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BRUNEI DARUSSALAM



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.

At the release of this Country Profile, Brunei Darussalam had not updated it and therefore any new changes will appear on our web page: <http://www.un.org/esa/agenda21/natlinfo>

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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/WWV)
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 National Environment Strategy (NES) has been formulated with the assistance of ESCAP.

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: Brunei Darussalam cooperates with other countries at various levels and in ways such as participating in activities within the ASEAN framework as well as activities organized by UNEP. Regionally, Brunei Darussalam is active within ASEAN with regard to environmental matters. Brunei Darussalam participates in various meetings and activities of the ASEAN Senior Officials on the Environment (ASOEN) and six Working Groups under ASOEN on Nature Conservation; Environmental Management; Environmental Economics; ASEAN Seas and Marine Environment; Transboundary Movement; and on Environmental Information, Public Awareness and Education. During the recent forest fire and haze event effecting the ASEAN region, Brunei Darussalam, along with its other ASEAN colleagues, has played an active role in ensuring the successful implementation of the Regional Haze Action Plan. Subregionally, Brunei is the lead country for the BIMP-EAGA Working Group on Environmental Protection and Management and Sub-Regional Fire Fighting Arrangement for Borneo. Brunei Darussalam has become a signatory to certain international conventions and agreements dealing with environmental issues, including: The Vienna Convention on the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer. For the Montreal Protocol, a country programme for phasing out consumption of ozone depleting substances has been finalized; The Convention on International Trade of Endangered Species (CITES); The ASEAN Agreement on the Conservation of Nature and Natural Resources; and The Convention on the Prevention of Pollution from Ships (MARPOL 73/78).

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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: 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 4: CHANGING CONSUMPTION PATTERNS

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 4: CHANGING CONSUMPTION PATTERNS - ENERGY

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 4: CHANGING CONSUMPTION PATTERNS - TRANSPORT

Decision-Making: At present, Brunei Darussalam has yet to establish comprehensive legislation which contains regulations and standards pertaining to protection and control of air quality. Currently, internationally accepted standards such as WHO standards and those of ASEAN member countries are used as references. Presently there are eight particulate samplers and one station monitors the five PSI "criteria pollutants".

Programmes and Projects: No information available.

Status: Vehicle emissions are among the major sources of atmospheric pollution. As of late December 1993, all vehicles are to be tested as part of the regulation process. The testing of gasoline vehicles include emission test for carbon dioxide and hydrocarbon at idle, and, for diesel vehicle, a smoke test at free acceleration. Similarly, motorcycles are also tested for carbon monoxide and hydrocarbon levels. In an effort to maintain clean air, unleaded gasoline (ULG) was introduced in January 1993. It was reported that the level of usage after the first month was almost 70 percent. Based on the first month usage, the emission of inorganic lead into the environment from vehicles has been reduced approximately 20 tons/year.

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: 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 6: PROTECTING AND PROMOTING HUMAN HEALTH

Decision-Making: Health care in Brunei Darussalam is a three-tier system with health clinics providing primary care, health centres providing secondary care, and district hospitals the tertiary and specialized care. Brunei Darussalam health planners place great emphasis on primary health clinics and mobile services, particularly in the remote areas. The Poisons Act governs the use of pesticides in Brunei Darussalam. It regulates the import and sale of poisons to prevent its misuse. The Ministry of Health's Director of Medical Services has legal responsibility in implementing the act. Licenses issued by the Department of Medical Services are required for the importation or sale of any substances included in the poison list. In addition, a Pesticide Assessment Committee was established in 1989 which aims to screen application for licenses to import agro-chemicals and to assess the competence of sellers. In addition to health care, the Ministry of Health collaborates with the Ministry of Development in health related projects, for example the provision of rural sanitation and water supply. The policy of the Health Ministry is to provide the highest level of health care and quality of life of the whole population in a clean and healthy environment. In protecting and promoting human health, emphasis is also given to the use of pesticides.

Programmes and Projects: No information available.

Status: Brunei Darussalam has made substantial achievements in improving and upgrading the health status and services, for example: life expectancy has stabilized to 70.1 years for males and 72.7 for females; infant mortality has decline from above 20.01 per thousand before the 1970's to about nine per thousand in 1989 and only 7.5 in 1990; maternal mortality has been reduced to about 0/1000 live births since 1988. In Brunei Darussalam, the use of chemicals in the form of fertilizers and pesticides is also increasing in agriculture and silviculture. Excessive use of these chemicals has the potential to cause harm to the rural ecology and human health.

