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LIECHTENSTEIN



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

Decision-Making: No information available.

Programmes and Projects: See **Status**.

Status: Liechtenstein and Switzerland form a customs and monetary union. On this basis, Switzerland formulates foreign trade policy for this Union, with the exceptions of trade within the European Economic Area (EEA), of which Liechtenstein is a member, and limited policy instruments set up by Liechtenstein. The development of international trade has been and still is very important and has raised the standard of living to a high level. For Liechtenstein, integration in the international trade system is vital. The current high level of economic development and the prosperity of the small country are due, inter alia, to its economic and customs union with Switzerland. Liechtenstein's close ties to its neighbours Switzerland, Austria and Germany support international trade. Liechtenstein finances different standardization bodies through the European Free Trade Agreement (EFTA). In conjunction with the other EFTA members Switzerland, Norway and Iceland, it has produced a trade brochure with all relevant information concerning trade, which can be obtained from the EFTA secretariat. Liechtenstein does not have a policy of credit grants to either national private enterprises or, given its small economy in real figures and therefore limited resources, to foreign entities. It consequently does not play an active role as regards debt relief. As far as possible, Liechtenstein works in competent organizations such as the World Trade Organization in favour of an equitable trading system.

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: The Ministry for Public Health and Social Affairs is responsible for taking measures in this area. The *Social Welfare Assistance Act* is the most important piece of legislation under this chapter.

Programmes and Projects: With the establishment of a law on rent subsidies, renters can now apply for allowances to help offset their high housing costs. These subsidies are limited to families, and are determined by levels of income and size of household. In this way, families' high housing expenses can be reduced, so that rent subsidies contribute to the promotion of families. Families, and individuals with low incomes, are the main beneficiaries of the new Medical Insurance Act, which took effect on 1 April 2000. The core provision of this Act is the introduction of a network provider system as well as a system of reduced premiums for persons with low incomes within the network provider system. Moreover, insured children under the age of 16 are exempt from the payment of insurance premiums within the network provider system. In 2000, the Government gave its approval for an agreement between the State and municipal authorities on a publicly financed work project, which seeks to provide unemployed recipients of social assistance who are able to work with a temporary income for up to six months by giving them jobs with the State and municipal authorities for a fixed period. This serves to hone their occupational skills and boost their self-confidence as well as increase their chances of keeping a position.

Status: The standard of living in Liechtenstein is generally high. A high standard of living carries with it a high cost of living, which is an issue particularly for lower-income households. A study on poverty found that 7.9 percent of households were lower-income households in 1994. Of these, 4.4 percent received public assistance, while the remaining 3.5 percent did not apply for such assistance. There is also evidence of marginalized population groups that do not live in poverty. It may be said that poverty has been eradicated, thanks to a series of compensatory measures such as income subsidies, premium reductions of insurance costs, tax allowances, social welfare assistance or subsidies. The Social Welfare Assistance Act plays a major role in poverty eradication. Social assistance is provided on the basis of reciprocity, which principle is anchored in legislation in the form of the Social Welfare Assistance Act. This means that, on the one hand, the State provides financial assistance and, on the other, the welfare recipient must reciprocate by actively seeking employment, registering with the employment agency and, in some cases, taking part in a work programme. However, this does not amount to much if this principle cannot, in practice, be adapted to each individual case in the ordinary circumstances of social work. Recently, new methods have been tried in the delivery of the programme to clients. For clarification, assistance plans have been introduced which contain agreements reached with each client regarding performance by each party. These agreements pertaining to the rights and obligations of both parties are also important on the psychological level, in that they serve to mobilize self-employment and self-help energies.

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.

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: The Ministry of the Economy is responsible for coordinating action in the field of energy.

Programmes and Projects: Measures were outlined in the Government's energy reports aimed at reaching the goals outlined in the Convention, and were subsequently implemented on a gradual basis. Liechtenstein has recognized that rational, environmentally sound use of energy is essential. The regulations regarding environmentally sound use of energy are constantly being tightened. Liechtenstein has introduced very high standards as regards new construction. A law has also been passed which provides for financial support for energy-saving measures (the Promotion of Energy Conservation Act). The use of renewable sources of energy receives special promotion, so that, for example, financial support is provided to help defray the investment costs of sustainable thermal insulation in old buildings, the installation of solar and photovoltaic arrays and of combined heating systems using wood-pellet or other heating systems using environmentally sound technologies. The Swiss Federal Council passed a law on carbon dioxide which took effect on 1 May 2000 and which stipulates that Switzerland must bring its carbon dioxide emissions down to 10 percent under 1990 levels by the year 2010. This obligation undertaken by Switzerland, as well as Liechtenstein's obligation, exceeds the 8 percent reduction required in the Kyoto Protocol to the Climate Convention. This goal is to be reached, in the first instance, through voluntary economic measures as well as measures that have already been agreed. Should these prove insufficient, the Federal Council will introduce a carbon dioxide tax, which can be instituted in 2004 at the earliest. This tax will probably be instituted in Liechtenstein as well, given the fact that the Government of Liechtenstein has set itself the same goal as Switzerland, and considering the customs treaty between the two countries.

Status: Liechtenstein has an annual energy requirement of 1,200 GWh, and provides approximately 8.7 percent of this figure on its own. With the exception of natural gas, which is brought in via a pipeline beginning in Austria and ending in the neighbouring region of Chur, all imported energy is brought into Liechtenstein via Switzerland. Since local energy sources are almost fully depleted, Liechtenstein will continue to be largely dependent on other countries for its energy supply in the future. The electricity and gas markets have been liberalized, so that Liechtenstein will also have access to the European energy market.

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: Liechtenstein signed the United Nations Framework Convention on Climate Change on 4 June 1992 at the United Nations Conference on Environment and Development, held in Rio de Janeiro, and ratified the Convention on 22 June 1994.

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CHAPTER 4: CHANGING CONSUMPTION PATTERNS - TRANSPORT

Decision-Making: The Ministry of Transport is responsible for coordinating action in the area of transport.

Programmes and Projects: Measures taken: Introduction of a charge on heavy goods vehicles based on vehicle category (*Schwerverkehrsabgabe-LSVA*), identical to that levied in Switzerland; Exemption of electric- and gas-powered vehicles and hybrid vehicles from the vehicle tax; Establishment of the Liechtenstein Bus Authority with the aim, inter alia, of promoting the use of public transport on a broader basis; Introduction of Liechtenstein frequent-service regional trains to make the public transport system more attractive to commuters; Introduction of stricter emissions regulations for passenger cars.

Measures planned: Introduction of management measures for parking lots; Subsidies for electric mopeds and scooters.

Systematic measurements: Permanent civil engineering traffic measurement points; Periodic examination of Liechtenstein's overall transport model.

Status: Liechtenstein's policy to date has outlined only general obligations aimed at ensuring sustainability in the area of transport. However, the findings of the study on the sustainable development of the transport system in the upper Rhine valley currently underway, once they are presented, should facilitate the development of the appropriate goals, strategies and corresponding monitoring methods to ensure sustainability, taking into account the country's specificities.

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 Government is aware that Liechtenstein is very small in area and that all direct or indirect effects of traffic almost always impact other countries as well. Therefore, it provides support for or initiates international (regional) measures in the service of the entire region and, consequently, Liechtenstein itself. Liechtenstein is a party to the Alpine Convention and has signed the Transport Protocol thereto.

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CHAPTER 5: DEMOGRAPHIC DYNAMICS AND SUSTAINABILITY

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: As of June 2000, Liechtenstein had a resident population of 32,673. Of this number, 34.3 percent were foreigners. Of all the foreigners resident in Liechtenstein, 45.3 percent are from countries participating in the European Economic Area (EEA), mainly Austria and Germany, and 33.9 percent are from Switzerland. Other countries therefore account for 20.8 percent, which includes 7.8 percent from Turkey and 9.7 percent from States of the former Yugoslavia (including the Federal Republic of Yugoslavia, Bosnia-Herzegovina and Croatia). Between 1990 and 1998, there were on average 399 births each year, while in the same period, an average of 204.3 people died each year. In June 2000, 19 percent of the population was under 15 years of age, while 10.8 percent was older than 65. Average life expectancy has been rising steadily for the past 30 years, and averaged 74.8 years for women and 67.1 years for men for the period from 1990 to 1998. There is no formal national population policy in Liechtenstein. Material and institutional support is provided to families through family policy and social policy measures. Everyone is guaranteed access to family planning as a part of Liechtenstein's public health care system. The Centre for Motherhood offers technical and personal counseling for women with unwanted pregnancies, as well as financial support for mothers during pregnancy and after childbirth. Women also receive medical and psychological assistance from doctors and therapists. Starting at age 17, all women receive an invitation every two and a half years to undergo a gynaecological examination which includes, mainly for younger women, family-planning counseling where necessary. All costs relating to such examinations and counseling, as well as a portion of the costs of related family-planning measures, are borne by health insurance providers. However, contraception, which is legal in Liechtenstein, is not funded by the State.

