater protection to women and, at the same time, making government programmes for women accessible to them. Policies and strategies to achieve equality in all aspects of society, including issuing a strategy by year 2000 to eliminate obstacles to full participation of women in sustainable development, have been established. The proportion of women decision makers in parliament and local government was respectively 16.7% and 9.7 % in 1992. Mechanisms are in place to assess the implementation and impact of development and environment policies and programmes on women. Capacity-Building, Education, Training and Awareness-Raising: Curricula and educational material already promote gender relevant knowledge. Cooperation: The Convention on the Elimination of All Forms of Discrimination Against Women was ratified by the Philippines in 1987. In addition to the above initiatives, the country participated in the Fourth World Conference on Women in Beijing, China from 4-15 September 1995.

Children and Youth: Decision-Making: In the Philippines, a number of initiatives and efforts have been implemented to integrate the concerns of children and youth in the Government's planning and decision-making process. The Capacity 21 Project has linked several government agencies (such as the Department of Education, Culture and Sports, the Department of Social Welfare and Development, the National Economic and Development Authority, the Department of Environment and Natural Resources) with several youth organizations from PO and NGOs in the preparation of the Philippine Agenda 21. A Committee was formed to plan and set directions for the conduct of the Youth Conference for Sustainable Development in the 21st Century. The conference aimed at involving and consulting youth representatives from different sectors and localities for the formulation of the Philippine Agenda 21. The youth representatives are thus full participants in the National process of moving towards sustainable development. Other accomplishments of the youth sector include the creation of the National Youth Commission (NYC), and the Philippine Youth Environmental Network. Capacity-Building, Education, Training and Awareness-Raising: The purpose of the establishment of "Sangguniang Kabataan" (Youth Council) in local communities was to promote awareness, participation, and environmental concerns in advocacy, environmental protection, and conservation initiatives.

Indigenous People: Decision-Making: Several indigenous POs and NGOs are recognized and allowed to participate in various levels of policy and planning processes related to government programmes and projects as provided in the Local Government Code of 1991. The National Integrated Protected Areas Act enhances the role of indigenous communities in the management of identified protected areas in the country. Executive Order Number 263, signed on July 19 1995, institutionalized both community based forest management as a resource management approach and the indispensable role of the indigenous community in forest conservation, extraction, and protection. The issuance of Certificates of Ancestral Domain Claim has strengthened the tenurial claim of the indigenous community to their land. The empowerment of indigenous people and their communities in sustainable development through policies and legal instruments has been established. Indigenous people participate fully in appropriate National processes, while they are fully involved in resource management strategies and programmes. Participation of the indigenous community in almost all levels of the project cycle and in almost all projects undertaken in their area of concern is ensured by various directives and promulgations issued by the Government. Foremost are: a) the recognition of their right for self-determination through the creation of the Office of Southern Cultural Communities and the Office of Northern Cultural Communities; and b) their active participation in various committees and sub-committees of the Philippine Council for Sustainable Development (PCSD).

Non-governmental Organizations: Decision-Making: In the Philippines, mechanisms already exist that allow NGOs to play their partnership role in sustainable development responsibly and effectively. NGOs are participating fully and their inputs are important. There have already been a number of collaborative efforts between POs and NGOs on sustainable development. To ensure active participation from the civil society in the decision making process towards sustainable development, representatives from POs and NGOs sit in as members of the Philippine Council for Sustainable Development and in several foreign assisted projects on the environment (that is, Protected Areas Projects).

Local Authorities: Decision-Making: Devolution and decentralization of sustainable development initiatives have placed the local government units (LGU) in the forefront of the development process. A local Government Academy has been established to train local government officials and develop them into a core of competent and dedicated executives to promote and support the government thrust towards poverty eradication, social reform, and sustainable development. Moreover, the Department of Interior and Local Government (DILG) has issued a memorandum which primarily aims to designate a focal person in local government offices to ensure that sustainable development concerns are integrated into the local planning process. The Local Government Authority (LGA) has been instrumental in providing LGUs assistance to enable them to develop their capability towards sustainable development. The local councils' structures and mechanisms were established based on the respective needs and political dynamics in the regions and provinces. A number of regional councils were created as a committee under the Regional Development Council. Other provincial city and municipal structures for SD are separate and distinct bodies created solely for the purpose of implementing SD initiatives. The dynamic collaboration of sectors and stakeholders at the local level provides a venue for these structures to continually adopt to the growing needs of the localization process. At the present, there are 16 local councils for sustainable development (LCDS) established nationwide, including the following: Bulacan CSD, Caraga RCSD, Central Luzon CSD, Central Visayas CSD, Eastern Visayas RCSD, Marinduque CSD, Palawan CSD, Quirino CSD, RCSD for Central Minanao, RCSD V, RCSD XI, Region 1 CSD, Region 9 CSD, Region 10 TWG on SD, San Jose CSD and Western Bisayas CSD. Capacity-Building, Education, Training and Awareness-Raising: The LGA undertook a nationwide training on the integration of PA 21 with other governmental initiatives. The training addressed the need to integrate sustainable development (SD) and PA 21 with development programmes of the government at the local levels. These local CDS are presently engaged in building awareness and capacity towards actualization of SD at their level.