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 7: PROMOTING SUSTAINABLE HUMAN SETTLEMENT DEVELOPMENT

Decision-Making: In addressing the issue of human settlements, Brunei Darussalam's national long term goal is to provide the people with a proper accommodation in a pleasant environment with the citizen households owning their own houses. Towards achieving these goals, the government encourages the people to build houses through provision of low interest housing loans for its employees and soft loans through the Development Bank of Brunei for housing estates. For those without land to build their own houses, two schemes are available, the National Housing Scheme and the Schemes for the Landless under which housing units are made available at subsidized prices to be paid over a period of 20 - 30 years. In addition, the government provides government housing for its employees at subsidized rents, and certain larger private companies also provides accommodation for their own work force.

Programmes and Projects: No information available.

Status: Safe drinking water is available at the turn of the tap and is presently be enjoyed by more than 90 percent of the population. Total water usage for the period under review reached 66,157 million liters, recording an increase of 66,157million liters. The Water Services Department, Public Works, is directly responsible for the supply of potable water and management of fresh water resources. It manages several water treatment plants with a total capacity of more than 195 million liters per day and has a modern laboratory to make sure that the quality of treated water meets safe drinking standard.

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: The NCE oversees the implementation of national environmental activities, legislation and policies pertaining to the environment. To assist the NCE in its function, The Environment Unit was set up in the Ministry of Development in 1993 to serve as the Secretariat. In recent years, the government has taken some measures to introduce changes in the institutional structure to enable integration of environment consideration in the economic planning and development. In 1993, the National Committee on Environment (NCE) was established for the purposes of pursuing the overall goal of environmental protection and service, and to ensure a more holistic approach to environmental management through consultation and formulation of appropriate policies. The NCE is responsible for overall policy coordination and review. In response to Agenda 21, a National Environment Strategy (NES) was formulated with the assistance of ESCAP. The strategy aims to provide a policy framework and a plan of action for environmental protection and management in the country for the period of 1996 – 2000 and beyond. In line with the Vision Towards a Better Quality Environment, the policy objectives on environment for the Seventh National Development Plan are as follows: maintain sustainable utilization of natural resources; minimize negative impacts on the environment arising from population growth and human activities; and balanced goals of socio-economic development and the need to sustain sound environmental quality. To achieve the above objectives, the policy directions and strategies, which are based on the National Environment Strategy, are as follows: raise environmental consciousness; integrate environmental dimensions in economic planning and development; improve environmental and natural resources assessment and information database; strengthen urban and rural environment improvement programmes; protect vulnerable ecosystems, habitats and biodiversity; protect coastal and marine environmental resources; and strengthen regional and international cooperation.

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 9: PROTECTION OF THE ATMOSPHERE

Decision-Making: Brunei Darussalam has yet to establish comprehensive legislation that contains regulations and standards pertaining to protection and control of air quality. Currently, internationally accepted standards such as WHO standards and those of ASEAN member countries are used as reference.

Programmes and Projects: In Brunei Darussalam efforts to strengthen the institutional, technical and legal capacity to prevent and combat forest fires have been undertaken. This includes physical measures such as putting up fire breaks in forest reserves to prevent fire spreading, observation towers for early detection and warning, and fences that prevent people from entering in some fire sensitive areas. In addition, as of late December 1993, all vehicles as part of the regulation process are to be tested.

Status: Environmental pollution is currently not a major problem in Brunei Darussalam. However, with diversification of the economy and industrial growth coupled with the increasing population, it is bound to become severe in the future with environmental quality coming under increasing stress. Major sources of atmospheric pollution include: (a) vehicle emissions, (b) industrial activities, (c) forest fires, and (d) open burning. The current drive for industrialization in efforts to diversify the country's economy carries with it a potential for increased pollution and degradation in environmental quality. At present, air pollution due to industrial activities is minimal. Ad hoc studies have been undertaken which indicate the levels of air pollutants (sulphur dioxide, nitrous oxide, hydrocarbons and carbon monoxide) are relatively low. Efforts are being undertaken to reduce the use of chlorofluorocarbon (CFC) and halon in air-conditioning and fire prevention systems.