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: The Ministry for Public Health is responsible for protecting and promoting human health. The *Health Care Act* is the most important piece of legislation under this chapter.

Programmes and Projects: Under the Health Care Act the financing of the health care system in Liechtenstein is based on the one hand on State participation and on the other hand on the system of private health insurance. In light of Liechtenstein's family policy, measures were taken to lower the costs for families for health services. The revised Health Insurance Act took effect on 1 April 2000. Insured persons may now choose between physicians who are part of the Liechtenstein health system's network of health care providers or they may be seen by any physician of their choice. The in-network provider system reduces premiums and co-payments for the insured. No premiums are required for coverage of children up to the age of 16 within the network, so that families in particular benefit from a less costly health-care system. Reductions on premiums are also available, mainly to persons with lower incomes - up to 60 percent depending on the level of their income.

AIDS prevention: "AIDS-Hilfe Liechtenstein" (AIDS-Assistance Liechtenstein), a specialized counseling centre funded by the Government, conducts public HIV/AIDS information campaigns with broad coverage which target both sexes and all age groups. There are also self-help groups for persons with HIV/AIDS which also receive State funding. Awareness-building activities supporting sex education in primary and secondary schools as well as in vocational training schools and a programme especially designed to raise girls' self-confidence ("Girl Power Days") take place periodically. In conclusion, the target audience of adolescents generally shows great awareness regarding preventive behaviour.

Status: Access to basic health services, clean water and sanitation is guaranteed in Liechtenstein. Numerous water, soil and air protection regulations and the use of modern technology guarantee not only de jure but also de facto clean drinking water. Under the terms of the Health Care Act of 24 November 1971 health care in Liechtenstein offers a multitude of services starting with ensuring the survival and healthy development of newborns as well as older children. The services extend from the prenatal period through birth to all subsequent phases of child development and include vaccinations and routine health checks. The State has furthermore the legal obligation to take preventive measures, particularly in schools and kindergartens, consisting of regular monitoring of physical health and dental care. Infant mortality (death within one year of birth) has been continually decreasing in Liechtenstein since the 1950s. In recent years it averaged 1.2 cases, or 3.0 per 1000 children.

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: Sustainable human settlement development is covered under Chapter 10 of this Profile.

Programmes and Projects: See **Programmes and Projects** in Chapter 10 of this Profile.

Status: See **Status** in Chapter 10 of this Profile.

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

Information: See **Status** in Chapter 10 of this Profile.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: See **Cooperation** in Chapter 10 of this Profile.

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CHAPTER 8: INTEGRATING ENVIRONMENT AND DEVELOPMENT IN DECISION-MAKING

Decision-Making: No information available.

Programmes and Projects: See **Status**.

Status: In general, people in Liechtenstein are well aware of environmental problems. Therefore, the environmental impact of regulations is usually determined in advance of implementation; the obligatory environmental impact assessment (EIA) rules are much stricter than those in the relevant international agreements to which Liechtenstein is a party. Existing laws have served to secure a high level of environmental protection. Each new proposed law or any revision to existing law must be presented to different interested groups. Liechtenstein also provides the option of a referendum, which ensures that all interests can be brought up and discussed on a political platform. Because of this process, policy follows a steady and durable strategy. The Government produced earlier in 2001 a document on the further sustainable development of Liechtenstein which seeks to balance social, economic and environmental issues. The main focus is to be on qualitative and not quantitative growth. The environmental behaviour of individuals, enterprises and institutions varies in accordance with their attitude to environmental problems, their awareness of ecological factors, and, in particular, economic incentives. To act responsibly, people have to be informed about the consequences of what they do – or fail to do. This includes information on the environment as provided in numerous scientific or more popular publications on topics such as the role of forests, endangered ecosystems or threatened species of flora and fauna, hazardous waste management or energy-saving in households. Many enterprises in Liechtenstein have already adopted an environmental management system and some of them have ISO certification. This instrument can bring about broadly-based, continual improvement in corporate eco-efficiency, the responsible authorities will increasingly be able to dispense with new regulations, and the existing statutory provisions will be easier to implement. A high level of credibility is currently given to ISO certification.

Capacity-Building, Education, Training and Awareness-Raising: See **Status**.

Information: See **Status**.

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: The Ministry for Environment, Spatial Planning, Agriculture and Forestry is responsible for coordinating measures for the protection of the atmosphere. Since 1992, several new laws have been passed or existing laws revised in the light of Agenda 21. For example, in 1996 the *Energy Conservation Act* and its accompanying Ordinance were introduced to provide a legal framework for the promotion of environmentally sound use of energy and the use of renewable energy. Further, in 1998 the Swiss *Ordinance on the volatile organic compounds tax (VOCV)* and *Ordinance on the tax on "extra-light heating oil" with a sulphur content of over 0.1 percent* took effect in Liechtenstein within the framework of its customs treaty with Switzerland. The VOCV seeks to make these substances more costly by imposing a tax on them, thereby reducing their use in the medium term. Since VOCs are considered precursors of ground-level ozone, this tax represents a means of using market forces to reduce atmospheric ozone levels. A law has been introduced which provides for charges on heavy goods vehicles depending on their service category, and has been an incentive for better utilization of particular categories of vehicles and therefore one more means of reducing harmful emissions. An important means of protecting the atmosphere is the system of threshold levels for emissions. Since 1992, various changes have been effected in terms of the legal framework for the protection of the atmosphere. In late 1999 the limit for suspended particulates (PM 10) was tightened, and since 1 January 2000 only unleaded gasoline is allowed. It is expected that a new law on air pollution prevention will take effect in 2002. This revision process takes account of various European Union regulations in this area, so that, for example, target levels and alert thresholds for emissions must now be established. Under the revised air pollution law, car dealers must also provide information on fuel consumption and carbon dioxide emissions for every vehicle. These measures seek to orient consumers' choices towards vehicles with lower emission rates. Since 1999 Liechtenstein has been examining construction projects for new installations to ensure that they do no harm to the environment. Such testing includes assessing the effects of a given project on the atmosphere and imposing the appropriate conditions on the project where necessary. It is a fundamental goal of the Government, as a precautionary step and with a view to reaching target levels (the critical loads approach), to establish a series of measures aimed at continuously reducing and eliminating emissions, independent of existing environmental damage. In this context, an emissions register has been established to provide the basis for the planned measures, which will serve to improve air quality and to reduce the levels of those substances which have an impact on climate. The municipalities and NGOs are involved in this decision-making process, in that they may express their views on individual provisions of a particular law as part of the enactment process. Once the Parliament has passed a law, the people may call for a referendum to vote on the law in question.

Programmes and Projects: The Office of Environmental Protection has established an emissions register, in which data on emissions at individual installations are recorded. Using the lichen indicator method, air pollution levels covering all human settlements as well as non-wooded areas are measured approximately every 10 years. If lichen levels increase, it may be surmised that pollution levels have risen.

Status: Various measures have been taken over the last ten years to improve air quality. Household, industry and traffic emissions regulations have been tightened. Emissions from furnaces were greatly reduced by banning the use of "heavy heating oil", and the introduction of natural gas and the technical improvement of oil and gas heating systems also served to lower pollution levels, as has the ban on burning treated waste wood and other rubbish. Individual sources of high emissions levels were brought into line. In the area of transport, the introduction of catalytic converters and of unleaded gasoline, speed reduction along various stretches of road and the provision of gas tracing systems for gas stations have all shown positive effects. The initial results may be summarized as follows: sulphur dioxide, carbon monoxide and lead pollution levels are at a minimum, and nitrogen dioxide pollution was prevented from rising any further. However, many positive effects of the measures outlined above are being countered by other developments. In this connection, a high settlement growth rate and increased traffic should be mentioned, as these factors have impacted greatly on the presence of substances affecting the climate.