Workers and Trade Unions: Decision-Making: In the Philippines, workers take some part in National Agenda 21 (PA 21) discussions and implementation. With the recent inclusion of the labour sector as a member of the Philippine Council for Sustainable Development (PCSD), it is expected that its involvement and participation in sustainable development initiatives will be intensified. As member-representative to the PCSD, the Trade Union Congress of the Philippines and the Labor Advisory and Consultative Council are coordinating trade union activities related to sustainable development. Several trade unions have already included the "Green Clause" in their Collective Bargaining Agreements. Status: The labour sector participated in a series of discussions related to the formulation of the PA 21. Similarly, the sector contributed to the conduct of the "Gathering for Human and Ecological Security", a conference which served as a venue for sharing experiences and developing consensus on the new ethic for human and ecological security.

Business and Industry: Decision-Making: The role of business and the industry in the pursuit of sustainable development is expected to strengthen with its recent inclusion as a member of the Philippine Council for Sustainable Development (PCSD). The involvement of the business sector in sustainable development initiatives came with the formulation of the Philippine Business Charter and the launching of the bi-monthly news magazine "Business and Environment". In the Philippines, there are government policies to encourage increasing the efficiency of resource use and reduction of waste per unit of economic output. There are also governmental policies requiring recycling. The sector also participated in the consultation programme for the Major Groups Committee supported by the International Labor Organization (ILO) in 1995 and provided inputs to the formulation of the Philippines Agenda 21 (PA 21). The sector is moreover a signatory to the "People's Covenant Towards a Transition

to Sustainable Development" which formalizes the commitment of all stakeholders to the implementation of PA 21. Status: The business sector has undertaken an assessment of its compliance with the principles of sustainable development. The Management Association of the Philippines (MAP), a confederation of business institutions in the country, conducted a discussion on the role of the business sector in advancing the goals and objectives of PA 21/SD in the agenda of the business sector. In coordination with other organizations, the MAP conducted an orientation workshop on Corporate Strategies in the Environment Age. This provided an opportunity for multinational and local firms in environmental management to help accelerate the adoption of effective environmental management systems. Capacity-Building, Education, Training and Awareness-Raising: The sector has engaged in the promotion of sustainable development practices and other activities to advance environmental awareness, such as the implementation of the Environmental Information Center for Business and Industry, and the conduct of environment related campaigns (that is, the campaign on toxic and hazardous waste management, anti-smoke belching campaign).

Scientific and Technological Community: No information available.

Farmers: Decision-Making: In view of the inclusion of the farmer's group in the Philippines Council for Sustainable Development (PCSD) as a permanent representative from PO, the sector is given an equal chance to participate in the decision-making process of the government on sustainable development. The sector is involved in a series of consultations related to the formulation of the Philippines Agenda 21 (PA 21) and has been actively participating in the activity of the PCSD.

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CHAPTER 33: FINANCIAL RESOURCES AND MECHANISMS

Decision-Making: The Philippines Agenda 21 (PA 21) recommends the adoption of a mixture of market-based instruments (MBIs), and command and control (CAC) measures to provide the needed financial flows to support its implementation. The strategy aims to influence the consumption and production behavior of the general public, including the business sector, in favor of sustainable development. The PA 21 adopts the principle that the local government units (LGUs), the National Government, and economic sectors should be further developed to achieve the optimal conditions for the application of the financial resources strategy.