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: Brunei Darussalam acceded to the Vienna Convention for the Protection of the Ozone Layer on 26 July 1990; and the Montreal Protocol on Substances that Deplete the Ozone Layer on 27 May 1993. Brunei Darussalam has not signed the United Nations Framework Convention on Climate Change as of 7 October 1998. During the recent forest fire and haze event effecting the ASEAN region, Brunei Darussalam, along with its other ASEAN colleagues, has played an active role in ensuring the successful implementation of the Regional Haze Action Plan.

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

Decision-Making: Under new provisions section 277A of the Emergency Order (Penal Code Amendment, 1998), open burning was prohibited during dry seasons and prolonged drought. A stiffer penalty of B\$100,000.00 fine was imposed on offences relating to open burning. Where such offences cause pollution to the atmosphere or endanger human life or property the punishment is a fine of an unlimited amount and or imprisonment for a term of up to five years.

Programmes and Projects: No information available.

Status: Open burning at the moment is still a common practice. Open burning, though discouraged, is nonetheless observed during land clearing activities for development for agriculture as well as at construction and rubbish dumping sites. Presently, open burning is not allowed at government rubbish dump sites and forest reserves.

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 11: COMBATING DEFORESTATION

Decision-Making: Patrolling of the forests and stricter enforcement of the national Forest Law and Regulations are being intensified with the objective of curbing illegal logging and controlling other forest offences. Existing legislation as contained in the Forest Act prohibits persons from kindling, keeping or carrying any fire or leaving any fire burning that may endanger the reserved forests. Brunei Darussalam's Fifth National Development Plan introduced the forest conservation and protection policy that has designated the national forest as Conservation forest, Protection forest and Production forest. This policy has taken into consideration the need to conserve and protect the tropical flora and fauna biodiversity of the Brunei Forests. It also takes into consideration the need to protect water catchment areas and promote replanting of wasteland. Under the Seventh National Development Plan (1996 - 2000), several projects have been approved for implementations. These include the Wildlife Resource Inventory of Brunei Darussalam Forest and the Tropical Forest Biodiversity Development Project.

Programmes and Projects: No information available.

Status: The forestry sector holds great untapped wealth with its immense biodiversity. Forests still cover roughly 469,046 hectares or 80 percent of the total land surface of Brunei Darussalam. More than 55 percent of the land area is occupied by virgin tropical rainforests, in mostly pristine state. In line with the country's strong commitment to its conservation policy, logging in the natural forests had been reduced by 50 percent since January 1990 from 200,000 cubic metres (Cum) previously. This was inevitable given the small size of the forest resource and need to protect the environment and conserve species bio diversity. On the rehabilitation side, poor and degraded lands have been identified and substantial funds have been allocated for their greening and eventual reforestation. This is to control soil erosion besides enhancing the natural beauty of the environment.

Capacity-Building, Education, Training and Awareness-Raising: Extension services aimed at the general public and students has managed to increase awareness and appreciation of the forest and natural environment. It has also helped to conserve the resource. Efforts have been made to strengthen the institutional, technical and legal capacity to prevent and combat forest fires have been undertaken. This includes physical measures such as putting up fire breaks in forest reserves to prevent fire spreading, observation towers for early detection and warning, and fences that prevent people from entering in some fire sensitive areas. The ground and aerial forest fire fighting capacity (in term of equipment) has also been enhanced and improved. Brunei Darussalam has been working closely with its colleagues in Limbang, Miri and Lawas of Malaysia in combating forest fires in areas bordering the shared national boundaries. Other measures involve putting up sign boards to warn the public of potential causes of forest fires and campaigns to increase public awareness. Such awareness programmes also educate the public on the importance of the forest ecosystem and the need to protect them from being destroyed.

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: Brunei Darussalam has not signed the International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification.

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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: A Pesticide Assessment Committee was established in 1989. Its objectives are to screen the application for licenses to import agro-chemicals and to assess the competence of sellers. In protecting and promoting human health, emphasis is also given with regards to the use of pesticides.

Programmes and Projects: No information available.