Capacity-Building, Education, Training and Awareness-Raising: The activities outlined here have been conducted using the limited human resources available. The Office of Environmental Protection is responsible for carrying out such activities, and several tasks were also entrusted to external institutions. Every year, the Office of Environmental Protection distributes an environment calendar to the public. This calendar deals with a different environment-related theme each year. Schoolchildren are asked to participate in its development by submitting drawings on the current theme, so that their environmental awareness is developed at an early age. There are also CDs on environmental questions which have been specially produced for use in the classroom.

Information: The public is informed about environmental issues through newspaper reports. The emissions register provides public access to specific information on pollutant emission levels at individual installations. This data is to be published in an annual report. Since 1 January 2001, Liechtenstein has been participating with the cantons of eastern Switzerland in an emissions monitoring project entitled “Ostluft”, the results of which are accessible to the public at www.ostluft.li.

Research and Technologies: There are currently no ongoing research activities.

Financing: The State funds special atmospheric protection activities from its budget. In addition to various specific projects, the State provides ongoing contributions to the private sector under specific laws. For example, the State promotes the conservation and environmentally sound use of energy as well as the utilization of renewable sources of energy by making provision for financial inputs in this area. Moreover, the planned revision of the air pollution prevention law will serve to promote installations and procedures that facilitate the reduction of air pollution levels, provided that they reduce air pollution even more than provided for in the applicable legislation. The main focus in this context is the promotion of measures to reduce levels of greenhouse gases.

Since installations have an obligation to stay within prescribed emission limits and other criteria, many atmospheric protection activities also receive funding from the private sector.

Cooperation: In 2000, Liechtenstein signed a joint emissions monitoring agreement with the cantons of eastern Switzerland, under the terms of which the air in Liechtenstein and in eastern Switzerland has been jointly monitored since 1 January 2001. Also in 2000, Switzerland and Liechtenstein concluded a treaty and an agreement providing for joint imposition of charges on heavy goods vehicles with rates to be determined by service category. Liechtenstein also cooperates with the Swiss authorities as regards the Swiss ordinances on taxes on volatile organic compounds and on “extra-light heating oil”, which are also applicable in Liechtenstein. On the international level, Liechtenstein is a party to several conventions. In 1983, Liechtenstein ratified the Convention on Long-range Transboundary Air Pollution, and between 1986 and 1998 it ratified five of the eight Protocols thereto: the Protocol on the Reduction of Sulphur Emissions or Their Transboundary Fluxes by at least 30 percent in 1986, the Protocol on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) in 1987, the Protocol concerning the Control of Nitrogen Oxides or Their Transboundary Fluxes and the Protocol concerning the Control of Emissions of Volatile Organic Compounds or Their Transboundary Fluxes in 1994, and the Protocol on Further Reduction of Sulphur Emissions in 1997. It also signed the Protocol on Heavy Metals and the Protocol on Persistent Organic Pollutants in 1998, and the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone in 1999. In 1989 Liechtenstein became a party to the Vienna Convention, and also ratified the Montreal Protocol. Subsequently it ratified the London Amendment in 1994 and the Copenhagen Amendment in 1996. It also expects to ratify the Montreal Amendment and the Beijing Amendment. Liechtenstein also ratified the United Nations Framework Convention on Climate Change in 1995 and signed the Kyoto Protocol in 1998. Also in 1998, it ratified the Convention on Environmental Impact Assessment in a Transboundary Context. In May 2001 Liechtenstein signed the convention providing for the reduction and elimination of 12 persistent organic pollutants (POPs Convention).

An important part of the work of “Lake Constance-Agenda 21” of the International Conference of Lake Constance, in which Liechtenstein has been actively involved since 2000, concerns the atmosphere. In this connection, the Office of Environmental Protection has established an advisory office for the municipalities, sectors of the economy or NGOs which deals with sustainable development issues. The office will continue to function until 2002, at which time it will be expanded, possibly to a central government office.

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

Decision-Making: Liechtenstein's eleven municipalities enjoy a high level of autonomy, and this extends in principle to municipal planning. The municipalities are primarily responsible for making decisions and carrying out local planning activities. However, the decisions of the municipal authorities are taken in consultation with the Government, which has monitoring and coordinating powers. The Government's national planning office provides support to the Government in carrying out spatial planning activities, as well as to the municipalities in carrying out their functions, and coordinates activities between national and municipal authorities as well as between different municipalities. The office is also responsible for technical matters involving the neighbouring countries and for linkages with regional and international bodies of experts. Currently there is no specific framework law which lays down clear guidelines for spatial planning at the national level and the distribution of responsibilities. The Liechtenstein Parliament is examining a revised text of a draft submitted by the Government in 1999, and it is expected that the draft Spatial Planning Act will be passed during the course of the current year. Given the fact that the Spatial Planning Act is still in the process of being approved and that, therefore, there is no framework legislation that regulates development in this area, coordination is achieved through the individual laws governing human settlements, nature and landscape, transport and environmental protection. The most important laws in this connection are: The Construction Act (*Baugesetz*)(1947), revised; The Nature and Landscape Protection Act (*Gesetz zum Schutz von Natur und Landschaft*) (1996); The Forests Act (*Waldgesetz*) (1991); The Ordinance on the integrated rehabilitation of the Alpine and mountain areas (*Verordnung über die integrale Sanierung der Alp- und Berggebiete*) (1968); The Promotion of Public Transport Act (*Gesetz über die Förderung des öffentlichen Verkehrs*); The Conservation and Protection of Agricultural Lands Act (*Gesetz über die Erhaltung und Sicherung des landwirtschaftlichen Bodens*).

Involvement of Major Groups: Legislation in Liechtenstein provides that the Government at the national level and the municipal authorities in consultation with the Government at the municipal level have responsibility for spatial planning. At the national level, those organizations that are so entitled under the appropriate law have the right of complaint. The public can express its views through the referendum process. At the municipal level, in addition to those organizations entitled to express their views, the citizens directly affected also have the right to intervene. The Spatial Planning Act currently in development will include new provisions regarding public participation and the legal options available to the various organizations. On the one hand, the development of the Spatial Planning Act will provide a framework to further promote the Government's path to sustainable development and will be implemented through a system of national directives. On the other hand, an interdisciplinary and complementary goal will be reached in the various areas covered in Agenda 21 by adapting legislation (e.g., the Construction Act) or developing approaches to landscape development or forests, for example. As part of the revision of the national guidelines, other underlying aspects will be dealt with and documented.

Programmes and Projects: The introduction of the Spatial Planning Act will provide Liechtenstein with a legal foundation for pursuing development while taking into careful consideration the various ecological, social and economic interests. It is a stated goal of this law to preserve and protect the country's unique qualities, to pursue development while taking into account the natural foundation for life and to maintain the largest possible free area for the fulfilment of the responsibilities of future generations.

On the basis of the planning principles, measures have been taken to protect and enhance the natural foundation for life such as soil, water, air and landscape for human, animal and plant life. The most important measures are: The national guidelines; The landscape development approach; The national programme on forests; The general transport system approach; The plans for protected areas (for ground water, nature, etc.).

Status: Approximately 39 square kilometres (24 percent) of Liechtenstein's total area of 160 square kilometres is devoted to agriculture, while wooded areas cover 68.7 square kilometres (43 percent) and potential construction

areas 21 square kilometres (13 percent). Therefore, it is extremely important for the various planning offices to coordinate their activities in this area. The underlying principles governing Liechtenstein's spatial development policy are determined by, inter alia, the Alpine Convention, ratified by Parliament in 1994. It has also been stated in international treaties that sustainable development shall be the basis for future policy.

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

Information: See **Status**.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: Because of its small size, Liechtenstein participates in various transnational projects and programmes run by the neighbouring States and by international organizations. Liechtenstein has a keen interest in cooperating with its neighbours and with international bodies and is committed to a coordinated transboundary spatial planning system. It participates in the Interreg III B programme Alpine Space. Because it is a small country, its main focus is on its regional ties. Liechtenstein maintains contacts with Switzerland, Austria and Germany under the terms of various agreements.