Programmes and Projects: In order to implement the Environmental Impact Assessment System (EIAS), the country has a risk-liability system through the Environmental Guarantee Fund (EGF). The EGF is a fund that proponents, required or opting to submit an EIS, will commit to establish when an ECC is issued for projects or undertakings determined by the Department of Environment and Natural Resources (DENR) to pose significant risk to answer for damage to life, health, property and the environment caused by such risk or requiring rehabilitation or restoration measures. The Philippine Council for Sustainable Development (PCSD) supports the initiatives of the Integrated Environment Management for Sustainable Development (IEMSD)-Subprogramme on the Integration of Environment and Socio-Economic Development Policies (SEI) as an additional source of financing. Under the SEI of the IEMSD, a study on the "Implementation of Selected Market-Based Instruments for Air and Water Pollution Control" was undertaken to examine the applicability of MBIs for air and water pollution reduction in the Philippines. The study also discussed the implementation designs of emission and efficient charges to control air and water pollution and, likewise, computed the optimal levels of pollution charges.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: The Philippines is part of the UNDP-GEF Capacity Development Initiative particularly for the Asia and the Pacific Region. The country actively participated in series of consultations organized particularly to assess capacity development needs among countries relative to sustainable development as well as to device schemes for supporting projects along capacity development. Relative to this, the Global Environmental Facility (GEF) has created a new window for the financing of capacity development projects especially for developing countries. The Philippines is now packaging a proposal to be forwarded to the GEF.

The GEF Capacity Development Initiative is oriented to enhancing the capability of countries to contribute to the fulfillment of their obligations to international conventions which include the Convention on Biodiversity (CBD), the UN Framework for Climate Change (UNFCCC), and the Convention to Combat Deforestation.

Information: No information available.

Research and Technologies: No information available.

Cooperation: The Earth Capital Facility pilot-testing was explored by the Earth Council with assistance from the PCSD Subcommittee on Financing Arrangements. The Earth Capital Facility or Earth Fund provided financing assistance in the form of soft loans, grants and mixed credit, to support multi-sectoral initiatives on sustainable development. Related to the establishment of the Fund, an Investment Mission on Sustainable Development was hosted by the PCSD in collaboration with the Earth Council in 1998 to explore possible investment and assistance projects/areas in the country.

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CHAPTER 35: SCIENCE FOR SUSTAINABLE DEVELOPMENT

Decision-Making: The environmental agenda was enhanced through the creation of an Environmental Research and Development Programme Committee that facilitates the development of a more systematic and solid programme. The implementation of the Science and Technology Agenda for National Development (STAND), with the broad objective of ensuring global excellence and people empowerment, is a primary initiative undertaken in the Philippines to reinforce the role of science and technology in sustainable development. This is balanced by social considerations to ensure that science and technology addresses cultural distinctions and the plight of the needy sector of the society. Other activities include the assessment of research needs and priorities, enhancement of policy support and the development of tools for the implementation of sustainable development initiatives.

Programmes and Projects: The initiatives undertaken which support sustainable development-oriented activities include the development of new and innovative mechanisms for public participation in various R&D strategic alliances, action networks, core groups and round table discussions. The research programmes would develop, adopt and promote appropriate technologies on sustainable agriculture, promotion of chemical-free agriculture and natural resources, environment-friendly biological control techniques, organic farming, waste management and rapid composting technology. Emphasis is also given on the application of science and technology for the rehabilitation of degraded ecosystems.

Status: The role of science and technology and its contribution to sustainable development is increasingly being acknowledged especially in the restoration and rehabilitation of the environment. Results of earlier researches now form part of technologies used to restore the environment. These include bioremediation, rapid composting, revegetation and low input agriculture. Some advances have also been made on development of new products like medicine through bioprospecting, thus, lessening dependence on imported commercial drugs. While biotechnology holds much promise, caution is being exercised in research and trial applications to ensure safety to human populations. Meanwhile the sustainability component of the indigenous technologies and practices is being carefully looked into to help balance detrimental side effects of modern technologies. Harmonious mix between local and introduced technologies continues to be explored.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: Efforts to protect coral reefs, mangroves and seagrass include marine biological and oceanographic surveys, including the establishment of permanent stations and a monitoring system. Carrying capacity studies and the development of databases are being carried out as well. Efforts towards the rehabilitation and assessment of several rivers have been undertaken. Geological studies on the appropriate location of solid waste management sites, including the identification of geohazards and potential waste sources was completed in 1998. There is the development of ecotourism as a tool for biodiversity conservation in the Subic forest. Efforts to mainstream indigenous knowledge systems through the documentation of different plants used are also underway and propagated by the indigenous peoples (IPs) to sustain their livelihood and cultural activities are being conducted.