Status: In Brunei Darussalam, the use of chemicals in the form of fertilizers and pesticides is also increasing in agriculture and silviculture. Excessive use of these chemicals has the potential to cause harm to the rural ecology and human health.

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: Brunei Darussalam's Fifth National Development Plan introduced the forest conservation and protection policy that has designated the national forest as Conservation forest, Protection forest and Production forest. This policy has taken into consideration the need to conserve and protect the tropical flora and fauna biodiversity of the Brunei Forests. It also takes into consideration the need to protect water catchment areas and promote replanting of wasteland. Under the Seventh National Development Plan (1996-2000), several projects have been approved for implementation. These include a Wildlife Resource Inventory of Brunei Darussalam Forest and Tropical Forest Biodiversity Development.

Programmes and Projects: No information available.

Status: In line with the country's strong commitment to its conservation policy, logging in the natural forests had been reduced by 50 percent since January 1990 from 200,000 cubic metres (Cum) previously. This was inevitable given the small size of the forest resource and the need to protect the environment and conserve species biodiversity.

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: Brunei Darussalam has not signed the Convention on Biological Diversity as of 15 January 1999. Brunei Darussalam acceded to the Convention on International Trade of Endangered Species (CITES) on 4 May 1990. It has also signed the ASEAN Agreement on the Conservation of Nature and Natural Resources.

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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: No information available.

Biotechnologies: No information available.

Programmes and Projects:

Technologies: No information available.

Biotechnologies: No information available.

Status:

Technologies: No information available.

Biotechnologies: No information available.

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

Technologies: No information available.

Biotechnologies: No information available.

Information:

Technologies: No information available.

Biotechnologies: No information available.

Research and Technologies:

Technologies: No information available.

Biotechnologies: No information available.

Financing:

Technologies: No information available.

Biotechnologies: No information available.

Cooperation:

Technologies: No information available.

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: A Coastal Zone Management Plan for Brunei Darussalam has been prepared under the ASEAN - US Coastal Resources Management Project. Implementation of the plan is currently under review. One of the strategies included in the National Environment Strategy of Brunei Darussalam is the Strategy on Protection of Coastal and Marine Environmental Resources. This strategy comprises the following programmes: Strengthen Coastal Water Quality Management Programme; Operationalise the National Oil Spill Contingency Plan; Examine IMO conventions for their possible ratification; Strengthen mangroves management; Strengthen coral / artificial reef management; Designate marine wildlife sanctuaries; Prevent coastal erosion; Identify and implement other appropriate recommendation contained in coastal zone management plan.

Programmes and Projects: No information available.

Status: In Negara Brunei Darussalam, about 85 percent of the population lives in the coastal area where almost all the social, cultural and economic activities are concentrated.

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: Brunei Darussalam ratified the United Nations Convention on the Law of the Sea on 5 November 1996. It has also signed the Convention on the Prevention of Pollution from Ships (MARPOL 73/78).

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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: The Water Services Department, Public Works, is directly responsible for the supply of potable water and management of fresh water resources. It manages several water treatment plants with a total capacity of more than 195 million litres per day and has a modern laboratory to make sure that the quality of treated water meets safe drinking standard. A Water Resources Management Working Group was established by the National Committee on Environment in 1994 with the following objectives: Establishment of environmental quality objectives and corresponding standards and monitoring requirements for the water resources of Brunei Darussalam; Establishment of a plan of action to mitigate adverse effects on Brunei Darussalam's water resources (present or future) with particular emphasis on the following critical activities: raw sewerage discharge from settlements, silt from land clearance, oily waste from workshops and filling station, livestock and chemical wastes from agricultural development, discharges from industrial development and domestic discharges; Establishment of harmonized legal framework for water resource management.

Programmes and Projects: No information available.

Status: Safe drinking water is available at the turn of the tap and is presently enjoyed by more than 90 percent of the population. Total water usage for the period under review reached 66,157 million litres, recording an increase of 66,157million litres.

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

Decision-Making: The Poisons Act governs the use of pesticides in Brunei Darussalam. It regulates the import and sale of poisons to prevent its misuse. The Ministry of Health's Director of Medical Services has legal responsibility in implementing the act. Licenses issued by the Department of Medical Services are required for the importation or sale of any substances included in the poison list. In addition, a Pesticide Assessment Committee was established in 1989 which aims to screen application for licenses to import agro-chemicals and to assess the competence of sellers.