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CHAPTER 11: COMBATING DEFORESTATION

Decision-Making: The Ministry for Environment, Spatial Planning, Agriculture and Forestry has responsibility for matters in this area. Liechtenstein's policy on forests reflects a positive approach to the subject and broad-based public participation at all levels, based on democratic rights enshrined in the Constitution. The *Forests Act* (1991) provides a comprehensive legal foundation for activities in this area. The following legislation is also relevant: The *Ordinance on the scope and granting of compensation and financial assistance* (1995), which contains specific provisions regarding the implementation of the Forests Act, in particular as regards measures of protection against natural hazards, measures pertaining to forest management, ecological integration, damage to forests, diseases and pests, as well as training and planning. The *Ordinance on forest reserves and special forest areas* (2000), which deals with the goal, strategy, definition of terms, conditions, and index of forest reserves and special forest areas as well as compensation and financial assistance. The provisions of the following instruments, in particular, impact directly on forest management as regards the physical scope of their influence: the *Nature and Landscape Protection Act* (1996), the *Hunting Act* (1995) and its accompanying ordinances, and the *Ordinance on the integrated rehabilitation of the mountain region*.

Programmes and Projects: In June 2001 a national forests programme was announced, which represents Liechtenstein's response to its international obligations to promote sustainable forest management as part of its sustainable development. With a view to meeting Liechtenstein's sustainable development goals, the National Forests Programme provides the conceptual framework for the implementation of forest management measures. In particular, the National Forests Programme encompasses the following principles: respect for national sovereignty and responsibility for its own use of resources, compliance with domestic legislative provisions, compliance with obligations under international conventions and agreements, establishment of partnerships and participation by all interested groups, a global approach to forest conservation and management and choice of a long-term, iterative planning, implementation and monitoring process. All of Liechtenstein's forested areas have met the criteria established by the Forest Stewardship Council (FSC) and have therefore received FSC certification (SGS-FM/COC-0764).

Status: Forested areas in Liechtenstein cover a total of 7,372 hectares. Of this, trees cover 6,866 hectares, or approximately 43 percent of the total area. Thirty-five percent of the country's forested areas provide protection to settled areas and infrastructure against rockfalls, avalanches and mudslides, and are therefore considered protective forest areas and are not taken into consideration. Forest reserves account for approximately 27 percent of wooded areas, and 70 percent of this figure is protected from human influence and therefore left to develop according to its own natural dynamics. The remaining 30 percent is subject only to action aimed specifically at promoting particularly endangered species of flora and fauna. A total of 92 percent of the total forested area is publicly owned: 73 percent of this area is the property of the municipalities and 19 percent is owned by the Alpine cooperative societies. Over half of the country's forests lie over 1,000 metres above sea level in areas with more than a 60 percent slope. Conditions in the area where the eastern and western Alpine regions meet and where the climate is influenced both by the sea and the continental land mass sustain life for 55 forest communities and, consequently, for a broad range of diverse forest habitats. Between 1986 and 1998, 50 different species of woody plants were recorded (32 trees and 18 shrubs).

Timber Reserves, Growth and Use: Timber reserves in Liechtenstein's forests cover some 1.7 million cubic metres of trunk timber with its bark, which translates into an average reserve of 340 cubic metres of timber per hectare. Between 1986 and 1998 there was an average growth of 8.5 cubic metres per hectare per year, 7.9 cubic metres per hectare were utilized per year, and treefalls accounted for 36 percent of the total figure utilized, especially after strong winds.

Forest Regeneration: Forty-eight percent of young growth and young forest stand occurs through natural regeneration, 15 percent through afforestation and 29 percent through a mix of the two. Regeneration does not occur in 16 percent of all areas where it is needed, and this lack is most marked in the protective forest areas.

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

Information: A periodic inventory is taken to determine the status of and changes in Liechtenstein's forests. The results of this study of the status of the forests or information on any developments and changes affecting those areas are disseminated through the regular publication of informative bulletins, theme-specific brochures and posters, or through newspaper reports. Field trips for schoolchildren, groups and professional associations also constitute an important part of Liechtenstein's public-awareness work in this area.

Research and Technologies: No information available.

Financing: Financing is from the national budget.

Cooperation: Various international conventions to which Liechtenstein is a party and which contain provisions directly relating to forest issues are relevant to Liechtenstein's forest policy and its international development cooperation activities in this area. These are: the Convention on International Trade in Endangered Species of Wild Flora and Fauna of 3 March 1973 (Washington Convention), the Convention on the conservation of European wildlife and natural habitats of 19 September 1979 (Bern Convention), the Convention on Wetlands of International Importance especially as Waterfowl Habitat of 2 February 1971, the United Nations Framework Convention on Climate Change of 9 May 1992, the Convention on the Protection of the Alps of 7 November 1991, the Convention on Biological Diversity of the United Nations of 5 June 1992, and the Convention on the Conservation of Migratory Species of Wild Animals of 23 June 1979. On the regional level, while it is true that the resolutions and declarations of the Ministerial Conference on the Protection of Forests in Europe do not constitute binding agreements under international law which States can be obligated to implement, they are rules agreed by Governments which have been recognized as the mutually agreed basis for national action and serve as the benchmark for future decision-making as regards forest issues.

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CHAPTER 12: MANAGING FRAGILE ECOSYSTEMS: COMBATING DESERTIFICATION AND DROUGHT

Decision-Making: In 1999 Liechtenstein ratified the United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa.

Programmes and Projects: No information available.

Status: This issue does not apply to Liechtenstein since there are no deserts or areas in danger of becoming deserts in Liechtenstein.

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: See **Decision-Making**.

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CHAPTER 13: MANAGING FRAGILE ECOSYSTEMS: SUSTAINABLE MOUNTAIN DEVELOPMENT

Decision-Making: The Ministry for Environment, Spatial Planning, Agriculture and Forestry has responsibility for matters in this area. The legal instruments applicable in this area are: the *Ordinance on the integrated rehabilitation of the Alpine and mountain areas* (1968), the *Act on hardship compensation for mountain and slope area management* (1996), the *Promotion of Alpine Area Management Act* (1980), the *Ordinance on management subsidies for the conservation of infertile lands* (1996) and the *Ordinance on the protection of mountain flora* (1989). The provisions of the following instruments are also applicable as regards physical scope: the *Forests Act* (1991), the *Nature and Landscape Protection Act* (1996) and the *Hunting Act* (1962).

Programmes and Projects: The *Ordinance on the integrated rehabilitation of the Alpine and mountain areas* (1968) marked the beginning of an approach to the future development of the Alpine and mountain region that would serve as a model for the Alps. Since then, as part of a process that enjoys broad support in society, the various interests, particularly in Alpine area management, forest management, hunting, nature and landscape protection, and leisure and recreation travel, have all been taken into account and harmonized, and the resulting programmes have been implemented with the aid of concrete projects which have considerable support from the public. In May 2000 the Government issued its development and conservation plan for the mountain region, aimed at ensuring coordination among individual interests and, in particular, ensuring that their needs are met in a sustainable manner. The plan also seeks to resolve problems which arise, owing especially to the sharp rise in leisure and recreation travel. Three strategies are envisaged: conservation and promotion as well as appropriate forms of use of existing features of the natural and developed landscape. To this end, any conflict between the various forms of resource use must be resolved. The future development of this sector is to be undertaken in accordance with the principles of sustainable use and taking into account the impact of any activities on the land and on the environment. The United Nations has proclaimed 2002 the International Year of Mountains. Given Liechtenstein's position in the central Alps, the realization of sustainable development policy principles in the Alpine region will be of greater importance than ever before, and special emphasis should be placed on the significance for Liechtenstein of such policy during the Year. Understanding for national and international protection and development measures will be promoted through the appropriate inclusion of the broadest possible range of sectors in activities focusing on topics relating to the Alpine region. The Government has approved the development of an approach for the conduct of activities leading up to the Year through the International Commission for the Protection of the Alps (*Commission Internationale pour la Protection des Alpes-CIPRA*) and the Liechtenstein Alpine Society.

Status: Approximately two thirds of Liechtenstein's total area of 160 square kilometres are mountainous, while only one quarter of the country lies in the valley. Liechtenstein's heritage includes a natural and cultural landscape that is surprisingly rich for a country of its small size. The country's mountain region is a large part of that heritage, as it is the sole area in which a large number of endangered species and habitats flourish. It has become an important place of refuge and survival for many species and habitats that have been pushed out of the valleys, and represents the only potential for renewed propagation for many biotopes and species. Some particularly fine examples of Liechtenstein's traditional cultural landscape are to be found as the main feature of its mountain region. The danger to them is less acute here than in the valley, and there has been relatively little intervention here to date. However, the mountain landscape has also been strained in the last 25 to 30 years because of settlement and infrastructure-building, improvement works and leisure and recreation.