Research and Technologies: Research and development efforts are directed towards the promotion of export winners and environmentally acceptable products. Basic human needs like food, health, housing, nutrition, disaster and hazard mitigation, energy, and telecommunications receive priority in research and technology development.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 36: PROMOTING EDUCATION, PUBLIC AWARENESS AND TRAINING

Decision-Making: In the Philippines, the Department of Environment and Natural Resources, with its attached Bureaux, has taken the lead in promoting education on environment and sustainable development through its various programmes, projects, and information, education and communication (IC) activities. These activities include the participation of various groups such as policy makers, local government authorities, youth and non-government organizations. Non-government organizations also conducted IC activities on environment and sustainable development for communities and other local sectoral groups through their own efforts and initiatives. Efforts are being undertaken to integrate environmental education in all levels of education (basic, secondary, tertiary, technical/vocational, teacher training, and non-formal). Concerned agencies are the Department of Education, Culture and Sports (DECS), the Department of Environment and Natural Resources, Commission on Higher Education, and the Technical Skills Development Authority, particularly with the Asian Development Bank-DECS-Environmental Management Bureau (ADB-DECS-EMB) Project on Environmental Education.

Programmes and Projects: The Philippines launched the implementation of an examination scheme which aims to motivate civil servants, especially at the executive levels to be knowledgeable of environmental and sustainable development (SD) facts, principles and issues. Dubbed as the Environmental Intelligence Quotient Scheme (EQS), the Philippines pioneered this innovative approach of building a constituency for sustainable development within government. It is jointly lead by the Philippines' Civil Service Commission (CSC); the Career Executive Service Board (CESB); and the Department of Environment and Natural Resources (DENR) in coordination with the Philippine Council for Sustainable Development (PCSD) and the National Economic and Development Authority (NEDA).

Status: The Government provides training of local government policy-makers on sustainable development, particularly organizational seminars on solid waste management, Environmental Impact Assessment, Environmental Risk Assessment, and waste minimization by the EMB. In terms of increasing public awareness, the general public has been stratified into specific target audiences. Of these, policy-makers (National and local), educators, and media personnel were identified as priorities. Several seminars and symposia have been identified as venues for popularizing the PA 21 aside from the dissemination of primers and posters for the general public.

Information: The promotion of sustainable development through information and education is one of the priority activities to invoke a paradigm shift in the development outlook of the nation. Member agencies of the Philippine Council for Sustainable Development (PCSD) as well as their civil society counterparts have all contributed to the promotion of sustainable development in the country through various programmes, projects, and other IC activities related to the promotion of awareness and advocacy activities for the environment and sustainable development. The Philippine Agenda 21 (PA 21) is being distributed to key agencies, organizations, and institutions. Popular versions and primers which will be printed in different dialects and designed for basic sectors will also be distributed to provide the general public with a lay person's version of the PA 21.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER 37: NATIONAL MECHANISMS AND INTERNATIONAL COOPERATION FOR CAPACITY-BUILDING IN DEVELOPING COUNTRIES

This issue has been covered either under Chapter 2 or under the heading **Cooperation** in the various chapters of this Profile.

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CHAPTER 38: INTERNATIONAL INSTITUTIONAL ARRANGEMENTS

This issue deals mainly with activities undertaken by the UN System.

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CHAPTER 39: INTERNATIONAL LEGAL INSTRUMENTS AND MECHANISMS

This issue has been covered under **Cooperation** in the various chapters of this Profile.

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CHAPTER 40: INFORMATION FOR DECISION-MAKING

Decision-Making: To popularize the Philippine Agenda 21 (PA 21) principles and strategies, the Philippine Council for Sustainable Development (PCSD), through its Subcommittee on Information and Education, took the initiative in the areas of print and broadcast media. Major stakeholders such as environment and planning officers, Local Government Units (LGUs) and NGOs participated in briefings, educational symposia and training -seminars on PA 21 in general and on specific topics such as community-based forest management, land use planning, environmental impact assessment, and other related tools and concepts to build capacities for SD advocacy and to enable them to mainstream SD principles in their respective line of work. A Speakers' Bureau was established and is composed of a SD advocates who will showcase sustainable development as the focus of national development.