Programmes and Projects: No information available.

Status: In Brunei Darussalam, the use of chemicals in the form of fertilizers and pesticides is also increasing in agriculture and silviculture. Excessive use of these chemicals have the potential to cause harm to the rural ecology and human health.

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

Decision-Making:

Hazardous wastes: No information available.

Solid wastes: Solid waste management has been identified as a significant problem that requires priority action. Negara Brunei Darussalam is currently preparing a long term waste management strategy that will cater to the needs of all identified waste stream including: domestic wastes, industrial wastes, commercial wastes, sewage sludge, oily waste, hazardous waste, and clinical wastes. In the management of solid waste, efforts are being made to better coordinate the management of solid wastes, improve the system of collection and coverage of refuse collection as well as increase the number of public facilities for refuse disposal. Related to the problem of solid wastes, the Sixth National Development Plan has identified a study to look at the problems of waste arising from the use of plastic materials and ways to remedy them. Projects that are underway under the Seventh National Development Plan which address some of the problems of solid waste include the creation of new landfill areas and improvement of a solid waste disposal system.

Radioactive wastes: No information available.

Programmes and Projects:

Hazardous wastes: No information available.

Solid wastes: No information available.

Radioactive wastes: No information available.

Status:

Hazardous wastes: No information available.

Solid wastes: No information available.

Radioactive wastes: No information available.

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

Hazardous wastes: No information available.

Solid wastes: No information available.

Radioactive wastes: No information available.

Information:

Hazardous wastes: No information available.

Solid wastes: No information available.

Radioactive wastes: No information available.

Research and Technologies:

Hazardous wastes: No information available.

Solid wastes: No information available.

Radioactive wastes: No information available.

Financing:

Hazardous wastes: No information available.

Solid wastes: No information available.

Radioactive wastes: No information available.

Cooperation:

Hazardous wastes: No information available.

Solid wastes: No information available.

Radioactive wastes: No information available.

CHAPTERS 24 TO 32: STRENGTHENING THE ROLE OF MAJOR GROUPS

Women: No information available.

Children and youth: No information available.

Indigenous people: No information available.

Non-governmental organizations: No information available.

Local authorities: No information available.

Workers and trade unions: No information available.

Business and industry: No information available.

Scientific and technological community: No information available.

Farmers: No information available.

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CHAPTER 33: FINANCIAL RESOURCES AND MECHANISMS

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 35: SCIENCE FOR SUSTAINABLE 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 36: PROMOTING EDUCATION, PUBLIC AWARENESS AND TRAINING

Decision-Making: No information available.

Programmes and Projects: No information available.

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

This issue has been covered under the heading **Capacity-Building, Education, Training and Awareness-Raising** 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. However, you will find below a list of international conventions and agreements dealing with environmental issues Brunei Darussalam has signed. They include: The Vienna Convention on the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer. For the Montreal Protocol, a country programme for phasing out consumption of ozone depleting substances has been finalized; The Convention on International Trade of Endangered Species (CITES); The ASEAN Agreement on the Conservation of Nature and Natural Resources; and The Convention on the Prevention of Pollution from Ships (MARPOL 73/78).

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CHAPTER 40: INFORMATION FOR DECISION-MAKING

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: INDUSTRY

Decision-Making: At present, Brunei Darussalam has yet to establish comprehensive legislation that contains regulations and standards pertaining to protection and control of air quality. Currently, internationally accepted standards such as WHO standards and those of ASEAN member countries are used as references.

Programmes and Projects: No information available.

Status: Industry is among the major sources of atmospheric pollution. Presently there are eight particulate samplers and one station monitors the five PSI "criteria pollutants". The current drive for industrialization in efforts to diversify the country's economy carries with it a potential for increased pollution and degradation in environmental quality. At present, air pollution due to industrial activities is minimal. Ad hoc studies have been undertaken which indicate that the levels of air pollutants (sulphur dioxide, nitrous oxide, hydrocarbons and carbon monoxide) are relatively low. Efforts are being undertaken to reduce the use of chlorofluorocarbon (CFC) and halon in air-conditioning and fire prevention systems.

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: SUSTAINABLE TOURISM

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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