Capacity-Building, Education, Training and Awareness-Raising: The competent authorities and private organizations regularly make public research findings or the results of evaluations of the status of the mountain region, or information on developments or changes in this area, using bulletins, theme-specific brochures and posters or by means of newspaper reports. Field trips organized by various bodies for schoolchildren, groups and

professional associations are an important part of public-awareness work in this area. Efforts are currently underway to develop an auditing procedure with a view to making winter sports installations less damaging to the landscape and the environment. Since 1998, CIPRA, which has its headquarters in Liechtenstein, has been conducting an annual “summer programme” focusing on the Alps in Liechtenstein. This is a valuable training exercise for young university or technical university graduates interested in studying Alpine issues from an interdisciplinary and transnational perspective. The programme consists of a three-week basic course on the Alps and an elective four-week, practical-oriented project component. Instruction is provided by experts from all the countries in the Alpine region. Funding is provided by Liechtenstein.

Information: No information available.

Research and Technologies: No information available.

Financing: Financing is from the national budget.

Cooperation: Liechtenstein is a party to the Alpine Convention, which is a framework convention for the protection and sustainable, environmentally sound development of the Alpine region. The Convention was signed in Salzburg on 7 November 1991 by the seven States in the Alpine area (Austria, France, Germany, Italy, the former Yugoslavia, Liechtenstein and Switzerland) as well as the European Community. Monaco acceded to the Convention by means of an Additional Protocol. The Alpine Convention entered into force on 9 March 1995.

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CHAPTER 14: PROMOTING SUSTAINABLE AGRICULTURE AND RURAL DEVELOPMENT

Decision-Making: The Ministry for Environment, Spatial Planning, Agriculture and Forestry has primary responsibility for legislation in this area. The legal instruments applicable in this area are: the *Act on income-enhancing agricultural subsidies* (1994), the *Act on compensation for eco-and animal-friendly agricultural services* (1996), the *Act on hardship compensation for mountain and slope area management* (1996), the *Ordinance on management subsidies for the conservation of infertile lands* (1996) and the *Promotion of Alpine Area Management Act*(1980).

Programmes and Projects: Apart from the above-mentioned laws, (on subsidies and on compensation), which represent important pillars for the development of sustainable production, the Government approved in early 2001 a project on assessing and protecting genetic resources.

Status: Liechtenstein already enjoys a high standard in terms of legislation providing for the protection of the environment, flora and fauna. Particular attention is paid to compliance with these provisions in the agricultural sector, since this is a condition for receiving subsidies. Additional support is provided for these efforts towards achieving sustainable agriculture through promotion by the State of bioagriculture and integrated production through the compensation law, which also promotes eco-friendly agricultural activities such as the care of extensive areas, fallow land and wild fruit trees and responsible land use (erosion protection, bog and mire management). These measures are structured in such a way as to make them attractive and are actively utilized by farmers (incentive system).

Capacity-Building, Education, Training and Awareness-Raising: Since agriculture is practised only on a small scale (approximately 130 to 150 establishments devoted primarily to farming), Liechtenstein does not have its own training programme in this area. Farmers in Liechtenstein therefore take advantage of such facilities in Switzerland. However, the State has been promoting counselling on bioagriculture and integrated production for years. The nature protection agency also provides counselling to farmers with a view to ensuring greater compliance with nature and landscape protection goals. Special attention is paid in this respect to projects aimed at achieving an ecological balance and integration and considerable financial support is provided for the implementation of such projects.

Information: Information is provided in annual reports submitted by the Government on its activities. Data on ecological balance (ecologically balanced areas) are managed by the Office of Agriculture through the agricultural information system (LIS/GIS). The Government has entrusted to an environmental organization the task of monitoring the effects of measures undertaken under the terms of the compensation law.

Research and Technologies: Because of Liechtenstein's small size, it does not conduct its own agricultural research.

Financing: Financing is from the national budget.

Cooperation: Liechtenstein has very close legal ties, particularly with Switzerland, based on the customs treaty that it has with that country. This means that Liechtenstein has taken measures that are very similar to and compatible with existing measures in Switzerland.

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CHAPTER 15: CONSERVATION OF BIOLOGICAL DIVERSITY

Decision-Making: The Ministry for Environment, Spatial Planning, Agriculture and Forestry has responsibility for actions in the area of biological diversity. The relevant legal instruments are: the *Nature and Landscape Protection Act*, the *Forests Act*, the *Hunting Act*, the *Ordinance on management subsidies for the conservation of infertile lands*, the *Ordinance on the scope and granting of compensation and financial assistance*, the *Ordinance on forest reserves and special wooded areas*, the *Ordinance on the integrated rehabilitation of the mountain region* and the *Ordinance on the protection of mountain flora*.

Programmes and Projects: Systematic biological research is fully funded by the State and is conducted in cooperation with the Botanical and Zoological Society of Liechtenstein (BZG) as well as universities and institutes in other countries. These findings are published in a series of research publications issued by Liechtenstein and provide the technical basis for the country's nature and landscape protection policy. In 1992 a group of experts was commissioned by the Government to establish an inventory of areas that are important from the nature point of view. The result was a comprehensive description of things and areas meriting protection, which served to influence official intervention in nature and the landscape. The inventory listed biotopes, forests, landscape protection areas and natural monuments. A group comprising representatives of bodies responsible for nature protection, environmental protection and the landscape, as well as NGO representatives, experts from ecological bodies and researchers is currently working to develop a concrete nature and landscape development approach. The Ordinance on management subsidies for the conservation of infertile areas, which took effect in November 1996 and is based on the Nature and Landscape Protection Act, attempts to sensitize agricultural users about the extensive use of the landscape through tolerance protection measures, thereby preventing infertile areas meriting protection from being overfertilized and ultimately disappearing. A management subsidy system has been put in place in the two largest protected areas to ensure proper management of flowering meadows, where several types of rare flowers may be seen during the blooming season and which also provide a richly structured wildlife habitat. This Ordinance covers many aspects of landscape protection and, in the relative long term, the protection of nature and flora and fauna as well.

Status: Liechtenstein is a small country which lies between Austria and Switzerland from the floor of the Rhine valley to the higher Alpine region. The lowest point is at 430 metres in the northern part of the country and the highest point is in the south at 2,600 metres. Only about one quarter of the country lies in the valley; one third lies in the Alpine region and the remaining 40 percent is the slopes surrounding the valley and covering almost the entire country. These particular physical features have given rise to an extraordinarily varied geology and topography and, therefore, to great diversity in terms of flora and fauna: there are 1,600 species of vascular plants alone to be found within Liechtenstein's 160 square kilometres. In the north there are large protected reed-covered areas and throughout the country there are various, relatively small areas that are protected under the terms of ordinances or that have at least the status of municipal protected areas. The fact that forested areas are fully protected as the largest interrelated habitat and refuge area, covering 43 percent of the country's total area, is the most important consideration for the protection of endangered flora and fauna and their habitats. Also, 26.7 percent of those areas are protected by ordinance as forest reserves and Liechtenstein's entire forested area has FSC certification for sustainable forest management with little social impact, all of which demonstrates the importance of the country's forests as regards nature and landscape protection.

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

Information: No information available.

Research and Technologies: No information available.

Financing: Financing is from the national budget.

Cooperation: Liechtenstein is a party to the Convention on Biological Diversity of the United Nations of 5 June 1992, and has also acceded to the following international conventions on the conservation of biological diversity: the Convention on the conservation of European wildlife and natural habitats of 19 September 1979, the Convention on International Trade in Endangered Species of Wild Flora and Fauna of 3 March 1973, the Convention on Wetlands of International Importance especially as Waterfowl Habitat of 2 February 1971 and the Convention on the Conservation of Migratory Species of Wild Animals of 23 June 1979. The Ministerial Conference on the Protection of Forests in Europe, held in Helsinki in 1993, adopted a resolution on general guidelines for the conservation of the biological diversity of European forests which was signed by 35 countries, including Liechtenstein. Liechtenstein is also participating, with the Council of Europe, in the development of programmes and the implementation of measures for the conservation of biological diversity as part of the “Environment for Europe” process, which also involves the countries of central and eastern Europe.

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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: No information available.

Programmes and Projects: No information available.