Programmes and Projects: No information available.

Status: A study commissioned to review existing literature on Sustainable Development Indicators (SIDS) and to formulate a framework for a system of SIDS for the Philippines to aid in the monitoring of compliance with PA 21 has recently been completed. Indicators compiled from the study include those for economic welfare, ecosystem (forest/upland, agricultural/lowland, urban, coastal/marine, and freshwater), critical resources (mines/minerals and biodiversity) and critical issues related to manufacturing, energy, science, technology and global climate change. The criteria used in the section of SIDS include usefulness in policy and decision-making, feasibility, cost effectiveness, accuracy, reliability, timeliness and validity.

Capacity-Building, Education, Training and Awareness-Raising: The realm of print media witnessed the birth of a PA 21 primer and poster in English. Materials are distributed to PCSD member agencies who, in turn, disseminate copies to their stakeholders and local counterparts. Training-seminars, briefings and workshops are also venues for dissemination of materials. Local dialect versions are currently in the development stage, including a PA 21 Popular Book Version. A monthly media forum entitled "Talakayan Kalikasan" provides the opportunity to discuss sustainable development (SD) related issues. Radio plugs and guests on local stations were initiated to popularize PA 21 principles in daily living. For example, Channel 21, a local television network, allotted a weekly one-hour slot for SD-related films and documentaries. A PA 21 video was also developed to showcase SD principles through three local stories that embody such principles. The video is used by PCSD officials, regional focal persons and the secretariat during briefings on PA 21.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: To promote the work programme of the UNCSD, the Economic and Social Commission for Asia and the Pacific (ESCAP) is undertaking a project called "Capacity Building for the Application of Sustainable Development Indicators in Asia and the Pacific." Part of the ESCAP Project is the "National Testing of SD Indicators" which will be implemented in several countries including the Philippines.

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INDUSTRY

Decision-Making: The role of business and the industry in the pursuit of sustainable development is expected to strengthen with its recent inclusion as a member of the Philippine Council for Sustainable Development (PCSD). It should be noted, however, that this sector engaged in several contributory activities before its membership in the PCSD. These included the implementation of the Environmental Information Center for Business and Industry, and the conduct of environment related campaigns (that is, the campaign on toxic and hazardous waste management, anti-smoke belching campaign). In the Philippines, there are government policies to encourage increasing the efficiency of resource use and reduction of waste per unit of economic output. There are also governmental policies requiring recycling.

Programmes and Projects: Several projects are being implemented by the Philippine Government through the Department of Environment and Natural resources (DENR) aimed at assisting private firms to be environmentally competitive. The Integrated Environmental Management Programme (IEMP), a joint undertaking of DENR and the United States Agency for International Development (US AID), aims to encourage sustainable economic growth in the Philippine industrial sector while reducing pollution from industrial activities, and improving human health and the environment. It conducts pollution management appraisals (PMAs) to periodically assess waste minimization opportunities and improve firms' production processes and methods (PPM). The local chemical industry, for instance, has adopted the Responsible Care Programme as a means of minimizing risks and potential adverse effects associated with its operations. The recent adoption of the programme by the Chemical Industries Association of the Philippines, also known as the "Samahan sa Pilipinas ng mga Industriyang Kimika (SPIK)", is a commitment to continually improve its respective companies' performance regarding health, safety, and the environment.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: A survey of the country's top 1000 companies to benchmark existing environmental practices of these companies and identify areas where businesses can collectively work to improve local environment initiatives has been initiated by several organizations. It was undertaken to consolidate the business sector's contribution to the Philippine Agenda 21 (PA 21). The findings of the survey reveal that private firms are increasingly adopting voluntary environmental guidelines such as the Philippine Business Charter for Sustainable Development (PBCSD), Responsible Care Programme or the International Standards Organization ISO 14000, and standards set by the Department of Environment and Natural Resources (DENR). There has also been an observed increase in both investments and savings on the environment over the past three years.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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SUSTAINABLE TOURISM

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: The development of ecotourism as a tool for biodiversity conservation occurs in the Subic forest.

Capacity-Building, Education, Training and Awareness-Raising: No information available.

Information: Efforts to mainstream indigenous knowledge systems through the documentation of different plants used and propagated by the indigenous peoples (IPs) to sustain their livelihood and cultural activities are being conducted.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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