Status: Liechtenstein's industrial sector mainly produces highly specialized and high-tech products. Provision for the necessary cost-intensive research and innovation activities is made in full by companies, with no contribution from the Government or other institutions or agencies. This means that Liechtenstein does not provide for any technology policy or measures to boost the economy or promote exports. Although the Government of Liechtenstein does not promote any measures fostering innovation, it still provides for an economic landscape which offers investors a very stable environment. Public institutions or agencies in Liechtenstein do not conduct any basic technological research. However, there is a senior technical college, the "Fachhochschule Liechtenstein - Hochschule für Technik, Wirtschaft, Gestalten", which has the status of a university, and generates expenditure of 4.2 million Swiss francs (1999). The former school of engineering now concentrates on financial services. Liechtenstein also provides support, in the form of an annual contribution of 560,000 Swiss francs, to the Swiss "Neutechnikum Buchs" technical university.

Capacity-Building, Education, Training and Awareness-Raising: See **Status**.

Information: No information available.

Research and Technologies: No information available.

Financing: See **Status**.

Cooperation: Liechtenstein supports basic research activities abroad with annual contributions of 250,000 Swiss francs each to the Austrian scientific research fund, the "Fonds für wissenschaftliche Forschung", and the Swiss national fund. Further public expenditure in the area of research involves various contributions to European projects and programmes within the European Economic Area. Particular mention should be made of the European Union's Fifth Framework Programme for research and development, which facilitates environmental research by the business sector. One part of the programme focuses on sustainable development and includes as its subprogrammes, inter alia, Sustainable Management and Quality of Water, Global Change, Climate and Biodiversity, and Cleaner Energy Systems including Renewables.

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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 No information available.

Programmes and Projects: No information available.

Status: This issue does not apply to Liechtenstein.

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 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 Ministry of the Environment, Spatial Planning, Agriculture and Forestry has responsibility for coordinating actions taken in the area of water resources. The Office of Environmental Protection has responsibility for implementing the *Water Pollution Prevention Act* (1957) and the *Water Rights Act* (1978). The Office is also charged with monitoring water resources and protection of lakes and rivers as habitats for local fish and crab species. The legal framework for such activities is provided by the *Fisheries Act* (1990). The *Ordinance accompanying the Water Pollution Prevention Act* was revised in 1997. This Ordinance establishes quality goals for lakes and rivers and waste water treatment requirements that are in large part stricter than European Union guidelines. In early 2001, the Government submitted a new water pollution prevention act which also regulates pollution prevention, for example, in energy generation activities, as well as pollution prevention in water from various sources, such as agriculture, and the polluter pays principle. Special emphasis is placed on the prevention of groundwater pollution as an important resource for drinking-water supply and the revitalization of straightened and blocked running water systems. The various measures for pollution prevention and sustainable water resources development, including flood protection, are coordinated within the framework of the working group on water, involving the Office of Environmental Protection, the Office of Civil Engineering, the Office of Forestry, Nature and Landscape, as well as the Division for Spatial Planning and the Office of Agriculture. There is close cooperation with the municipalities, which are responsible for building and maintaining water supply and waste water treatment installations. The level of water consumption continues to be high; however, it has diminished considerably from 1046 litres per inhabitant per day in 1992 to 926 litres per inhabitant per day in 1998. State authorities and NGOs cooperate in the fisheries advisory board.

Programmes and Projects: The various bodies of water, springs and groundwater are utilized in balanced and diverse ways in order to ensure sustainability. Great emphasis is placed on ensuring water reserves and distribution, while avoiding pollution and loss. Water supply and distribution is conducted in accordance with approaches that are applied throughout the country. The same holds true for waste water collection and treatment. All of the municipalities are members of water supply and waste water treatment associations, which also include various waste water treatment plants, with a view to reducing costs, improving treatment services, energy conservation and orderly sewage sludge disposal. As part of spring and groundwater protection, the areas in question benefit from spatial planning safeguards and, for example, no construction is allowed in those areas. This system will be continued. Several sections of running water have been successfully revitalized as part of the process of improving lakes and rivers as habitats and as features of the landscape. A programme to integrate bodies of running water to enable fish to manoeuvre freely again has been completed.

Status: Thanks to a series of measures aimed at ensuring coordinated water supply and distribution, the public has been provided with a secure drinking-water supply. Waste water treatment combined with systematic sewage sludge and waste removal have led to a marked improvement in water quality, particularly as regards nutrients. The water revitalization measures already undertaken are also showing marked results in the reappearance of local species of fish and crabs that had disappeared. In order to prevent increased settlement and a larger population from eroding the positive results achieved in the area of water resources, the envisaged Spatial Planning Act will contain appropriate provisions for the protection of lakes and rivers.

Capacity-Building, Education, Training and Awareness-Raising: The various municipal and national offices and divisions ensure implementation of existing laws and ordinances. Since Liechtenstein is a small country with limited human resources, there is close cooperation with experts from the private sector and NGOs. Increasingly, schools are including sustainable development of water resources in their curricula, for example, every year,

students create an “environment calendar”, which is made available to the public free of charge by the State and the municipalities. In 1999, water was chosen as the main theme for the calendar. Information on, inter alia, water quality, water conservation and the protection of endangered species is regularly provided to the public by the State and municipal authorities through brochures and bulletins. A significant part of public information on water resources in Liechtenstein is provided by NGOs. The Office of Environmental Protection is currently working to create a web page on the various environmental issues.

Information: Information on the findings of ongoing water quality monitoring activities, the status of lakes and rivers or of fish species and stocks is disseminated through the channels and media mentioned above, and the press and radio services play an important role in this context. Information is also directed to the various international commissions in which Liechtenstein is active in the field of water resources policy.

Research and Technologies: As part of transboundary cooperation within the Alpine region of the Rhine, water and fish ecology, hydrology and groundwater currents have been the subject of in-depth research since 1994. Special research programmes are being conducted in conjunction with Switzerland’s fisheries research institutions which focus on “Competitive behaviour between the American rainbow trout introduced into local waters and local river and lake trout” and “Fish health”.

Financing: Annual expenditure by the municipalities and the State for the purpose of ensuring water supply amounts to 8 million Swiss francs. Nineteen million Swiss francs are spent on waste water treatment, and 1 million Swiss francs on water revitalization. Water supply and waste water treatment costs are increasingly being passed on to the consumer in accordance with the polluter pays principle, in order to provide financing for the construction and maintenance of the necessary installations and the promotion of water conservation.

Cooperation: Liechtenstein ratified the Convention on Protection and Use of Transboundary Watercourses and International Lakes in 1997. As a member of the European Economic Area, it plans to adopt the new European Union general guidelines on water resources by the end of 2001. As a riparian State in the Rhine region, Liechtenstein is involved in the work of the Intergovernmental Commission for the Alpine Region of the Rhine, the International Water Pollution Prevention Commission for Lake Constance, the International Conference of Plenipotentiaries on Fisheries in Lake Constance, the International Steering Committee for the Implementation of the European Union General Guidelines on Water Resources and the International Commission for the Protection of the Rhine (ICPR). Water is an important focus area in the work of “Lake Constance - Agenda 21” of the International Conference of Lake Constance, in which Liechtenstein has been actively involved since 2000. In this connection, the Office of Environmental Protection has established an advisory office for the municipalities and NGOs which deals with sustainable development issues. The office will continue to function until 2002, at which time it will be expanded, possibly to a central government office.

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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 Minister of the Environment has responsibility for coordinating action regarding chemicals. Liechtenstein's customs treaty with Switzerland and its membership in the European Economic Area (EEA) greatly influence its legislation governing chemicals, so that Swiss and European laws are applicable. Since 1992 various provisions in line with Agenda 21 have been adopted under the customs treaty and the EEA Agreement. Legislation on chemicals in Liechtenstein is implemented in the same manner as in Switzerland. European laws are implemented in cooperation with the chemical licensing authority in Germany, which is a part of the Federal Office of Occupational Safety and Medicine. Liechtenstein's chemical policy is heavily influenced by Switzerland and the European Union. The goals of this policy are the classification and identification of chemicals, promotion of understanding of chemicals and contamination, safety measures, prohibitions and restrictions in handling chemicals, the polluter pays principle, authorization regarding movement of chemicals, as well as sanctions and administrative procedures. The municipalities and environmental and business associations (NGOs) participate in the legislative process on chemicals.

Programmes and Projects: The chemicals market is closely monitored as a focus programme.

Status: It should be noted that Liechtenstein has no chemical industry of its own, and therefore can only influence trade and consumption of chemicals. Legislation and the implementation thereof, as well as the public-awareness activities that have been carried out, have led to a high degree of awareness within enterprises and among the public about the safe handling and use of chemicals that are less hazardous for humans and the environment.

Capacity-Building, Education, Training and Awareness-Raising: A Materials and Products Department has been set up within the Office of Environmental Protection to deal with issues in this area, among others. The services of outside experts and in-house consultants from within the administration are also available. Everyone working with hazardous chemicals must appoint a focal point for toxic substances. The environmentally sound use of chemicals is taught both in schools and in companies. Issues relating to the handling of chemicals are publicized through annual environment calendars that are made available to the public free of charge, as well as targeted media reports. Brochures have also been and will continue to be prepared and distributed to relevant sectors of the population.

Information: The results of the chemical market monitoring process are regularly included in the annual report of the Government to Parliament and in reports in the local media.

Research and Technologies: There are no research activities.

Financing: No State funding is required.

Cooperation: Liechtenstein cooperates closely and shares experiences in the implementation of legislation with the Swiss cantonal and federal authorities and with the German Federal Office of Occupational Safety and Medicine. As a member of the European Economic Area, Liechtenstein cooperates with the European Free Trade Area and the European Union States in the area of chemicals. Liechtenstein signed the POPs Convention in Stockholm in May 2001.

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

Decision-Making: The Minister of the Environment is responsible for coordinating action regarding wastes. Liechtenstein's customs treaty with Switzerland and its membership in the European Economic Area (EEA) greatly influence its legislation governing wastes. Some Swiss laws, such as the Technical ordinance on wastes and the Ordinance on movement of special wastes, are also directly applicable in Liechtenstein. Since 1992, various provisions that are in line with Agenda 21 have been adopted under the customs treaty and the EEA Agreement. Under the customs treaty, the Technical ordinance on wastes and the Ordinance on movement of special wastes are implemented in the same way as in Switzerland. Liechtenstein law in this area, which is based largely on Swiss and European Union legislation, includes the following strategies: avoidance and reduction of wastes, assessment of wastes and environmentally sound disposal thereof. These laws address the elaboration of a waste materials model, prohibitions, the polluter pays principle, the duties of persons possessing wastes and construction and operation requirements for waste disposal plants. The municipalities and all environmental and business associations participate in the legislative process.

Programmes and Projects: The existing waste materials and waste disposal models are currently being revised. For several years, a working group on waste management set up in conjunction with the municipalities and environmental and business associations in accordance with the principles of existing law (prevention, reduction, assessment, environmentally sound disposal) was active. Various projects were carried out (monitored scrap materials collection centres in each municipality, separate collection of hazardous household wastes, an organized disposal system with standardized receptacles in accordance with the polluter pays principle, burning of wastes for heat generation and purification of fumes, as well as joint monitored disposal of the burning residue with the neighbouring region in Switzerland). The municipalities also offer glass collection services. A working group on "Environment and Administration" has been set up in schools and in the State and municipal administrations with a view to preventing waste generation, inter alia, by buying environmentally sound products and by sorting garbage.

Status: The programmes that were part of the wastes campaign begun in the early 1990s have made it possible to greatly reduce the volume of wastes destined for burning. In recent years there has been a resurgence in volume due to growing economic activity and a rising population. The volume of recyclable wastes has also risen considerably.

Capacity-Building, Education, Training and Awareness-Raising: The Office of Environmental Protection has two departments devoted to this issue. Bringing together air pollution prevention and waste management activities allows the Office to take advantage of synergies. Schools, administration offices and companies must all appoint focal points for waste-related issues. A great deal of financial resources are expended for awareness-raising activities in this area targeting all concerned groups. Attention is focused on waste-related issues through the annual environmental protection calendar, which is made available to the public at no charge, as well as in targeted media reports. Brochures on the topic are also prepared and distributed. Special course on waste prevention and recycling are offered (for example, courses on recycling organic wastes and their use in gardening and agriculture).

Information: Information on waste collection is publicized in the Government's annual report to the Parliament as well as in the local media.

Research and Technologies: There are no research activities.

Financing: Liechtenstein provides financial input to the establishment (with depollution of fumes and heat generation) of the regional waste incineration centre in neighbouring Switzerland. It is also involved in the activities of a battery recycling plant (Batreco) in Switzerland.

Cooperation: Liechtenstein is a party to the Basel Convention. Resolution C(92)39/FINAL of the Organization for European Cooperation and Development applies. Liechtenstein cooperates closely and regularly shares experiences in the implementation of legislation with the Swiss cantonal and federal authorities and with the waste management experts of all the German-speaking countries. As a member of the European Economic Area, Liechtenstein cooperates with the European Free Trade Area and the European Union States in the area of waste management. An important part of the work of "Lake Constance - Agenda 21" of the International Conference of Lake Constance, in which Liechtenstein has been actively involved since 2000, concerns wastes. In this connection, the Office of Environmental Protection has established an advisory office for the municipalities and NGOs which deals with waste-related issues. The office will continue to function until 2002, at which time it will be expanded, possibly to a central government office.

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CHAPTERS 24 TO 32: STRENGTHENING THE ROLE OF MAJOR GROUPS

Women: Decision-Making: In accordance with the principle of equal rights for women and men enshrined in the Constitution, girls and women are guaranteed access to all basic services provided by the State. The de jure equality of men and women can be regarded as having been successfully achieved. The Equal Rights Act, which entered into force on 5 May 1999, is particularly worth mentioning. It provides women and girls with an instrument that enables them to assert their rights more effectively as regards employment and to make them more enforceable. The main provisions are: the prohibition of discrimination, the right to file class action complaints, burden-of-proof reduction, protection against retaliatory dismissal and the possibility of making legal claims. The Equal Rights Act also specifies that appropriate measures to achieve de facto equality do not represent discrimination. Since 1993, Liechtenstein's Labour Contract Act includes a prohibition of discrimination on grounds of gender, specifically with reference to an agreement or to action taken, and particularly in the establishment of the employment relationship, professional advancement, termination or dismissal. The Labour Contract Act also fulfils the requirements concerning equal pay for equal work or work of equal value and free choice of profession and employment. Both the Equal Rights Act and the Labour Contract constitute important instruments against discrimination not only of women but also of girls in vocational training. Cooperation: The Convention on the Elimination of All Forms of Discrimination against Women was ratified by Liechtenstein on 21 December 1995. The Government of Liechtenstein has also been contributing to the United Nations Development Fund for Women (UNIFEM) and to the United Nations Development Programme (UNDP).

Children and Youth: Decision-Making: The annual reports published by the Government for many decades include governmental, parliamentary and judicial activities during the year. They generally provide broad information on the status within the different ministries regarding, inter alia, children and youth policy. Social institutions and the general well-being of children and adolescents and thus the implementation of comprehensive policies on children and youth have therefore been under constant monitoring. In 1997 an expert meeting was held, where youth workers and representatives of political circles discussed ways and means of bringing the needs of children and adolescents to the attention of political decision-makers. Priorities for improved cooperation between public and youth services and policy makers were also discussed. Both debates had a remarkable impact on the involvement of various sectors of society. Under the amended legislation in force since 11 February 2000, legal majority and the right to vote is now acquired at the age of 18. Liechtenstein's Youth Act dates back to 1979. In early 2000 a revision of the Act was initiated to respond to changes and developments in society. Adolescents, youth representatives and youth workers are being involved in this reform process. The aim of this revision is to establish appropriate ways and means to better react to changes in society. Programmes and Projects: Support from the concerned municipal authorities and state grants for youth work in the municipalities have increased along with a number of youth participation projects during the last few years. In each of the eleven municipalities within the country there is a youth club, headed either by professionals or by volunteers. Within the last three years four additional youth clubs headed by professionals have been opened and several youth participation projects on the local level were carried out. A non-governmental coordinating office for youth issues, in the form of the Association of Youth Workers of the municipalities in Liechtenstein has been established and cooperates closely with the Children's and Youth Service of the Government. "Flash" youth magazine, produced by young people and published by the Association of Liechtenstein Youth Workers, serves as a channel of communication from adolescents for adolescents. The establishment in 1998 of a national Youth Parliament - promoted by the political parties and supported by the Government - is another form of integrating young people into society and of motivating them to assume responsibility. Three candidates under the age of 25 were nominated for the parliamentary elections in the spring of 2001. None of them managed to win the required number of votes.

Indigenous People: This issue does not apply to Liechtenstein.

Non-governmental Organizations: No information available.

Local Authorities: Decision-Making: The political landscape in Liechtenstein is divided into the State level and the municipal level. The eleven political divisions or municipalities maintain a high level of autonomy. This autonomy, the scope of which is established in the Constitution, is an important feature of the political structure of Liechtenstein. The citizens of each municipality elect a Council, headed by a chairperson who functions on a full- or part-time basis, depending on the size of the municipality. The municipal authorities are independent as regards the conduct of their business and are responsible for the administration of their own budgets. Citizens can appeal the decisions of the municipalities by means of a referendum. The municipalities have nature protection commissions which offer advice and suggestions to the executive and provide valuable technical input in the formulation of nature and landscape protection policy. These commissions also communicate with the nature protection authorities at the highest level, and in many cases collaborate in resolving problems, working on construction plans or conducting agricultural surveys.

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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CHAPTERS 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: Liechtenstein does not have any university or research institute devoted primarily to sustainable development activities. However, as part of the country's biological research activities, authorities and private organizations in Liechtenstein cooperate with university research institutes in other countries to acquire ecological scientific know-how, which combines with the results of economic and sociocultural evaluations and research activities to help to shape sustainable development policy.

Capacity-Building, Education, Training and Awareness-Raising: See **Status**.

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: The Ministry of Education is responsible for coordinating action in the area of education and training. The regulatory framework is provided by the Education Act and the Occupational Training Act and their accompanying ordinances. Of particular importance is the fact that, the various relevant sectoral laws, in particular the more recent ones such as the Forests Act and the Nature Protection Act, establish the obligation for implementing authorities, in addition to providing for a comprehensive monitoring system, to promote regular further training and continuing education for the agencies active in the various areas, to ensure the dissemination of information to the public and, in general, to promote greater awareness of sustainable development issues.

Programmes and Projects: After the 1992 Rio Conference, as before, schools in Liechtenstein continued to conduct projects on environmental education, for example:

Provision of environmental education services in some schools: Faculty members are exempted from one teaching period in exchange for assuming responsibility for instruction on environmental issues. These environmental focal points either launch or provide support for specific environment projects in their schools. This has given rise to “forest days”, school gardens, environmentally sound recreation areas, field trips and much more.

Environment days: Special “environment days” have been organized in all of Liechtenstein’s schools. For example, a secondary school class visited a hydroelectric power station on “Water Day”, and another class built water wheels or created a small biotope.

Eco-friendly office and school supplies: There is a catalogue in which teachers can find recommendations on eco-friendly office and school supplies (paper, notebooks, writing implements, etc.).

Miscellaneous other support activities: Liechtenstein’s schools supervisory office promotes environmental awareness that is in line with the goals of the new curriculum by, inter alia, publishing various teaching and learning aids (for example, “School on the Farm”), and organizing further training courses for teaching staff.

The new curriculum for the Principality of Liechtenstein: After a two-year pilot, testing and evaluation phase (1999–2001) and a subsequent revision phase, the new curriculum will take effect in the 2002/03 academic year for the entire compulsory school system. This instructional model, which applies to all types of educational establishments, includes “Man and the Environment” as a specific subject area, alongside Languages, Design, Music and Sports and Mathematics. The new subject area covers Religion, Biology, Physics and Chemistry, History, Geography, Home Economics and Computer Science. This curriculum model facilitates interlinking education on environmental issues with other subjects.

Status: Integrated Training: Liechtenstein’s schools contribute greatly to an integrated education system by including instruction in the natural and social sciences and the humanities in their curricula, and by linking this instruction with topics in other disciplines.

World View: Schoolchildren gain skills and knowledge which enable them to ask meaningful questions about human existence, to seek their own answers and to shape their own lives. They learn to recognize interdependent factors and the potential to act and influence things.

Information: This issue has covered under the heading **Capacity-Building, Education, Training and Awareness-Raising** in various chapters of this Profile.

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

Decision-Making: The Ministry for Foreign Affairs has responsibility for coordinating action in the area of development cooperation. The legislative framework is provided by the *Promotion of Development Aid and Disaster Relief Act*. Under the provisions of this Act, “Liechtensteiner Entwicklungsdienst”, an autonomous foundation established in 1965 to provide development aid, is responsible for work relating to Liechtenstein’s development cooperation activities.

Programmes and Projects: In 2000 Liechtenstein contributed to the International Committee of the Red Cross (ICRC), the United Nations High Commissioner for Refugees (UNHCR), the United Nations Children’s Fund (UNICEF) and the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). It also provides financial support for various projects run by the Austrian “Österreichisches Hilfswerk” aid organization, the Council of Europe and the Liechtenstein Red Cross.

Status: Liechtenstein’s foreign policy must meet the demands of the international community in terms of international solidarity, in particular as regards participation in international assistance programmes by providing aid to refugees and disaster relief through its programmes on development aid and assistance to eastern Europe.

In accordance with its development policy, the Government traditionally supports individual development programmes. In 1998, it established guidelines and criteria providing for support by Liechtenstein to individual development programmes: in addition to poverty alleviation, peace-building, rural development, support for small trade and awareness-raising on environmental issues, priority is given to programmes focusing on education, health and improvement of the status and interests of women. The sub-Saharan region is among those in the developing world that are given particular attention. Cooperation with development organizations, including NGOs, continues to play a major role.

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

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

Research and Technologies: No information available.

Financing: International humanitarian assistance is funded from the national budget. In 2000 Liechtenstein contributed 10.4 million Swiss francs, that is, 1.5 percent of its total expenditure, to developing countries and countries with economies in transition as part of its development cooperation activities and assistance to eastern Europe.

Cooperation: As part of its international humanitarian aid programme, Liechtenstein participates in many projects run by the United Nations and the Council of Europe. It also cooperates closely with aid organizations in neighbouring countries, for example, with Österreichisches Hilfswerk and CARE Österreich in Austria, and the Swiss Agency for Development and Cooperation (SDC).

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CHAPTER 38: INTERNATIONAL INSTITUTIONAL ARRANGEMENTS

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

This issue has been covered either in Chapter 8 or under the heading **Decision-Making** in the various chapters of this Profile.

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CHAPTER 39: INTERNATIONAL LEGAL INSTRUMENTS AND MECHANISMS

This issue has been covered under the relevant sectoral chapters of this Profile.

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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.

Research and Technologies: No information available.

Financing: No information available.

Cooperation: No information available.

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CHAPTER: INDUSTRY

Decision-Making: The Ministry of the Economy is responsible for measures to promote trade and industry.

Programmes and Projects: No information available.

Status: The distinguishing feature of Liechtenstein's economy is the manufacture and supply of high-tech, forward-looking products with a strong net value. These are, in large part, produced using environmentally sound methods that make rational use of resources. Most of all, the strong point of the economy is that it takes advantage of niche markets and market gaps by providing high-value speciality items and products. The highly diversified structure of Liechtenstein's economy is largely characterized by its small and medium-sized enterprises, which contribute greatly to the economy's competitiveness through their ability to adapt. More and more, these companies are orienting their activities towards meeting the needs of outside markets. The Government's economic stimulus policy continues to focus on creating and maintaining favourable general economic conditions. It is not expected that this focus will change, so that government financial support to promote economic growth is not envisaged in the future. In environmental terms, the manufacturing and processing industries have made good progress in recent years, particularly in reducing atmospheric pollutants and in energy consumption. Also noteworthy are the efforts of many companies in the field of environmental reporting and environmental management. Industry is making considerable efforts to prevent or reduce environmental pollution, because less pollution means lower costs and competitive advantages. For example, although production has increased in recent years, the levels of hazardous waste per ton of goods produced has decreased. Many companies have now built their own recycling systems and a great deal fewer hazardous substances escape into the environment.

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: The Ministry of the Economy is responsible for coordination action in the area of tourism. The legal framework for activities in this area is provided by the *Tourism Act* (2000).

Programmes and Projects: The revised Tourism Act, which took effect in May 2000, is based on the principles of sustainability and takes into account the interests of the natural and social environment. In recent years a tourism model for Liechtenstein was developed which deals in a focused manner with marketing and with overall conditions for tourism. However, the model does not devote sufficient attention to the landscape and, in particular, its ability to meet all the demands placed on it. Work on this model is continuing, in that tourism is to be included in the development of a separate model for the mountain region. An exercise to determine the appropriateness of tourism activities will show which forms of tourism are economically desirable in Liechtenstein's mountain region as well as feasible from an ecological and sociocultural and, generally, sustainable standpoint. This is to serve as the basis for the development of a specific approach that will include a series of measures to be taken.

Status: Tourism in Liechtenstein is concentrated in the capital Vaduz and in the mountain and Alpine region. The annual hotel occupancy rate is approximately 120,000 nights.

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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